Reaching the last child:
Evidence from Young Lives India

Singh, R., Galab, S., Reddy, P. Prudhvikar & L. Benny

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Young Lives

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The images throughout our publications are of children living in circumstances and communities similar to the children within our study sample. © Young Lives / Farhatullah Beig; Sarika Gulati.

Introduction

Renu Singh

This summative country report draws upon fifteen years of evidence captured by the Young Lives study in India. It provides an overview and synthesis of a much more detailed evidence base, much of which can be found on the project website. Some new analysis has been completed for this report to bring it right up to date. Many of the findings are drawn from journal articles and working papers which have been subject to separate review processes.

Young Lives ran parallel to the Millennium Development Goals (MDGs) and utilised mixed methods consisting of surveys, in-depth interviews and focus groups to improve understanding of the causes and consequences of childhood poverty, and to examine how policies affect children's well-being. Drawing upon significant information gathered about children's experiences as they transition from early childhood to adolescence and early adulthood, this report attempts to capture and highlight key findings from various papers, policy briefs and journal articles written over the period since 2002.

The research has been guided by three intersecting lines of enquiry: (1) an analysis of the factors shaping children's growth and development over the course of their lives; (2) development of the understanding that risk and deprivation are concentrated in particular social groups and localities, with dramatic disparities in children's outcomes, leading to questions about what these inequalities mean for children; (3) an examination of the changing influences in children's lives, including the risks to which they are exposed and the support they enjoy. This has been achieved specifically by comparisons between the two cohorts of children that the Young Lives project followed, and more generally by linking data on the children and the households they live in to the political-economic, socio-cultural and institutional context.[1]

About Young Lives

Young Lives is a longitudinal study on childhood poverty in four countries (Peru, Ethiopia, Vietnam and India) that has followed 12,000 children in two cohorts born seven years apart. In India, the study has been collecting household and child-level survey data from 3,000 households in Andhra Pradesh and Telangana since 2002. The project has followed two cohorts of children, one aged eight years (Older Cohort) and the other aged one year (Younger Cohort) in 2002 over five rounds of collection of survey data at child, household and community level. The power of the Young Lives data lies in its capacity to illuminate patterns of changes in the lives of selected groups of people.[2] In parallel, the project treated children not as passive recipients of experience but as active contributors to their own development; child-related research set up in this way enables children to exercise their agency to participate and contribute.[3]

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1   Boyden and James (2014)

2   Brock and Knowles (2012)

3   Boyden *et al*. (1998)

The sampling methodology

The study sites in India were selected in 2001 using a semi-purposive sampling strategy. The districts were selected first, then 20 sentinel sites within these were fixed according to an agreed set of criteria. In each sentinel site, 100 households with a child born in 2001-02 and 50 households with a child born in 1994-95 were randomly selected. If a selected family had both a one-year-old and an eight-year-old child, the younger child was included. Each sentinel site in United Andhra Pradesh was defined as a *mandal*.

The selected districts were ranked according to their relative level of development based on three categories of indicators: economic, human development and infrastructure. Based on these rankings, a representative group of poor and non-poor districts was selected, and then narrowed down to six: Srikakulam and West Godavari (in Coastal Andhra); Anantapur and Kadapa (in Rayalaseema); Karimnagar, Mahabubnagar and Hyderabad (in Telangana).

Young Lives study sites in Andhra Pradesh and Telangana States

The districts selected for sampling covered around 28 per cent of the total population of the state and included 318 of the 1,119 *mandals* (excluding the city of Hyderabad). Since Telangana was formed in 2014, Telangana has been sub-divided into 31 districts in six of which the Young Lives sentinel sites in Telangana are now located: Mahabubnagar, Karimnagar, Jogulamba Gadwal, Nagarkurnool, Jayashankar Bhupalpalli and Hyderabad[4].

Longitudinal survey rounds

The design of Young Lives is longitudinal, and involves repeated measurement of aspects of the same children's development (e.g. cognitive development, health, nutrition, subjective well-being, social support and psychosocial measures such as self-efficacy, self-esteem etc.). Measurements were made in their homes and gathered alongside key household and community-level development indicators. This design aids our understanding of causation, prognosis, stability, change and development in relation to a range of outcomes, including cognitive development and health, and ultimately poverty status.[5] Factors that drive disadvantage, resilience and success can be traced within each of the two cohorts, and we are also able to make cross-cohort comparisons by disaggregating the data to study inequalities across gender, poverty status, location and caste. Young Lives conducted five rounds of quantitative surveys of children, households and communities in India. The fifth round of Young Lives household and child data was collected between August 2016 and January 2017 with the children now aged approximately 15 years (the Younger Cohort) and 22 years (the Older Cohort).

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4   Author's calculations based on bifurcation of districts of undivided Andhra Pradesh. The Young Lives study started in 2002 before Andhra Pradesh was bifurcated (divided). Therefore we use the figures for girls and boys married before the legal age in the newly formed states of Andhra Pradesh and Telangana along with undivided Andhra Pradesh, according to the 2011 Census.

5   Little and Rolleston (2014)

Figure 1: *Overview of the design of Young Lives*
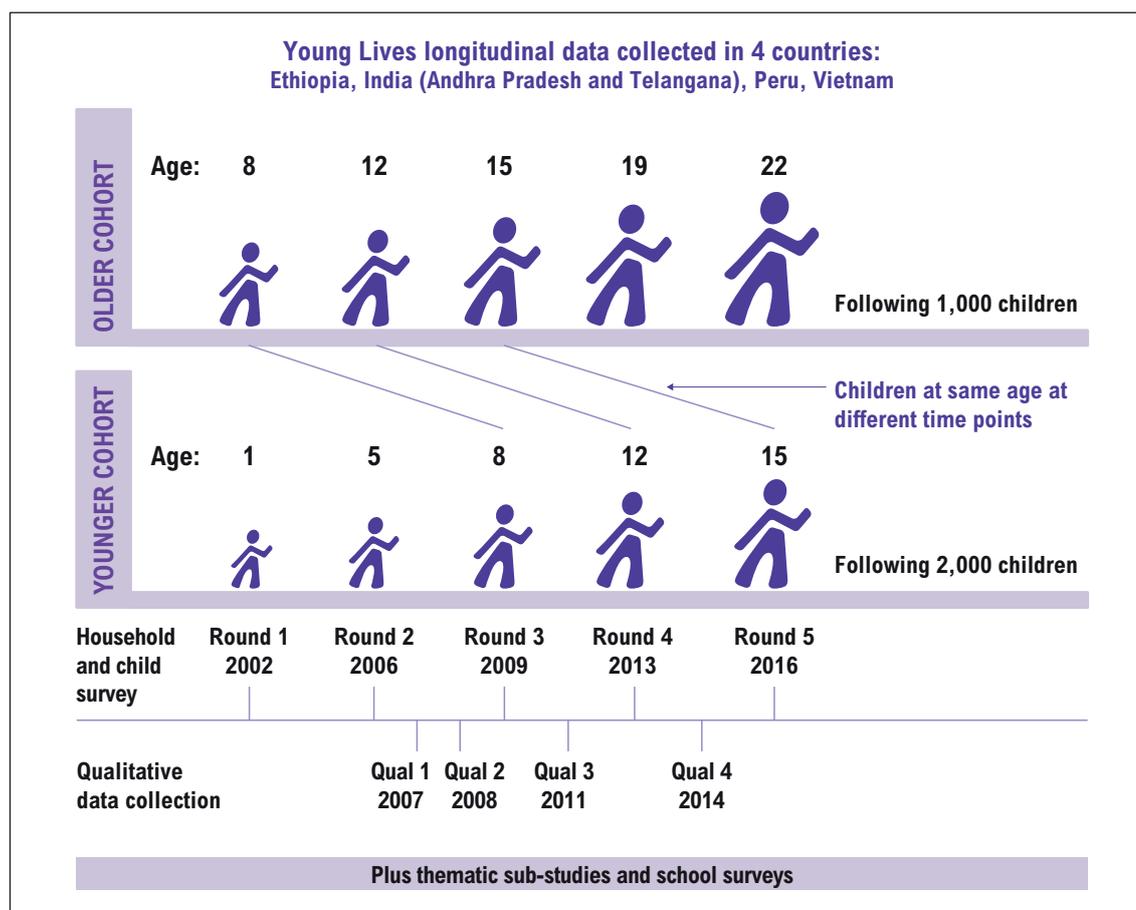
A lot of effort has gone into ensuring that questionnaires in each round are developmentally appropriate and reflect children's and young people's life stage, while maintaining the integrity of cross- cohort comparison. For example, Older Cohort questionnaires administered in the household surveys have evolved from a focus on education, well-being and related themes to matters concerning the transition to adulthood, such as employment and earnings, marital and living arrangements, and child bearing.[6]

Table 1: *Number of children by round and cohort*

	Round 1 (2002)	Round 2 (2006)	Round 3 (2009)	Round 4 (2013)	Round 5 (2016)
Younger Cohort	2,011	1,950	1,930	1,915	1,891
Older Cohort	1,008	995	977	952	914

The attrition rate across all the study countries for Young Lives as well as in India has been low compared to other longitudinal studies in developing countries.[7] In India the attrition rate was 3.7 per cent for the Younger Cohort and 8.1 per cent for the Older Cohort over the course of the study. Table 1 shows the sample size in the household survey in each round.

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6   Boyden and James (2014)

7   Outes-Leon and Dercon (2008; Young Lives Methods Guide (2017)

Longitudinal qualitative research

Young Lives also undertook four rounds of qualitative research between 2007 and 2014. The first round was carried out in 2007 when the Younger Cohort children were aged five to six years and the Older Cohort 12-13; the second round in 2008, the third round in 2011 and the final round in 2014, by which time the Younger Cohort were 12-13 and the Older Cohort 19-20. The qualitative methods comprised semi-structured interviews with children, caregivers, service providers and community leaders; focus group discussions; drawing (including community mapping and life-course draw-and-tell), writing (a daily activity diary); and visual methods (photos/videos). It covers children's attitudes towards and experiences of poverty, their sense of well-being and ill-being, their hopes for the future and their roles and social and institutional transitions.[8] Additional sub-studies were also conducted to investigate experiences of children working in agriculture and decision-making about fertility.

School surveys

Two rounds of school surveys were carried out. The first in 2010 followed the Younger Cohort children into schools to gather information about their educational experiences in primary school. The second, conducted in 2016-7, was a secondary school survey to measure school effectiveness. This was followed by classroom observations in selected schools.

The structure of this report

Since Young Lives was designed to improve understanding of the causes and consequences of childhood poverty, we have structured the country report around five critical themes that have affected the lives of the sample children. Chapter 1 deals with childhood poverty from a multidimensional perspective and examines dynamic poverty status amongst households, including experience of shocks, subjective well-being and access to services. Chapter 2 looks at nutrition and health and captures changes in the nutritional status of children, including recovering and faltering over time. This chapter highlights evidence of the effects of undernutrition and stunting on later cognitive outcomes. Chapter 3 provides insights into the educational trajectories of children and youth as they transition from pre-primary to secondary schools and the Older Cohort transition to higher education and skills training. This chapter captures the preference for low-fee-charging private schools, issues related to equity in cognitive achievement and indicators of the children's psycho-social well-being over time. Chapter 4 addresses child work and transitions to the labour market for the Older Cohort. Chapter 5 explores issues related to marriage and fertility of the Older Cohort and highlights determinants of child marriage and teenage child bearing. The concluding chapter highlights key messages from each of the thematic areas and provides recommendations for addressing childhood poverty in India.

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8   Boyden (2013)

Chapter 1: Childhood poverty

Renu Singh and S.Galab

1.1. Introduction

India has the fourth fastest growing Gross Domestic Product in the world, with a growth rate of 7.6 per cent in 2016.[9] The NITI Aayog Draft Action Plan (2017-20)[10] states that although a combination of global economic developments and domestic policy choices led to a lower growth rate in 2012-3, rapid corrective action in 2014, followed by sustained policy reforms, has helped the economy maintain over seven per cent growth during the three years ending on 31 March 2017. The Organisation for Economic Cooperation and Development (OECD) states that in India 'growth has also become more inclusive as about 140 million people have been taken out of poverty in less than 10 years.'[11] The same report states that many Indians still lack access to core public services such as electricity and sanitation. A key question is how inclusive the economic growth has been, and how far it has resulted in lower levels of poverty. India is the country with by far the largest number of people living under the international US$1.90-a-day poverty line (224 million), more than two and a half times as many as the 86 million in Nigeria, which has the second-largest population of the poor globally. Overall Sub-Saharan Africa has one in two of the poor worldwide, while India accounts for one in three. [12]

Monetary measures of income or expenditure are important but provide only partial insights into standards of living or well-being.[13] Given that poverty is multidimensional, and monetary measures are one-dimensional,[14] multidimensional poverty has been measured in recent years by various methodologies. The recently developed Multidimensional Poverty Index (MPI) uses an adjusted (multidimensional) headcount indicator that measures the incidence and breadth of those who are deprived in three dimensions (health, education, and standard of living).[15] This indicator suggests higher levels of poverty than the monetary measure: nearly two out of every five children globally (37%) are multidimensionally poor.[16] Children are more afflicted by poverty, both in terms of incidence and intensity, than adults. Thirty-seven percent of children are MPI-poor, compared to 21 per cent of adults. Out of these, 31 per cent of the world's 'multidimensionally poor' children are reported to live in India, and nearly half the children in India are reported to be MPI-poor.[17]

1.2. Changes in the wealth index

Young Lives has data related to multidimensional deprivation, and this chapter presents findings on changes that have taken place in household poverty measured by wealth index, across urban and rural locations and in different caste groups, based on five rounds of Young Lives household

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9   IMF World Economic Outlook (2016)

10   Niti Aayog 2016

11   OECD Report (2017)

12   World Bank (2016)

13   Singh and Sarkar (2014)

14   Sen (1983)

15   Alkire and Santos (2010)

16   Alkire and Robles (2017)

17   Alkire *et al.* (2017)

surveys conducted between 2002 and 2016. The qualitative research provides an insight into children's views of poverty as well as how household risks interact with and exacerbate poverty. The measure of poverty used is this chapter is derived from a wealth index rather than income poverty *per se*, although the wealth index is likely to correlate closely with income poverty. The wealth index is a composite index that reflects the welfare of household members in terms of the quality of the dwelling (e.g. overcrowding and composition of the walls, roof and floor), ownership of consumer durables (whether the household owns a radio, TV, bicycle etc.) and access to basic services (whether the household has electricity, access to drinking water etc.).[18] Scores can be calculated for a particular survey year and allow change over time to be observed. Here we focus on households of both cohorts which were surveyed in all five rounds. The wealth index shows that the maximum percentage change was amongst those who started with the lowest wealth level. Overall there has been an increase in average wealth over time for all social groups amongst the Older Cohort households, with the greatest improvement between Round 1 and Round 5 seen amongst Scheduled Caste, Scheduled Tribes, Backward Class and rural households (Table 2). However, the average wealth of Scheduled Caste and Scheduled Tribes households remains much lower than Backward Class and Other Castes households.

Table 2: *Average wealth index across rounds by selected background variables (Older Cohort)*

Variables	Round 1 (2002)	Round 2 (2006)	Round 3 (2009)	Round 4 (2013)	Round 5 (2016)
Overall	0.41	0.47	0.52	0.61	0.65
Caste					
Scheduled Caste	0.33	0.38	0.46	0.54	0.59
Scheduled Tribes	0.31	0.35	0.40	0.52	0.57
Backward Class	0.41	0.48	0.53	0.62	0.67
Other Castes	0.54	0.59	0.63	0.69	0.75
Place of Residence					
Urban	0.65	0.69	0.70	0.73	0.76
Rural	0.33	0.40	0.47	0.57	0.62
Region					
New Andhra Pradesh	0.42	0.48	0.53	0.61	0.66
Telangana	0.39	0.44	0.51	0.59	0.64

Amongst Younger Cohort households, the greatest improvement in household wealth between Round 1 and Round 5 is seen amongst Scheduled Tribes, though they, along with Scheduled Caste households, continue to lag behind the other social groups (Table 3).

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18   For more details see Briones (2017).

Table 3: *Average wealth index across rounds by selected background variables (Younger Cohort)*

Variables	Round 1 (2002)	Round 2 (2006)	Round 3 (2009)	Round 4 (2013)	Round 5 (2016)
Overall	0.41	0.46	0.51	0.59	0.63
Caste					
Scheduled Caste	0.36	0.42	0.46	0.53	0.58
Scheduled Tribes	0.25	0.32	0.38	0.47	0.53
Backward Class	0.41	0.46	0.53	0.60	0.65
Other Castes	0.55	0.59	0.63	0.69	0.72
Place of Residence					
Urban	0.64	0.67	0.68	0.72	0.75
Rural	0.33	0.39	0.46	0.54	0.59
Region					
Telangana	0.39	0.45	0.51	0.57	0.61
New Andhra Pradesh	0.41	0.46	0.52	0.59	0.64

Given that most of the households have shown an increase in wealth over time, we further examine which households have had the greatest access to services, good quality housing and consumer durables (Annex 1). Ownership of consumer durables has seen the largest increase for both younger and older cohort households (133%). Both Scheduled Caste and Scheduled Tribes households have shown the maximum increase in ownership of consumer durables over the fifteen years, although Other Castes households continue to possess the most consumer durables such as TVs etc. Once again, Scheduled Tribes households have shown the most improvement in quality of housing, even greater for Younger Cohort households than for the Older Cohort households. Other Castes households and those in urban areas continue to have the advantage of access to the highest housing quality across time. Access to services (electricity, safe drinking water, sanitation and adequate fuel for cooking) has also shown considerable changes over time. Preliminary findings related to Younger Cohort households are that Other Castes households have the highest access to services in all rounds including Round 5, along with households with mothers with more than ten years of education and urban households. Households belonging to Scheduled Tribes have the lowest levels of access to services in 2016. Despite this, the greatest improvement in access to services over the 15 years has been amongst these same groups. Although access to clean water and electricity have become almost universal for all socio-economic groups (98 per cent for electricity and 99 per cent for clean water), in stark contrast in 2016 only 50 per cent of the households had access to sanitation facilities.

With the start of qualitative data collection in 2008, children's understandings of poverty were elicited by asking them to think about different families within their communities and describe what makes them different from each other.[19] Children's descriptions of material difference reflected a mixture of quantity, quality and access to services across 'poor' and 'rich' families. The children characterised children in poor households based on their vulnerability and risks such as extreme hunger, family debt, exposure to heat and domestic violence. One of the focus group discussions highlighted that 'even when they (poor people) go to work in the fields, they are asked by the rich to sit separately and eat their food. They are ridiculed for not having anything'.

In a community called Katur, poor children stated that they faced 'ridicule from classmates because of their way of dressing and speaking', for not having books and for falling behind in their studies. In Patna, a tribal village, the boys said that poor children were treated differently ('cheaply'), and they 'kept aside' at functions and parties, suggesting self-exclusion to avoid stigma and shame.

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19   Crivello *et al.* (2012)

A crucial theme emerging from the qualitative interviews capturing children's views on poverty is the importance of social relationships, family and friendships in shaping their experience of poverty.

In 2010, young people aged 16- 17 were asked, in individual interviews and in group discussions, to map their social networks, and to discuss who provides support and what kind of support, gaps in resources, opportunities for reciprocity and barriers to using available resources. Yaswanth, one of the Scheduled Tribe interviewees living in Patna, a very poor rural community in Srikakulam district of Andhra Pradesh, lost his father when he was in Grade 1 (about seven years old). He had always helped his mother by fetching water and buying provisions, and his mother had high hopes for him finding a 'small job'. By 2010, when he was 16, his sister was married but the family had incurred debts for the dowry, even though his paternal uncle and his maternal aunt helped his family with cash gifts. Other relatives gave her some gold, cooking pots and household appliances like a TV, gas stove and a steel *almirah* (cupboard). Yaswanth worried: 'If we don't repay them they will mortgage my house.' If their extended family had not helped, his mother would have had to borrow from money-lenders at very high interest rates. As it was, she secured a loan from the local Self-Help Group. When interviewed in 2007 and 2008, Yashwanth said he wanted to continue to study and go on to university but realistically knew that he could not afford it as he struggled to cope with school and work. By 2010, he wanted 'anything that will let me and [my] mother lead a happy life... anything, like repairing vehicles ... I must have the capacity to earn.' Yaswanth recounted how his friends helped him to pay his school fees whenever his mother was away from the village, and sometimes gave him a pen and pencils. Some of his friends had helped him study at exam time. He supported his friends too, sharing food with them, and even though he was poor, he paid the examination fee for a friend whose parents had temporarily migrated (for work). He also felt that teachers were encouraging children to score good marks, and he said he had helped his teachers, getting tea, breakfast and lunch for them.[20]

1.3. The dynamics of poverty

Given the five rounds of survey data, we are able to examine poverty mobility amongst both Older Cohort and Younger Cohort households between 2002 and 2016. We have done this by identifying the households who were in the bottom wealth tercile in 2002 (631 of the Younger Cohort households and 302 households of the Older Cohort) and then following them to see if they remain in the bottom third in each round. Of those poor households 422 of the Younger Cohort and 212 Older Cohort households had moved out of the bottom tercile by 2016 (Annex 1). Between 2002 and 2016, 209 households (11%) amongst the Younger Cohort and 90 households (10%) amongst Older Cohort were consistently in the bottom wealth tercile and are here termed 'persistently poor'. There were also 13.9 per cent of Older Cohort households and 15 per cent of Younger Cohort households who remained consistently in the top tercile, termed 'consistently least poor'.

Poverty dynamics

'Persistently poor' households are those households that have been in the bottom tercile of the wealth index distribution in every survey round from 2002 to 2016.

'Consistently least poor' households are those households that have been in the top tercile of the wealth index in every survey round from 2002 to 2016.

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20   Morrow and Vennam (2015)

Out of the total number of Scheduled Caste households, 47.7 per cent were in the bottom wealth tercile in 2002 but only 17.9 per cent of the total remained persistently poor. Among Scheduled Tribes households, 28 per cent of the Older Cohort and 32 per cent of the Younger Cohort households remained persistently poor, compared to Other Castes[21] households of whom only two per cent of Older Cohort and fewer than one percent of Younger Cohort showed as persistently poor. This indicates a strong association between poverty and caste. Further, while 13 and 14 per cent of older and younger cohort rural households remained in the bottom tercile between 2002 and 2016, none of the Older Cohort urban households and only one per cent of Younger Cohort households in urban locations remained persistently poor. Thus, despite some upward poverty mobility, Scheduled Tribe households amongst both cohorts as well as rural households across the sample continue to be trapped in poverty.

Figure 2 compares the percentage of households which have remained persistently in the bottom wealth tercile between 2002 and 2016 by caste and location with the percentage in the bottom wealth tercile in 2002.

Figure 2: *The dynamics of poverty by caste and location*

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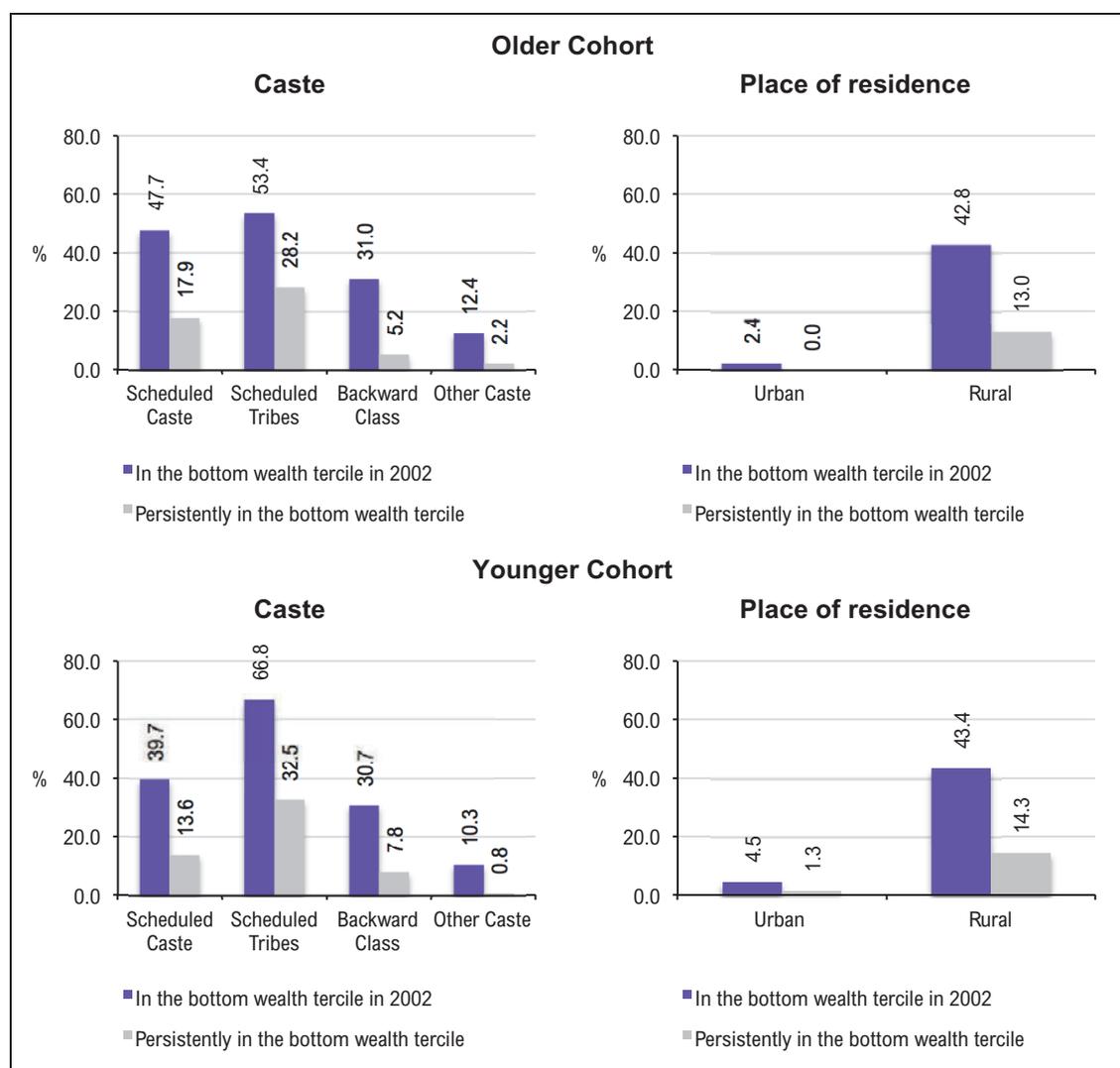
21   Scheduled Tribes, Scheduled Castes, and Backward Classes are official groupings recognised in the Constitution of India as historically disadvantaged. Other Castes are more privileged and socially advantaged classes.

Another study using a different approach defined households as chronically poor if they featured in the poorest quarter using data from survey rounds 2 and 3.[22] This study found 47 per cent of chronically poor households were Scheduled Tribes or Scheduled Caste, and more than 80 per cent were located in rural areas.

1.3.1. Subjective well-being

Subjective well-being is defined as *'a person's cognitive and affective evaluations of his or her life'*.[23] The Young Lives surveys captured subjective well-being for both cohorts across all five rounds by posing the following question:[24]

There are nine steps on the ladder. Suppose we say that the ninth step, at the very top, represents the best possible life for you and the bottom represents the worst possible life for you. Where on the ladder do you feel you personally stand at the present time?

Analysis of average subjective well-being scores of the Older Cohort persistently poor and consistently least poor households between the ages 12 and 22 captures children's own views about their personal well-being. The graph in Figure 3 clearly demonstrates that average subjective well-being scores are substantially higher amongst children from consistently least poor households than children from persistently poor households across ages. The average subjective well-being scores show an increase from 4.8 to 5.8 and from 3.0 to 4.4 for consistently least poor and persistently poor respectively. Despite the increment in the subjective well-being amongst persistently poor children between the ages of eight and 22, a difference of 33 per cent in well-being scores between them and consistently least poor children continues to exist at age 22.

Figure 3: *Older Cohort and Younger Cohort subjective well-being scores by poverty dynamics*

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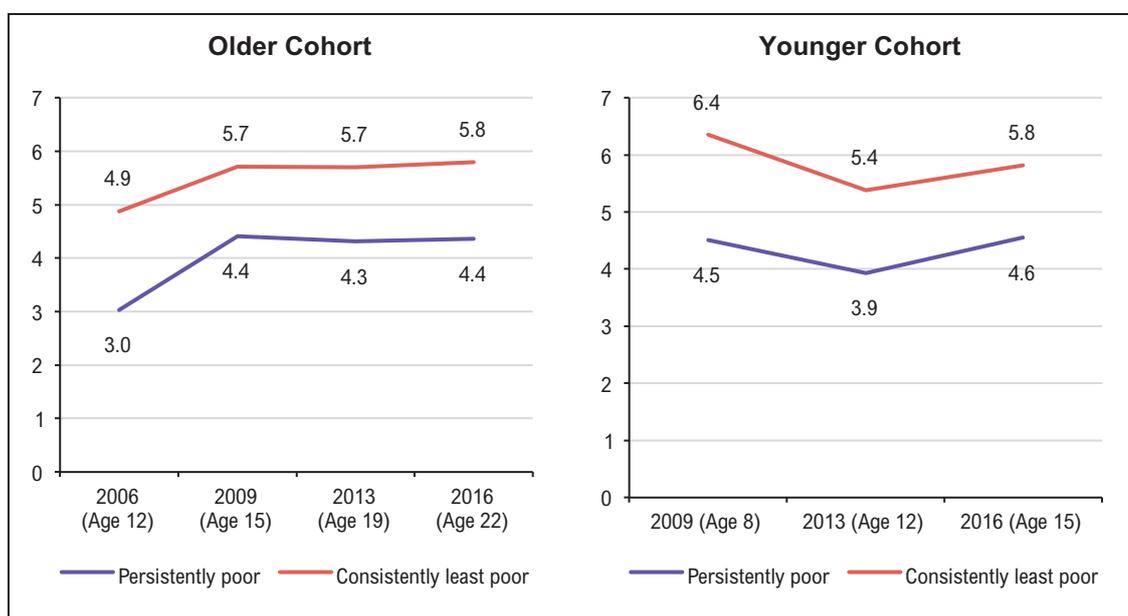
22   Ranked on Monthly Per Capita Expenditure (MPCE). Singh and Sarkar (2014)

23   Diener, Lucas and Oshi (2002)

24   Adapted from Cantril's (1965) ladder of life measure

It is suggested that poverty has a greater impact on children's subjective well-being than gender in Andhra Pradesh, with a higher percentage of poor children and children from the Scheduled Castes reporting a bad life.[25] According to this analysis, older children tend to position themselves in the middle of the ladder and a higher percentages of younger children place themselves at either end. A greater percentage of poor children in the Older Cohort, however, place themselves at the bottom end of the ladder in comparison with the Younger Cohort. This may suggest that, with age, poverty becomes an increasingly negative factor influencing children's subjective wellbeing, or alternatively that children become increasingly aware of poverty and inequalities.

1.4. Shocks experienced by households

There is considerable evidence to show that rural and agriculture-based households in low- and middle-income countries face various risks related to economic crises, illness, political shocks and environmental shocks.[26] There is evidence of the relationship between experience of shocks and poverty and also that both idiosyncratic (affecting individual households) and covariate (community-level) dimensions of risks are triggered by any one of the multiple and complex determinants of poverty. Drawing upon the longitudinal household data related to shocks experienced by both younger and older cohort households as well as those who remained persistently poor and those who remained consistently least poor, we find that across all five rounds persistently poor households reported a higher number of shocks (Fig 4). For example, while the increases in prices between 2013 and 2016 were reported as among the biggest shocks by one out of every two households, this percentage was much higher for persistently poor households, who are often in rural areas, with seven out of ten households reporting economic shocks. The same pattern is seen for households reporting shocks due to environmental hazards and shocks related to crop failure or death of livestock. Shocks due to the illness of a family member were not limited to the persistently poor households and were reported by a quarter of families in 2013 and by almost a third of families in 2016.

The first round of the qualitative interviews in 2008 gathered young people's perspectives on how risks and vulnerability associated with economic change affected children in their communities and whether or not there were programmes to protect them. Children living in rural and tribal communities talked about drought, flooding and heavy rains as disasters that affected their lives by destroying homes and causing homelessness. Children described how, during periods of drought, families were pushed to migrate in search of work, and children had to work more and often missed classes or were pulled out of school as a result. [27]

Bhavana, a Backward Classes girl living in Katur, a rural *mandal* in Rayalseema region, accompanied her parents to Mumbai each year during the dry season while her parents looked for work. As a result, she missed school and eventually stopped attending school altogether after Grade 2. Her father died soon after and her mother explained that the family condition improved slightly after his death, since he spent a lot of money on cigarettes and alcohol.

> '*When my husband was alive, we did not even have food to eat … after his death, we have some money … we still go to Mumbai … [to] earn money and can eat… I do not expect any changes, except difficulties… I am now scolded by my son… even people in the village told my son off for treating me badly… I have to put up with all of this.*'

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25   Pells (2011)

26   Macours (2012)

27   Vennam, Crivello and Kongara (2010)

Figure 4: *Shocks experienced by Older and Younger Cohort households*
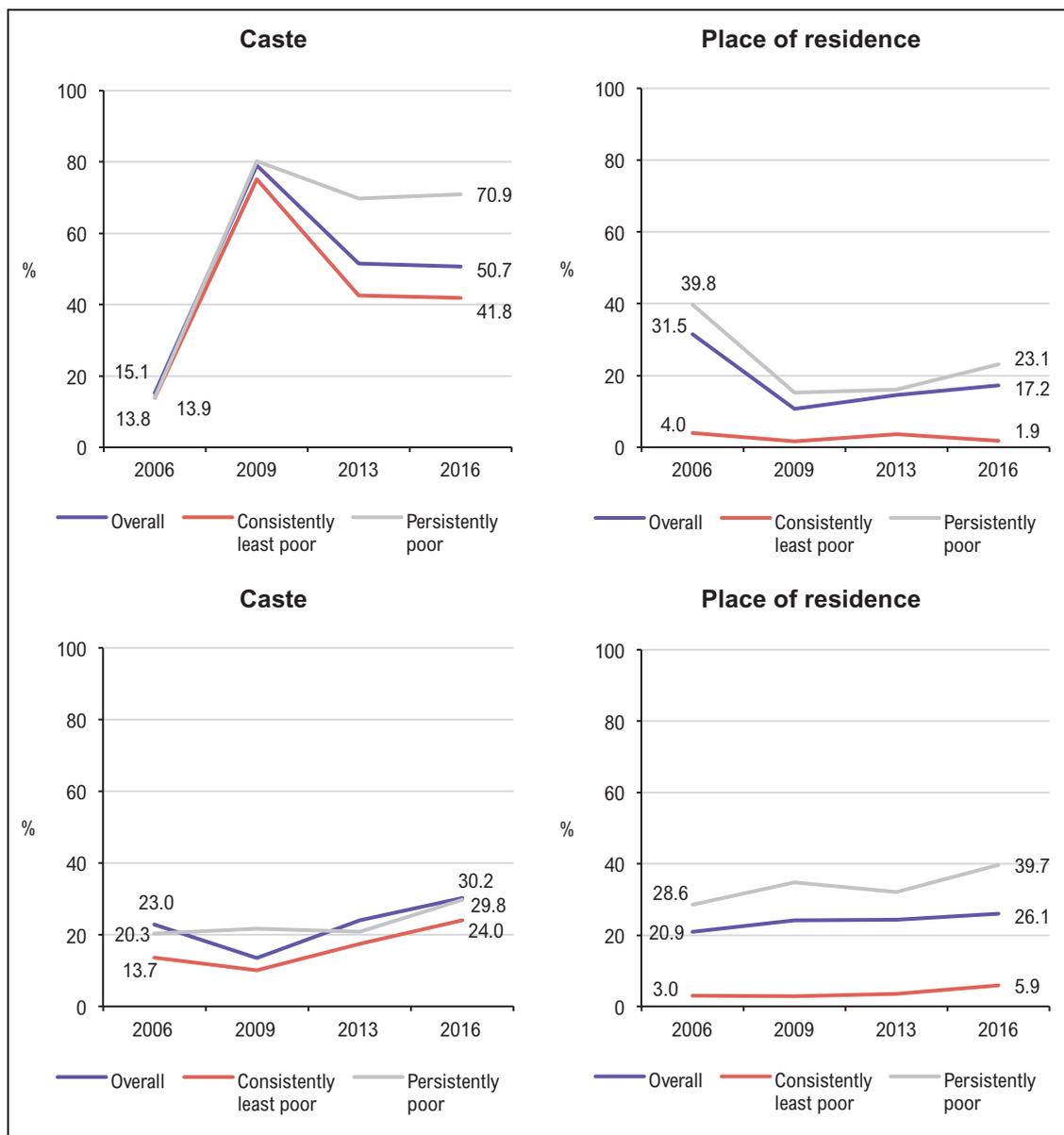
Note: there were some differences in the questions across rounds that could affect reporting and explain the sudden peak in economic shocks in 2009 seen here. In Round 2, increases in prices were based on only (1) an increase in the cost of inputs, (2) a decrease in the prices for outputs and (3) an increase in school fees. In Round 3 the increase in food prices was added.

1.4.1. Intergenerational transmission of poverty

Exploring intergenerational transmission (IGT) of poverty clearly requires a perspective across the lifecourse and the Young Lives data allow us to examine the likelihood that poverty is passed from one generation to another. It appears that education is a powerful tool for breaking the cycle of poverty and serves a strong protective function against shocks and extra-household pressures.[28] However, it is important to recognise that existing gender and social norms affect how resources within the household are spent on children's education. Comparing educational levels achieved by Young Lives young men and women at age 22 and their fathers and mothers respectively by poverty status, we observe that young people at 22 achieved higher levels of education than their parents among both persistently poor and consistently least poor families,

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28   Bird and Higgins (2011)

indicating a positive trend. However, one can also observe that there are huge differences in educational achievement between the persistently poor and the consistently least poor for both parents and children. Amongst persistently poor households, 97 per cent of mothers and 74 per cent of fathers had not attended formal education and none of the parents had post-secondary education. By contrast, amongst the consistently least poor households 14 per cent of mothers and 39 per cent of fathers had studied beyond secondary education. However, all of the Older Cohort had some formal education, whereas only 13 per cent of the girls and 8 per cent of the boys from persistently poor households studied beyond secondary level. The fact that more girls from persistently poor households are studying in higher education compared to boys is a very interesting trend and requires more analysis in order to understand the enabling factors that supported girls to continue studying.

Table 4: *Difference in educational achievement between youth and their parents by poverty status*

	Highest grade completed			
	No formal education	Primary	Secondary	Post-secondary
Persistently Poor				
Mother's education	97.3%	2.7%	–	0.0%
Daughter's education	0.0%	20.5%	66.7%	12.8%
Father's education	73.9%	17.4%	8.7%	0%
Son's education	0.0%	26.5%	65.3%	8.2%
Consistently least poor				
Mother's education	13.6%	31.8%	40.9%	13.6%
Daughter's education	0.0%	3.0%	32.8%	64.2%
Father's education	8.8%	17.5%	35.1%	38.6%
Son's education	0.0%	0.0%	41.4%	58.6%

Source: Singh and Mukherjee (forthcoming)

Thus, the difference in educational outcomes remains in favour of young people belonging to better-off households, even though educational attainment is much higher across the younger generation when compared to their parents across both categories.

There is also evidence of change in occupation between caregivers and children. 39 per cent of caregivers from persistently poor households were self-employed agricultural workers and 31 per cent employed agricultural workers. These percentages reduced to 32 per cent and 14 per cent respectively of young people who were cultivating their own land. The biggest change between generations is that 25 per cent of youth in consistently poor households were doing regular salaried non-agricultural work as compared to only six per cent of their caregivers. This general upward mobility is unevenly spread, with the number employed in salaried jobs much higher for youth (56%) and caregivers (51%) in consistently least poor households.[29] This might well be attributable to a combination of new livelihood opportunities brought about by economic changes and the increased educational levels of the younger generation.

1.5.   Implications for policy

It is evident that the standard of living has improved considerably for households in the Young Lives study over the last fifteen years.[30] However, despite these positive trends inequality

29   Singh and Mukherjee (forthcoming)

30   Singh *et al.* (2017)

between socially advantaged and socially disadvantaged households on the one hand and between urban and rural households remains evident. In spite of an increase in access to services, ownership of consumer durables and improved housing quality, households such as Scheduled Tribes, Scheduled Caste and rural households remain trapped in poverty. At the same time, we must recognise and take into account the multi-dimensional view of poverty and how cumulative risks increase risks of long term negative consequences for children's well-being. While education levels for youth show a marked positive trend compared to their parents, it is important for youth to be provided the necessary skills and opportunities to realise their potential through market opportunities. Since persistently poor households also seem to have experienced greater shocks related to price rises, environmental hazards and crop failure, it is important for vulnerable households which are likely to experience shocks and, partly as a consequence, remain poor to be provided with adequate social protection and insurance. Social security protection may be extended to such households, in light of Government of India's current commitment of '*Sabka Sath Sabka Vikas'* as well as Sustainable Development Goal 1 related to ending poverty. Given the economic and work impacts of ill health within the family often reported by children and their families, adequate healthcare that also reduces out of pocket expenses is therefore central to social protection. The Indian government's announcement of the new healthcare programme in the 2018-9 Budget that would provide 100 million families with up to Rs. 500,000 (about US$7,860) of coverage each year to access health services is a very welcome step in this direction though implementation will be key.

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Chapter 2: Nutrition and health in Young Lives

Liza Benny

2.1. The national and policy context

The number of people living below the poverty line has rapidly reduced from 45 per cent in 1993 to 22 per cent in 2011. India's performance on health indicators has been positive in many dimensions, as life expectancy improved from 58 to 68 years between 1990 and 2014, the under-five mortality rate saw sharp declines of 2.5 per cent annually over this period and its score on the Global Hunger Index reduced by about 25 per cent between 2000 and 2015.[31]

Rates of undernutrition among children declined over this period; rates of stunting among children under five have declined from 48 per cent in 2006 to 39 per cent in 2014.[32] Although this reflects a reduction of 23 per cent in the total number of stunted children and corresponding declines in wasting have led to seven million fewer wasted children under five, the absolute burden of malnutrition in India remains high.

Definitions

The prevalence of undernutrition in samples of under-fives is most commonly indicated by stunting, wasting and underweight.

Stunting: A child is described as being stunted, or having stunted growth, if their height is more than two standard deviations below the norm or median height for a healthy child of the same monthly age and gender from the World Health Organization (WHO) reference population. Stunting is an indicator of chronic or long-term malnutrition and reflects a child's failure to fully achieve linear growth potential due to poor health and/or low nutritional intake.

Wasting: Wasting, or thinness, is a measure of acute malnutrition, and indicates a recent and severe process of weight loss, reflected in weight more than two standard deviations below the norm for their height, as defined by the median weight for a healthy child of the same monthly age, gender and height in the WHO reference population.

Underweight: Underweight is defined as weight more than two standard deviations below the norm for a healthy child of the same monthly age and gender from the WHO reference population, and is influenced by both stunting (height-for-age) and wasting (weight-for-height).

Child undernutrition rates in India remain among the highest in the world and more stunted, wasted and underweight children live in India than in any other country in the world. This high prevalence of malnutrition in India, and especially in the number of stunted children, which is unlikely to be attributed to genetic factors[33] but has been linked to environmental and behavioural factors, such as an unhealthy environment due in part to open defecation, and social norms such as parental preference for eldest sons that contributes to height disadvantage among children

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31   IFPRI (2016a)

32   Raykar, Majumder, Laxminarayan and Menon (2015); RSOC (2016)

33   Arnold, Parasuraman, Arokiasamy and Kothari (2009)

who are later in the birth order.[34] The burden of malnutrition in its different forms varies across states in India. According to national statistics from 2015-6, about a third of children under five were stunted in both Andhra Pradesh and Telangana, and a little under one fifth of children under five were wasted.[35]

Child undernutrition is important for health and economic outcomes in current and future generations. It presents a risk factor for child mortality and survival, with an estimated 45 per cent of deaths of under-fives linked to malnutrition.[36] Undernutrition in childhood is associated with poorer health later in life and contributes to lower adult productivity through lower cognitive development. It is therefore estimated to reduce countries' economic progress by at least 8 per cent.[37] In addition, malnutrition and poor diet are the largest risk factors responsible for the global burden of disease.[38] Furthermore, early childhood malnutrition in girls is strongly associated with reduced birthweight of their offspring. The prevalence of early marriage and pregnancy can also adversely affect the intergenerational transmission of undernutrition, especially due to women's higher nutritional requirements during pregnancy and lactation, as well as the increased risk of malnutrition and infant mortality in their children.

The long-term lost potential represented by malnutrition is especially concerning in the Indian context, with more than half of all children under three in India being either stunted or wasted or both. The Sustainable Development Goals aim to end all forms of malnutrition worldwide and India is identified as crucial in ending malnutrition globally,[39] highlighting the importance of national and state-level policy to identify and target the key drivers.

Despite past policy attention concentrated on reducing malnutrition, success in this area has been limited.[40] Recently attention has focussed on policies to eradicate many of the drivers of malnutrition that have been identified in the literature. National policies have implemented actions to reduce the risk of environments that contribute to the spread of disease and infection through lack of access to safe sanitation facilities. Efforts to reduce the extent of poverty through programmes to guarantee food and employment have also improved food security among vulnerable populations. Finally, programmes to promote the education of girls and delay marriage and childbearing in adolescents have been central in the discussions around improving the welfare and status of women. They also provide additional potential to decrease the intergenerational transmission of poor nutritional status.

Young Lives evidence has contributed to these discussions as it has highlighted the changing patterns of nutrition and health among children in Andhra Pradesh over time, as well as the determinants of poor nutrition over the course of their life.

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34   Jayachandran and Pande (2015); Spears (2013); Spears *et al.* (2013)

35   NFHS-4 (2016)

36   Black *et al.* (2013)

37   Maternal and Child Nutrition Study Group (2013)

38   Forouzanfar *et al.* (2015)

39   IFPRI Global Nutrition Report (2016b)

40   Mohmand (2012)

2.2. Patterns of undernutrition among one-year-old children in 2002

Figure 5: *Distribution of undernutrition among sub-samples of one-year-old children in 2002*
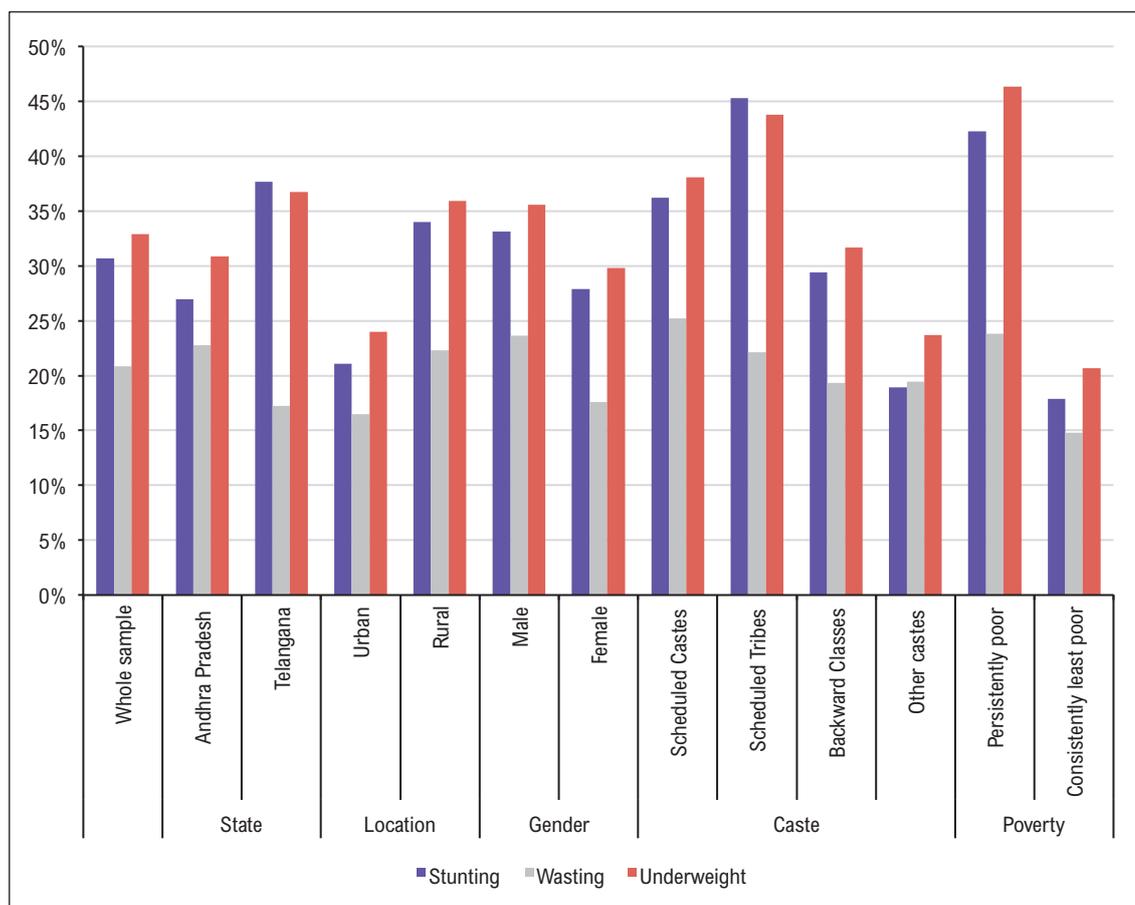
Note: Characteristics of households and children (such as location and region of residence) that vary over time are defined in 2002. Children were aged between six and 18 months in 2002.

Undernutrition was very prevalent among the Younger Cohort children of the Young Lives sample in 2002, with around three in ten one-year-old children being stunted (chronic malnutrition), more than one fifth being wasted (acute malnutrition), and close to a third being underweight. There was huge disparity in the groups of children who suffered from undernutrition in the states of Telangana and Andhra Pradesh (Figure 5). All measures of undernutrition were more prevalent in rural areas than in urban areas, indicating higher levels of all forms of nutritional deprivation in these areas. Boys were also more likely than girls to be undernourished, a pattern that is well documented in the literature. Children in the Young Lives sample who belonged to Scheduled Tribes fared worst in terms of chronic undernutrition compared to other ethnic groups, whereas acute undernutrition was most prevalent among Scheduled Caste children, as a quarter of them were wasted in 2002. Poverty, and especially persistent poverty, is positively correlated with undernutrition, with the prevalence of stunting and wasting being much higher in persistently poor households than in households that were consistently among the least poor households in the sample. However, even though poverty is correlated with undernutrition, the prevalence of undernutrition among consistently least poor households is still high; this could indicate the pro-poor bias of the Young Lives sample but in any case shows how large a problem undernutrition is.

The Young Lives data have highlighted how chronic undernutrition and poor health are associated with worse outcomes later in life. Lower levels of both chronic and acute undernutrition in India were associated with lower scores in cognitive tests at ages five and eight.[41] Analysis has shown that compared to children who were not stunted, children in India who were stunted age five were more likely to have lower scores on a maths test at age eight, ten per cent more likely to make a mistake when reading or writing a simple sentence, and nine per cent less likely to be in the correct grade for their age at eight years old.[42] Good nutritional status, as measured by height-for-age at the age of eight, is associated with better performance in indicators of psychosocial competencies such as self-efficacy, self-esteem, and educational aspirations at age twelve, when comparing with children who have poorer height growth.[43]

2.2.1. Changes in nutritional status over time: a cross-cohort comparison

Figure 6: *Changes in prevalence of stunting among children of similar ages over time*

Note: characteristics of households and children (such as location and region of residence) that vary over time are defined in 2002. The graph only considers children for whom data on stunting is available at both ages eight and 15.

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41   Aurino and Burchi (2016)

42   Save the Children (2013)

43   Dercon and Sánchez (2013)

Figure 6 shows how stunting in the Young Lives sample changed over time. In the first round of the Young Lives survey in 200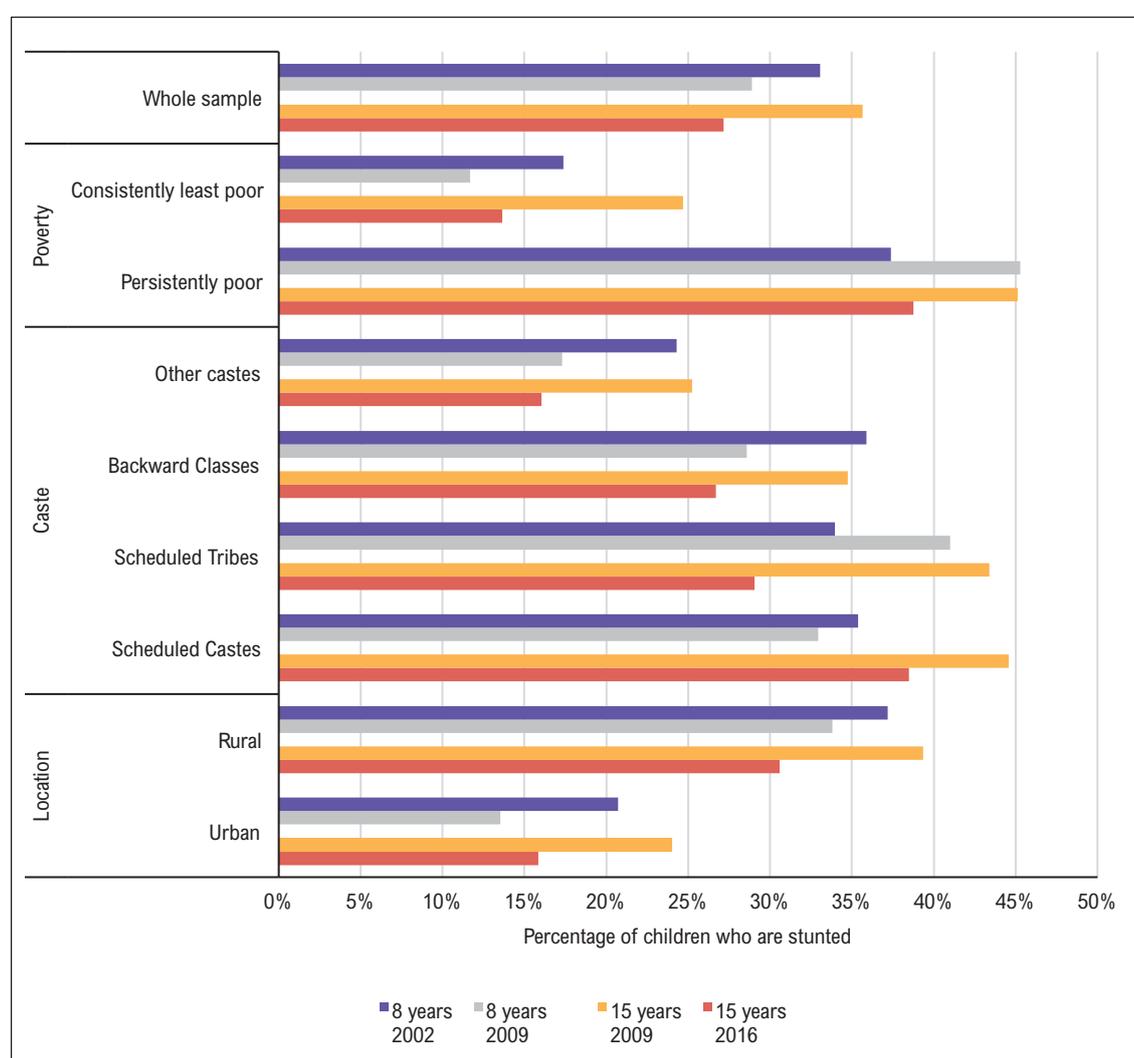2, around 34 per cent of eight-year-old children were stunted, but this figure had decreased to 26 per cent of eight-year-olds in 2009. This pattern of improvement holds true for most sub-groups of children – except, concerningly, for eight-year-old children from the most vulnerable groups, who were more undernourished in 2009 than in 2002. For instance, about 45% of eight-year-old children from persistently poor households were stunted in 2009, compared to 39 per cent from similar households in 2002. Similarly, more children from Scheduled Tribes suffered from chronic undernutrition in 2009 than in 2002, as the prevalence of stunting among eight-year-olds in this group increased from 33 per cent in 2002 to 41 per cent in 2009. Both equity and the general rate of progress seem therefore to have been undermined by a failure to reach the most marginalised.

2.3. Changes in nutritional status over the course of life

The evidence in early childhood literature emphasises the importance of early childhood[44] as a critical period for children's growth and development. Beyond this, the hypothesis is that there is little potential for improvement in health and nutritional status or for material improvements to outcomes later in life. Recent evidence has contested this hypothesis, however, as multiple studies have provided evidence of change in nutritional status beyond infancy using the Young Lives data. Stunting prevalence in the Young Lives sample increased by 5.3 percentage points between ages one and five, and decreased by 6.1 percentage points between ages five and eight.[45] 18 per cent of children who were not stunted at age one became stunted by age eight in India, whereas 45 per cent of children who were stunted at age one recovered from stunting by age eight.

Figure 6 shows that prevalence of stunting among eight-year-old children in 2002 (the Older Cohort) increased by age fifteen by about three percentage points, and that this increase was more marked among vulnerable populations such as Scheduled Tribes children and children from persistently poor households. This pattern was not seen among eight-year-olds in 2009 (the Younger Cohort) as stunting rates generally remained stable or decreased from ages eight to fifteen, even among more economically and socially vulnerable groups. These patterns are indicative of changing demographics and patterns of income as average incomes rose over this period; however, gains in poverty reduction were unevenly spread across groups.[46]

Young Lives qualitative research gathered perspectives of community members, children and caregivers on how risks and vulnerabilities affected children in their communities. For example, a village headman (*sarpanch*) explained that while crops were good between 2000 and 2005, the situation was bad in 2009 and all farmers had lost hope. He stated: 'the impact on children is that there is less protein[-rich] food, so they are mainly fed on rice and tomato curry so children's growth will be affected'.[47]

More than a third of children who were stunted at age eight managed to recover physically to the level of their peers by the age of 15, and there was substantial growth faltering over this period.[48] Research also suggests that there is significant physical recovery among girls between the ages of 12 and 15, with less evidence for physical recovery later in adolescence between the ages of

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44   Grantham-McGregor *et al.* (2007)

45   Lundeen *et al* . (2014)

46   Aurino *et al.* (2016); Galab, Reddy and Singh (2014)

47   Singh and Sarkar (2014)

48   Fink and Rockers (2014)

15 and 19.[49] This is evidence of changes in nutritional status in adolescence, and particularly in early adolescence, representing an additional potential critical window where policy interventions to improve health and nutrition may be beneficial for health outcomes as well as for future generations.[50] Among children who were stunted at one year old, more than half were not stunted at age fifteen (Figure 7). The prevalence of this change in stunting status was particularly high among children in urban locations; around two thirds of the children living in urban areas who were stunted at age one were not stunted at age 15. Conversely, around a fifth of children who were not stunted at age one were stunted at age 15; this proportion was significantly higher among children in persistently poor households, of whom 30 per cent experienced a worsening of their physical growth, moving from not being stunted to being stunted between the ages of one and 15.

Qualitative interviews with caregivers show crop failure and drought to be major causes of undernutrition amongst children belonging to the poorest households, The mother of Ravi, who lived in Manipur, a tribal village in north coastal Andhra, complained that since her two married daughters had returned to the parental home with their children after being ill-treated by their respective husbands, the situation at home was grim: 'however much we cook, the children do not get sufficient food, which makes us feel bad…. As there is no rain at all, there are no crops anywhere, all the fields are barren.'

Figure 7: *Changes in stunting status between ages 1 and 15*
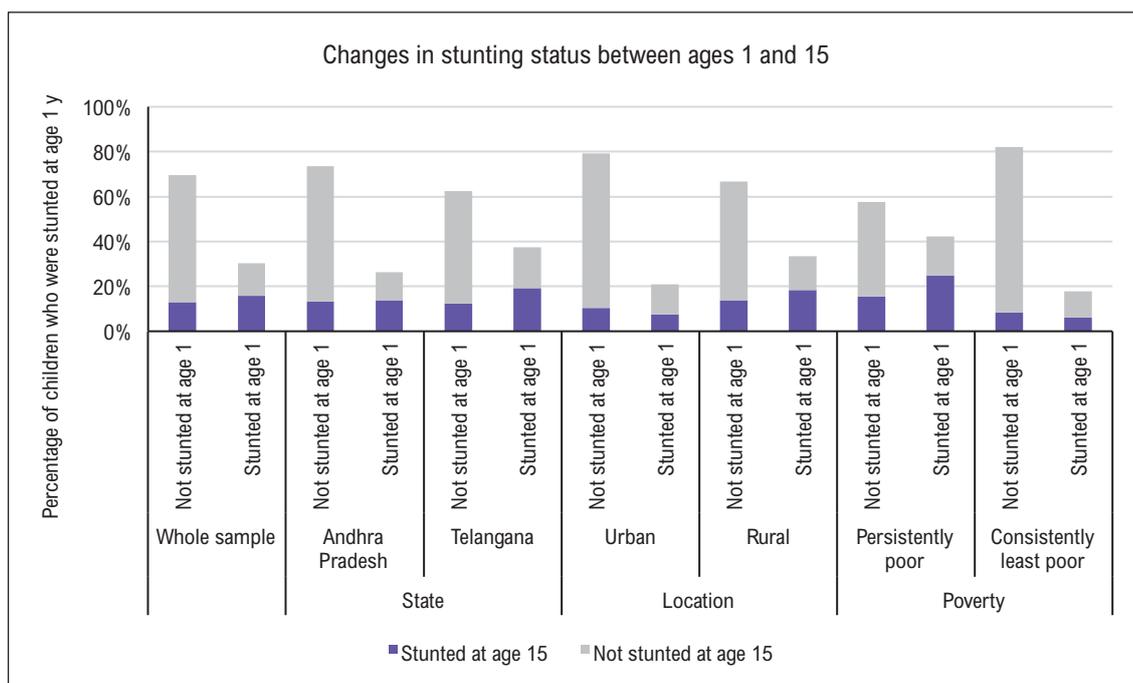
Note: Characteristics of households and children (such as location and region of residence) that vary over time are defined in 2002. The graph only considers children for whom data on stunting is available at both ages one and 15.

Young Lives evidence indicates that post-infancy recovery from stunting is associated with better outcomes in childhood and later in life. Children who were persistently stunted from ages one to eight performed significantly worse on tests of cognitive achievement than children who were never stunted between those ages; moreover, children who recovered from early stunting had

49   Benny, Dornan and Georgiadis (2017)

50   Prentice *et al.* (2013)

higher cognitive achievement test scores at age eight than children who remained stunted.[51] Even after the first thousand days of life, child growth has a positive effect on cognitive achievement.[52] However, the earlier that recovery from stunting occurs, the more likely it is to be associated with lasting improvements in cognitive performance.[53] The universalisation and effective delivery of programmes such as the Integrated Child Development Scheme, which focuses on early childhood development, and the Rashtriya Bal Suraksha Karyakram, which targets children aged up to 18 years for health and nutritional problems, are therefore crucial for fostering nutritional development among children, especially those who are vulnerable to shocks to their development in the early period of their lives. Improvements in height relative to the WHO reference group between ages eight and 12 are associated with better performance on cognitive tests.[54] This highlights the potential for nutritional interventions even after the critical window of the first thousand days to generate improvements in cognitive and psychosocial outcomes.

2.4. Factors associated with growth and nutrition in India

Parental characteristics such as mother's height and parental education are key factors that have been shown to be associated with growth in childhood, as well as with changes in nutritional status over time.[55] In particular, household wealth is consistently associated with child health and nutrition in both the short and long term.[56] Poverty reduction programmes could have a significant beneficial impact on reducing the prevalence of undernutrition among children, and may generate improvements in nutritional status for those suffering from early deficits.

Mother's height is one of the most important factors that determine child growth and height in infancy and beyond, and this link between maternal undernutrition and child undernutrition can be exacerbated if the child is born to the mother in adolescence (which may also present health risks for the mother).[57] This represents a particularly significant risk for the reduction of child malnutrition in India due to the prevalence of social and cultural factors that imply that the nutritional gender gap, which is documented as being in favour of girls in childhood,[58] may reverse in favour of boys and widen in adolescence, with adolescent girls having less diverse diets than adolescent boys do.[59] The National Food Security Act of 2013 provides for a cash grant to pregnant women and could, once implemented and if adequately targeted, represent a step towards reducing this gender imbalance in the nutritional status of adolescents. Employment and labour laws, such as the Maternity Benefit (Amendment) Bill of 2016 that propose improvements to maternity benefits could also alleviate some of the financial burdens associated with motherhood, and therefore improve child nutritional outcomes. However, as they only target women in formal employment – a minority of the Indian workforce and particularly a minority of the most disadvantaged working women – their effectiveness is limited.

Community factors have been particularly significant in determining child nutrition. In the case of India, the presence of a hospital in the community is significantly associated with growth between ages one and five, and between five and eight.[60] The high prevalence of open defecation has

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51   Crookston *et al.* (2013); Dornan and Georgiadis (2015)

52   Georgiadis (2017)

53   Georgiadis *et al.* (2017)

54   Crookston *et al.* (2014)

55   Schott, Crookston, Lundeen, Stein and Behrman (2013)

56   Krishna *et al.* (2015)

57   Benny *et al.* (2017)

58   Dercon and Singh (2013)

59   Aurino (2016)

60   Schott *et al.* (2013)

been highlighted as explaining the high rates of child stunting in India.[61] In the Young Lives data, households' access to water and sanitation and the disease environment in the community are factors that are significantly associated with child growth and changes in nutrition over time.[62]

In an interview in Round 3 of the qualitative surveys, Prasad, an Older Cohort boy from a household in Katur, a rural village in Rayalseema, said that the village had suffered from water scarcity for the past six months. The existing bore-well[63] had stopped functioning and the villagers had to fetch water from a well three kilometres away. The richer families (Kamma caste) were able to fetch water by tractor, but poorer families had to fetch water themselves. He complained that 'the village *sarpanch* will take no initiative and even though taps have been fitted, the timings for water supply are uncertain and the water might have insects in it'.[64]

Figure 8: *Changes in stunting status between one year and eight years of age by access to sanitation at one year*
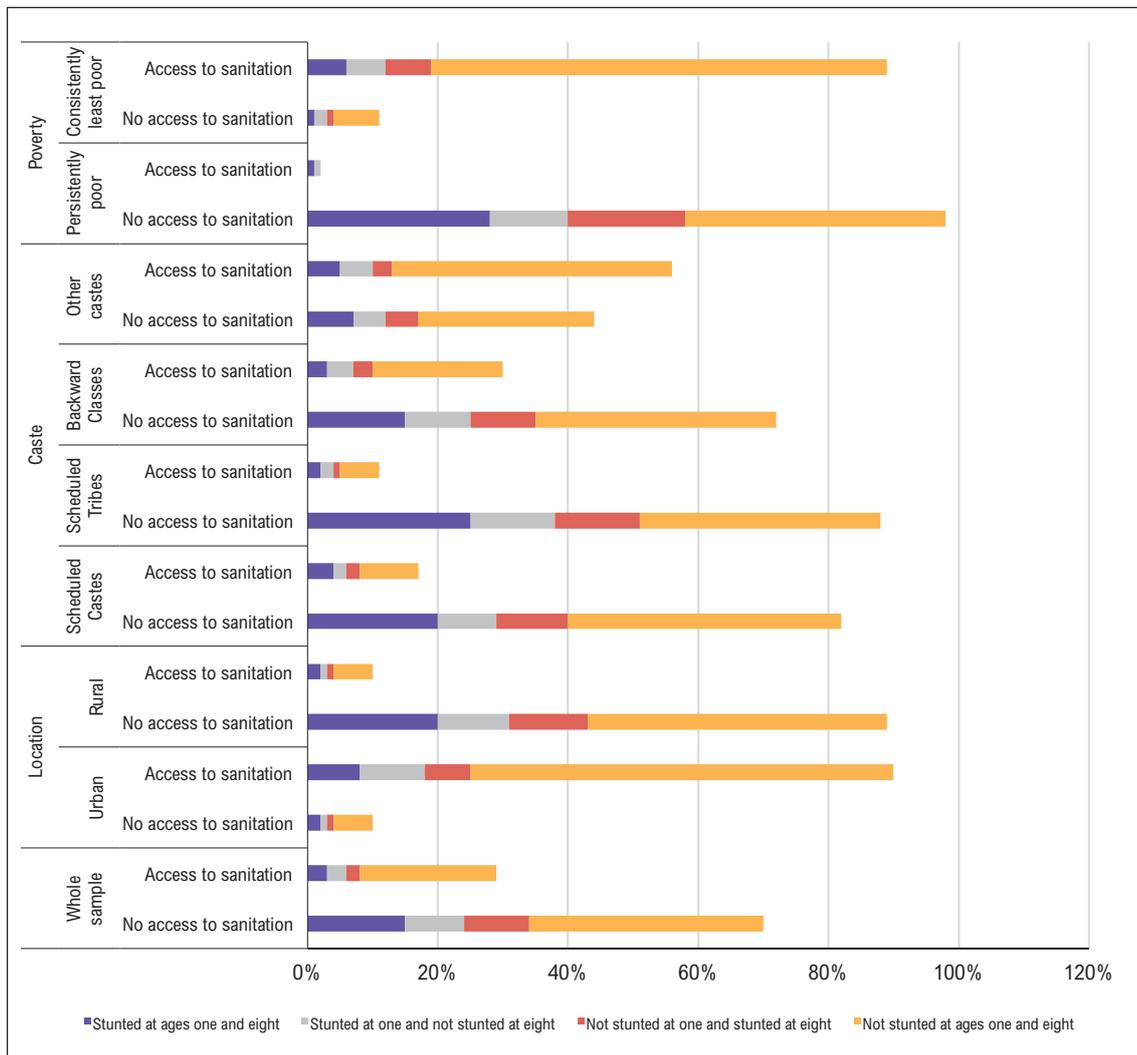
The cost of living, as represented by the prices of food in the community, is associated with changes in food consumption and increased short-term and chronic malnutrition in Andhra

61   Spears (2013); Spears *et al*. (2013)

62   Georgiadis *et al*. (2017); Nolan (2016)

63   Bore-hole well

64   Singh and Sarkar (2014)

Pradesh and Telangana.[65] Increases in wasting in particular were concentrated among low- and middle-income groups, which are most vulnerable to price shocks. Therefore, programmes such as the Public Distribution System (PDS), represent a potential for guaranteeing or improving the food security of households. However, the PDS has been criticised for corruption and poor quality of implementation and provision, which could in actuality result in harmful effects by reducing the nutritional intake of poorer households and individuals.[66]

Finally, policies targeted directly at improving children's nutritional intake such as the Midday Meals Scheme in schools have had the beneficial effect of promoting growth recovery later in childhood compensating for poor growth in early childhood.[67] Households' increased participation in the National Rural Employment Guarantee Scheme had a mitigating effect on the negative impact of drought on growth early in childhood, contributing to improvements in growth later in childhood.[68]

2.5. Implications for policy

Young Lives research on nutrition and growth highlights the importance of children's early life circumstances for outcomes in childhood and later in life. Early childhood nutrition and growth have lasting implications for cognitive achievement and psychosocial development, both of which are significant for the determination of outcomes in adulthood. However, it is also important that policies to target undernutrition do not only focus on reductions in early childhood as improvements in nutrition later in childhood could lead to improvements in a wide range of outcomes for current and future generations of children.

This chapter has highlighted Young Lives evidence on a variety of areas that can be targeted by policies to generate improvements in the nutritional status of children and contribute to nutritional catch-up to mitigate the effects of earlier growth faltering on later life outcomes.

The prevalence of undernutrition is highest among children from the poorest households and poverty is one of the key factors associated with persistent growth faltering in children. Social protection policies and programmes to reduce poverty and generate employment, in addition to reducing economic inequality, can also contribute to improving food and nutritional security for households with children. Moreover, economically and socially disadvantaged households are most vulnerable to shocks that affect food security, such as food price rises. Policies to guarantee access to high quality food that buffers the nutritional impact of agricultural and economic shocks provide insurance mechanisms that boost food and nutritional security.

Addressing growth in early childhood is hugely important for later life outcomes. However, Young Lives research also shows that policies aimed at addressing nutrition during later growth can be hugely beneficial. At the policy level, high quality administration of interventions such as school feeding and other forms of nutritional supplementation could have particularly beneficial impacts on remedying the impacts of early nutritional or health deficits and sustaining early good growth. These interventions could be combined with, and indeed could support, policies to ensure the continued enrolment of all children in education beyond the primary levels. Such an approach could lead to progress in the economic and social welfare of disadvantaged groups.

Access to sanitation and health facilities, or lack of it, is significantly associated with the incidence of stunting, as well as with subsequent growth recovery and faltering. Recent policy

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65   Georgiadis *et al.* (2017); Vellakkal *et al*, (2015)

66   Peisakhin and Pinto (2010); Pal (2011)

67   Singh, Park and Dercon (2014)

68   Dasgupta (2013)

attention has focussed on improving sanitation infrastructure; the Indian government has aimed to achieve an Open Defecation Free India by 2019, launching the Swachh Bharat Mission in order to provide access to toilets and improve sanitation infrastructure in the country. Along with programmes to improve access to safe water and hygienic environments, these programmes are important in densely populated urban contexts where the spread of infection is compounded by the poor sanitary environment. In rural contexts, poor and marginalised households and individuals in particular lack access to sanitation and health infrastructure, so policies to provide universal access to these facilities are key to promoting healthy growth there. Thus, schemes such as the Swachh Bharat Mission represent additional policy opportunities that could lead to improvements in child health even after infancy, but are especially crucial in ensuring child health in early life.

Young Lives research supports the proposition that policy needs to focus on the early period of life in order to prevent the occurrence of stunting in children, but that due to the potential for recovery later in childhood, policies that target children who suffered from initial growth faltering can also lead to improvements in later life outcomes. The priorities in order to reduce the prevalence of undernutrition are therefore investment in early childhood healthcare, feeding and supplementation programmes that promote the quality and coverage of programmes to reach the most vulnerable children. [69]

However, there is growing evidence that growth failure in childhood may be reversible and later interventions could potentially remedy early growth deficits and reduce their impact on nutritional and economic outcomes in current as well as future generations. Due to the potential for a further critical window in adolescence, interventions to target nutrition and growth during this period could generate large gains in nutrition, leading to additional potential for recovery. The scale of the problem India faces means that no opportunity should be lost. Improvements in the health and nutritional status of adolescent girls, and policies that target improvements in their welfare and education could also bring benefits in the nutritional status of their future potential offspring. These could include policies to delay the age of marriage, keep girls in education, improve maternity benefits and provide financial support to pregnant women. The potential for physical recovery in adolescence implies that interventions targeting girls in adolescence could be beneficial for their future outcomes as well as those of their children.[70] Initiatives such as the Rashtriya Kishori Swasthya Karyakram, aimed at adolescent empowerment, and Beti Bachao Beti Padhao Yojana, that tries to promote the education of girls, could be beneficial in delaying the age at marriage, and improving girls' social welfare, thus ensuring better nutritional status of women of reproductive age, and therefore contribute to reducing the intergenerational linkage between mother and child undernutrition.

Globally nutrition targets for 2025 aim to reduce by 40 per cent the number of children younger than five worldwide who are stunted, and reduce and maintain childhood wasting to less than five per cent. In highlighting the importance of targeting undernutrition in India to achieve global targets for reduction in child undernutrition, the Global Nutrition Report states that according to past research income support, maternal schooling, prevention of open defecation, and health care were important factors contributing to reductions in stunting of under-fives.[71] The continued large-scale malnutrition concentrated in India represents a limit to the extent to which its population can break out of poverty and achieve full economic growth potential. Despite the large financial investment by the Indian government in programmes that target nutrition as well as its underlying determinants, these investments have fallen short of the estimated amount required to

69   Dornan and Georgiadis (2015)

70   Singh and Revollo (2016)

71   IFPRI (2016b)

meet global nutrition targets. Hence, additional investment is required, at state and national level to finance and implement policies that address undernutrition.

International reviews of what works in nutrition policy have emphasised the importance of building national nutritional programmes based on strong research evidence and data because international efforts to eliminate maternal and child undernutrition have failed due to systemic problems such as fragmentation in implementation and institutional inertia.[72] Interventions that target severe acute malnutrition throughout childhood, as well as nutrition-sensitive policies in sectors that address the underlying determinants of nutrition, have led to improved nutrition and other developmental outcomes in children. Perhaps the key point is both that policies have been shown to be effective and there is a growing evidence base of what works. The most effective national nutrition-specific interventions targeted mothers and children earlier and over longer durations, and particularly targeted the poorest and most undernourished groups. Many of these programmes also included provisions to empower women and enhance their social status, in order to enable women to enter pregnancy in a state of optimal nutrition.[73]

72   Morris, Cogill and Uauy (2008)

73   Maternal and Child Nutrition Study Group (2013)

Chapter 3: Education

Renu Singh

3.1. Policies for pre-school, elementary and secondary school

Home to 19 per cent of the world's children, India boasts the largest education system in the world, catering for approximately 198.9 million students at elementary level (Grades 1-8) and 59.6 million students at the secondary and senior secondary levels (Grades 9-12).[74] Under a federal structure, the central government and the states/ union territories share responsibilities for the planning and implementation of education programmes. Preschool education is covered under the world's largest publicly funded child development programme, the Integrated Child Development Services (ICDS), while primary (Grades 1-5) and upper primary (Grades 6-8) classes together are called 'elementary classes' and are covered under the Right to Free and Compulsory Education Act, 2010. Rashtriya Madhyamik Shiksha Abhiyan, 2009 and Rashtriya Ucchtar Shiksha Abhiyan, 2013 are centrally sponsored schemes aimed to increase access and equity in higher education.

Private sector participation in education

Over the past decade, there has been growing participation of the private sector throughout the education system. In 2014-5, 74.7 per cent of the 1.45 million schools offering elementary education were managed by the government, while the private sector ran 22.7 per cent; the remaining 2.6 per cent were *madrasas* and unrecognised schools.[75] . Private schools make up an even larger share of the total number of secondary schools in the country, with government schools constituting 42.7 per cent, private aided[76] 16.7 per cent and private unaided 39 per cent of schools.[77] The private sector is reported to run 267 out of 757 universities.[78]

Undivided Andhra Pradesh- Statistics

Elementary level enrolment in undivided Andhra Pradesh has remained almost constant from 2011-3, with a Gross Enrolment Ratio (GER)[79] of 96.7 per cent at primary and 83.6 per cent at upper primary level in 2013-4. Undivided Andhra Pradesh had a Net Enrolment Ratio (NER)[80] of 78.3 per cent, 62.2 per cent and 43.5 per cent at primary, upper primary and secondary level respectively, all of which were lower than the national average in both 2012-3 and 2013-4, and particularly in primary and upper primary.[81]

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74   U-DISE (NUEPA, 2015a & 2015b)

75   NUEPA (2015a)

76   Private unaided schools have their own governance mechanism and do not receive funds from the government, while private aided schools receive funds for teacher salaries from the government

77   NUEPA (2015b)

78   MHRD Annual Report 2014-15

79   *Gross Enrolment Ratio:* Total enrolment in a particular level of education (e.g.Grades I-5), regardless of age, expressed as a percentage of the eligible official primary school-age population (six to 10+ years of age) in a given school-year.

80   *Net Enrolment Ratio:* Enrolment in specific level of education e.g. primary education (Grades I-5) of the official primary school age group (six to 10+ years of age) expressed as a percentage of the corresponding population.

81   NUEPA (2014)

Table 5: *NER at elementary and secondary level in undivided Andhra Pradesh and India in 2012 and 2013 (%)*

State	2012-13			2013-14		
	Primary	**Upper primary**	**Secondary**	**Primary**	**Upper primary**	**Secondary**
Undivided Andhra Pradesh	81.8	60.1	41.3	78.3	62.2	43.5
India	90.8	64.2	41.9	88.1	70.2	45.6

Source: UDISE and SEMIS, NUEPA.

In undivided Andhra Pradesh in 2013-4, 42.9 and 37.8 per cent of children enrolled at primary and upper primary level were studying in private unaided schools, while 51.7 and 57.6 per cent were enrolled in government schools at those levels. A much smaller proportion (3.2 and 3.6 per cent respectively) attended private aided schools.[82]

At the secondary level in undivided Andhra Pradesh the government, private aided and private unaided school shares were 52.5 per cent, 3.5 per cent and 42.2 per cent respectively. At the tertiary level, in Andhra Pradesh and Telangana, private unaided colleges occupy an even greater share than the national average, at 82.8 per cent and 82.3 per cent respectively.[83]

3.2. Evidence from Young Lives

3.2.1. Pre-school education

Sustainable Development Goal (SDG) Target 4.2 states that by 2030 countries should 'ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education'. Strengthening early childhood development is key to achieving at least seven of the SDGs, on poverty, hunger, health (including child mortality), education, gender, water and sanitation, and inequality.[84] Increasing awareness of the importance of pre-school education and the adoption of the National Policy on Early Childhood Care and Education[85] with its emphasis on all state governments developing their own ECCE curriculum have led to an increasing recognition that pre-school education must be given the greatest priority.

Available data indicates that 64.5 per cent of three-year-olds and 76.3 per cent of four-year-olds in rural India are attending Anganwadis or government-run early childhood development centres[86]. A study that followed a cohort of 14,000 four-year-olds from age four to age eight in rural areas of Assam, Rajasthan and Telangana found that 80 per cent of children at age four were attending an institutional setting.[87] Classroom observations of 165 Anganwadis found that children in these centres spent a significant proportion of their time just sitting around, with no planned activity.[88] Across all three states, at the time of school entry at the age of five school readiness levels in cognitive and language domains remained far below expectation, although relatively better in the psychosocial domain.

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82   NUEPA (2013-14)

83   MHRD (2014-15)

84   Woodhead (2016)

85   MWCD (2013)

86   ASER (2013)

87   Kaul *et al.* (2017)

88   Kaul *et al.* (2017

Increased pre-school enrolment

The Young Lives data shows that while 60 per cent of the Older Cohort attended pre-school, this increased to 91.4 per cent amongst the Younger Cohort.[89] We also find that private pre-school enrolment shows a massive increase with close to half of the Younger Cohort attending private pre-schools compared to one in five Older Cohort children. Not surprisingly, many more children attended private pre-schools in urban areas across both cohorts, although amongst the Younger Cohort more than four out of five urban children attended private pre-schools as against 54 per cent amongst urban Older Cohort children. A large percentage (58%) of households from the consistently least poor households chose private pre-schools; this is likely to be both because they can afford to pay for their children's schooling and because they preferred the English medium of instruction., By contrast only one per cent of households which were persistently poor chose private schools.[90]

Table 6: *Pre-school attendance of Older Cohort and Younger Cohort by school type (%)*
Enrolment in pre-school by type of school

			Older Cohort	Younger Cohort
Undivided Andhra Pradesh	Attended pre-school	Private	18.9	49.9
		Public	41	41.5
	Did not attend		40.1	8.6
Urban	Attended pre-school	Private	54.2	82.9
		Public	12.9	14.1
	Did not attend		32.9	3.0
Rural	Attended pre-school	Private	8.0	28.4
		Public	49.6	61.2
	Did not attend		42.4	10.4

Source: Young Lives Round 2 and Round 4

Qualitative data captured in Round 1 conducted in 2007, reveals reasons why poorer children did not attend pre-schools according to staff of Anganwadi Centres: *'Even though the (Anganwadi) teacher visits homes to persuade parents to send the children to pre-schools, families may not send them for various reasons. Scheduled Caste families in particular will stop the oldest child from attending pre-school to assist in household work if the mother is pregnant or to take care of younger siblings… also many prefer sending the younger children to the government primary school [rather than the Anganwadi] along with their elder siblings to informally sit in class and get the midday meal.'*

Raju's mother, a construction worker in Poompuhar, chose to send her son to primary school after attending six-months of pre-school. She explained that 'Raju attended Anganwadi and did not learn anything…they make the children sit for hours, feed them at specific times and then send them home... they teach nothing.'[91]

Private pre-schools seem to have gained the confidence of community members and even the government school teachers interviewed during the qualitative survey commented that 'in private schools there is what is called Lower Kindergarten and Upper Kindergarten before admission to Class 1. This is different from the Anganwadi…. in the sense that the focus is more on education.'

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89   Singh and Mukherjee (2017a)

90   Singh and Mukherjee (2016)

91   Singh and Mukherjee (2017b)

Long term associations between pre-school and better later achievement and well-being

Longitudinal evidence allows us to see the links between early experiences and later outcomes. This allows researchers to identify associations and to examine where these remain after having controlled for household background. Such analysis points towards three initial messages: first, that all pre-school is associated with better later performance; second, that private pre-school attendance is associated with greater gains; and third, that early enrolment is particularly beneficial. The Young Lives longitudinal data have also shown up strong associations between private pre-school attendance and effects on children entering primary school; having attended private pre-schools is associated with substantially, and significantly, higher test scores in mathematics compared to having attend public pre-schools.[92] Further, there is a significant association between pre-school attendance and subjective well-being among 12-year-old children in India, leading to the conclusion that there is a positive correlation between attending pre-school, and particularly for those who attended private pre-school, and long-term well-being.[93] This has been further substantiated in another study where, after controlling for a comprehensive set of observable background characteristics and other relevant inputs, children who attended any pre-school demonstrated higher scores in indicators of pride and agency at age eight and better scores in peer relationships at age 12, while those that attended private pre-schools demonstrated higher self-esteem at age 12.[94] In addition, the age of entry into pre-school has a strong association with the cognitive outcomes and subjective well-being of children at age 12; with children entering pre-school by age four accumulating higher cognitive achievement scores and reporting greater subjective well-being than those children who made later entry into pre-school.[95] The analysis also revealed that children who attended private pre-school education scored nearly ten times higher in mathematics scores and 13 per cent better in subjective well-being than children who attended public pre-schools.

Further, holding other things constant, children's early development of literacy skills, such as the ability to read words and sentences fluently at the age of eight, was associated with a 1.7 times increased chance of the the child completing secondary school than a child who was not able to do so.[96] Similarly, when children showed better writing skills at age eight this was linked with a 3.3 times greater chance of completing secondary education than where children who were not able to write without errors, and more children who attended private preschools are found to complete secondary education. Foundational skills such as early literacy which good pre-school can support are therefore likely to shape later opportunities to learn, with long-term effects.

3.2.2. Increase in enrolment over time in Primary and Upper Primary school

The Young Lives data sheds light on both primary and upper primary levels of education for both cohorts. There is undoubtedly a positive effect of the Right to Education (RTE) Act in terms of enrolment of the Younger Cohort in comparison to the Older Cohort. Many of the inequalities in enrolment, which were visible for the Older Cohort, were considerably less for the Younger Cohort, who had experienced years under the RTE.

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92   Singh (2014)

93   Singh and Mukherjee (2016)

94   Favara *et al.* (forthcoming)

95   Singh and Mukherjee (2016)

96   Singh and Mukherjee (2015)

Table 7: *Percentage enrolment at different ages, for Younger and Older Cohort (%)*

	Age 8		Age 12		Age 15		Older Cohort	
	Older Cohort	Younger Cohort	Older Cohort	Younger Cohort	Older Cohort	Younger Cohort	Age 19	Age 22
Undivided Andhra Pradesh	97.6	99.1	89.2	97.2	77.7	91.1	48.9	20.8
Gender								
Boys	98.3	99.3	91.2	97.4	81.6	92.5	56.2	26.2
Girls	96.9	98.9	87.2	97.0	74.0	89.5	41.9	15.6
Difference (%)	1.4	0.4	4.0	0.4	7.5	3.1	14.4	10.6
Place of Residence								
Urban	97.8	99.8	95.1	98.7	87.1	95.3	63.6	28.3
Rural	97.5	98.8	87.3	96.7	74.8	89.8	44.4	18.4
Difference (%)	0.3	1.0	7.8	2.0	12.3	5.5	19.2	9.9
Maternal education								
No Education	97.2	98.7	85.7	95.6	71.9	86.7	39.7	17.0
Primary	98.0	98.9	98.0	98.3	90.0	94.1	58.0	25.3
Middle	98.8	100.0	98.8	99.4	92.7	97.6	67.1	29.0
Secondary and above	99.0	99.8	98.0	99.8	94.9	98.6	88.8	35.8
Caste								
Scheduled Caste	98.5	98.6	85.3	97.7	76.5	91.1	39.7	21.0
Scheduled Tribes	95.2	98.9	86.7	96.1	76.2	86.7	50.5	22.3
Backward Class	97.7	98.9	88.4	96.5	74.9	90.6	45.3	17.5
Other Castes	97.5	100	96.1	99.0	85.7	95.5	65.0	26.9
Dynamic poverty status								
Consistently least poor	98.2	100.0	98.2	100.0	94.0	98.8	76.5	33.1
Boys	98.8	100.0	100.0	100.0	97.6	99.5	79.5	38.8
Girls	97.6	100.0	96.4	100.0	90.4	98.0	73.5	27.3
Persistently poor	95.4	96.5	76.7	94.5	72.9	79.8	34.1	21.5
Boys	97.3	96.9	76.7	92.3	72.6	78.5	42.5	31.8
Girls	92.9	96.0	76.8	96.8	73.2	81.2	23.2	9.1
State								
New Andhra Pradesh	98.0	99.2	89.6	97.7	78.3	90.7	50.1	20.6
Telangana	96.8	98.8	88.5	96.2	76.6	91.9	46.8	21.0
Overage	29.7	42.6	33.9	46.7	36.0	10.2	-	-

We find close to universal enrolment for both cohorts at age eight (Table above), however, comparing the cohorts reveals an increase in enrolment at age 12 (6 percentage points) and 15 (13 percentage points) amongst Younger Cohort children in 2013 and 2016 as compared to Older Cohort children in 2006 and 2009. The increase over time between the cohorts is particularly large for girls, Scheduled Caste children and those living in rural locations, with 97 per cent of girls, of Scheduled Caste and of rural children enrolled in 2013 as compared to 87 per cent of girls and rural children and 85 per cent of Scheduled Caste children enrolled amongst the Older Cohort in 2006. In 2016 we find that increase in enrolment at age 15, is particularly large for the children belonging to girls belonging to persistently poor households (81%) compared to only 73 per cent enrolment amongst girls from the poorest households in 2009.

The gender gap amongst the Younger Cohort was smaller than that amongst Older Cohort children, though gap in enrolment amongst the consistently least poor and persistently poor continues for both cohorts at age 15 (Table 7).

3.2.3. Increasing private school enrolment

Young Lives longitudinal data related to enrolment of the two cohorts across time reveals an increase of private school enrolment for the Younger Cohort at both ages eight and 12 in comparison to the Older Cohort. While 23 per cent of Older Cohort children were enrolled in private schools at age eight in 2006, this almost doubled to 44 per cent for the eight-year-olds of the Younger Cohort in 2009,[97] and 80 per cent of children who attended public pre-schools went on to attend public primary schools.[98] Although Younger Cohort enrolment in private schools decreased to 41 per cent between age eight and age 12, even at that age it remained much higher than Older Cohort private school enrolment (32%) at the same age in 2006. So two effects were seen, a general cohort effect where the Younger Cohort were more likely to be in private schools, and an age effect of shifts from private towards public with age. Private school enrolment remained highest for Other Castes children, 71 per cent of whom were enrolled in these schools as well as the 72 per cent of the least poor tercile. [99]This surge in private school enrolment was based on parental aspirations for English-medium instruction as a route to a better future for their children. While a tiny six per cent of parents cited 'good quality' and 53 per cent cited 'proximity to home' as reasons for choosing government schools, 63 per cent of parents of children attending private schools cited good quality and 23 per cent cited proximity to home as reasons for their school choice.[100]

Contrary to the popular belief that it is only educated parents who are shifting to private schools, Raghave, a nine-year-old Scheduled Tribes child whose parents have never attended school, was enrolled in a private school in Grade 5. His mother explains why she does not prefer the public school in their village for her three children: 'If we send them here (public school), certain subjects won't be taught… children will be going here and there, going into the forests and fields… so why [should we] send them there.'

Many other parents mentioned that they opted for private schools to ensure that their children will be 'taken care of' unlike in public schools, where they report a lack of effort and attention to the children. Supraja's father is a mason and her mother a housewife living in an urban area. They prefer private schools even though they have to spend a large amount of money they can ill afford. Supraja's mother says: 'People are not worried about their economic background or financial position now. They are only bothered about their children's education. They are prepared to give up anything for the sake of their children's education. They want to give their children whatever they missed in their own childhood and they want their children to attain that position which they failed to get.' She believed that in government schools the teachers were not at all bothered whether the students turn up to school or not.

The costs incurred for a primary school child enrolled in a private school are some 38 times the costs for those going to government schools. Besides school fees, expenditure incurred on books, transportation, uniform etc. add to costs of private schools. At secondary level, the differential is over 18 times.[101] However, private schools are far from homogeneous and annual fees varied between annual tuition fees of Rs. 8,113 per annum and Rs. 1,388 per annum paid by poorer households. Thus, parents are seen to be choosing fee-charging private schools over no-fee-charging government schools since according to parental perceptions gathered in Round 2, 'quality teaching' is associated with private schools. However, there exists a growing gender

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97   Galab *et al*. (2014)

98   Singh and Mukherjee (2017a)

99   Galab *et al*. (2014)

100   Singh and Sarkar (2015b)

101   Singh (2011)

divide, with boys being over-represented in the private sector so private schools are unlikely to be the best means of providing education for all children in the longer term in ways that respect the principles of equity.[102]

Many parents who enrolled their children in public schools displayed their helplessness at not being able to afford to send their children to private schools. Public schools continue to serve the 'poorest of [the] poor'[103] Balakrishna studied in an Ashram (government) school. His father is a cowherd and his elder brother aged 12 never attended school, since he helps his father tend the animals. Their mother explains that they chose a public residential school for their son because 'we are small people. Those who are well off put their children in private school; those who are like me will send them to the government schoo*l.'*

3.2.4. Overage and declining levels of learning

Overage indicates either that the child joined school later than expected or has made slower progress than specified. Despite high levels of enrolment, the proportion of overage children at age 12 amongst the Younger Cohort children (based on repetition of classes) is, at 46.7 per cent, higher than among the Older Cohort (33.9%) at the same age in 2006.[104] Cross-cohort comparison also reveals that many more rural children and boys were overage amongst the Younger Cohort at age 8 and 12 than in the Older Cohort. There is also a link to household wealth, maternal education and caste.[105] 60 per cent of Scheduled Tribes children of the Younger Cohort were found to be overage at age 12 in 2013 compared to 47.3 per cent of the Older Cohort in 2006 and more overage children in the Younger Cohort were enrolled in private schools (23%) than in government schools (15%).[106] This is a worrying trend and one that needs further research, since with the RTE Act the government adopted a change of policy to automatic class progression at elementary level, which in practice does not seem to have been implemented.

Young Lives conducted cognitive tests in each round and found a decline in maths test scores among children aged 12 in 2013 compared to children of the same age in 2006. This was similar to the National Achievement Test, which highlighted that the aggregate learning outcome levels for Class 5 students from a national sample declined across many state/s during the period 2011-2 to 2014-5 across various subjects that were tested. At the household level, wealth and caregivers' literacy are important predictors of skill acquisition; Young Lives data from the four study countries (India plus Peru, Ethiopia and Vietnam) confirm this finding.[107] This is especially the case when significant numbers of children have yet to enrol or when significant numbers are beginning to leave school due to pressure to start working, particularly due to rising costs of living. Competency in numeracy and literacy at the age of 12 and access to schooling are in India predictors of mathematical skill and of general cognitive skills at the age of 15. Furthermore, children who had acquired basic numeracy and literacy skills at age eight were found to have maintained an advantage over their peers, an effect that is further strengthened for those who had received most schooling.

Comparing mathematics scores of 12-year-olds across cohorts the Young Lives survey found that for the same questions administered to children at the two different dates, while 67 per cent

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102   Woodhead *et al.* (2013)

103   Singh and Sarkar (2015b)

104   Singh and Mukherjee (2016)

105   Singh and Mukherjee (2016)

106   Galab *et al*. (2014)

107   Rolleston and James (2014**)**

of the children in 2006 answered the questions correctly, this number fell to 53 per cent in 2013. This decline is seen in both government and private schools as well as in all wealth terciles. The most severe decline is noticed in government schools (20 percentage points), yet, surprisingly, even children in private schools and the wealthiest tercile show a decline of 12 percentage points.

Figure 9: *Maths scores of 12-year-olds in 2006 and 2013*
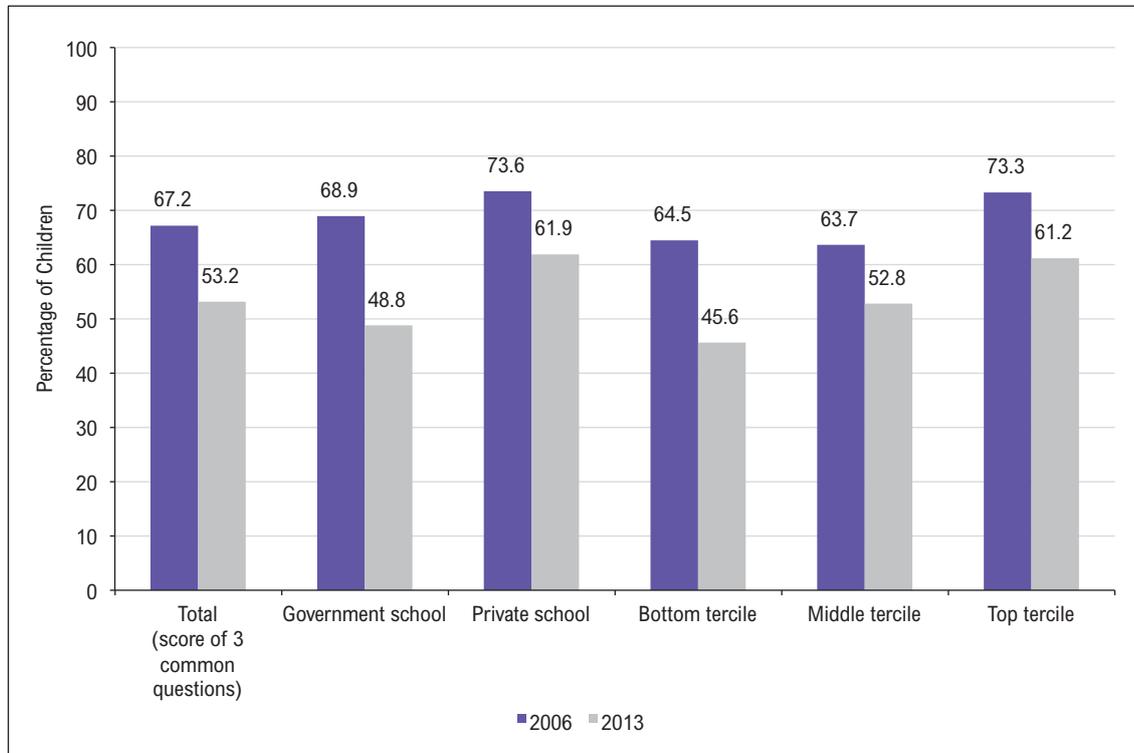
* Young Lives Older Cohort children and Younger Cohort children were 12 years old in 2006 and 2013 respectively.
* Maths score are computed on the basis of three common questions administered to the children
Source: Young Lives Round 2 and 4 surveys

Comparing findings related to comparable mathematics questions asked of Older Cohort and Younger Cohort children at age 15, we find that learning levels remain persistently low.[108] Overall only one in ten children correctly answered all three mathematics questions in 2016 and while children in private schools in Round 5 tended to score better in maths (14 %) than government school students (9%), the decline in learning levels in private schools (comparing 2009 and 2016 scores) was worse.

Kavya Sri's mother, who is from a Scheduled Tribes household, never attended school and has four daughters. She complains that in the government village school 'one teacher comes, he stays for an hour, then he says he has to do some administrative work and he goes off … [then he] comes and takes the attendance register and when the bus comes, he leaves … the other two or three teachers will be there, they will teach. They will appoint one older student to take care of the children and they will not let the children come out. The children go to school but they don't know how to read or write even a word. We see their slates and they don't write anything at all'.[109]

While various studies using Young Lives data have highlighted that children in private schools seem to be achieving better scores than those in government schools, those studies also stated

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108   Singh *et al.* (2017)

109   Sarkar and Singh (2012)

that private schools were 'better' but were not good.[110] Careful statistical analysis has generated comparable scores across rounds and cohorts and found that the premium for private school children was modest and exists primarily for English for the Younger Cohort and for mathematics for the Older Cohort.[111] The wealth variable remained positive and significant across the years and for all test scores.[112]

3.2.5. Teaching quality matters

Expanding school enrolment does not, on its own, facilitate the transformational potential of education.[113] According to results from the Young Lives primary school survey, 45 per cent of rural children enrolled in government primary schools and 20 per cent enrolled in rural private schools were first generation learners, who therefore required effective teachers to level the disadvantage they had experienced in their early years.[114] The analysis of primary schools revealed that, although government school teachers had on average three extra years of experience and exhibited better mathematical knowledge than teachers in private low-fee-charging schools, average mathematics scores of students in private schools remained higher. The regression analysis highlighted that experience, gender and knowledge of subject content did not have any significant bearing on children's mathematical achievement. However, the teacher's place of residence being close to the school, regular checking of homework and the teachers' positive belief in their school were associated with a significant effect on students' mathematics achievement (even after controlling for previous mathematics scores and other differences between the *mandals* children were growing up in).

Another Young Lives paper shows a significant and positive correlation between the academic self-concept and the progress in mathematics of students in primary schools.[115] There is no doubt that teachers' behaviours and classroom practices have an impact on students' learning levels. Analysis of the learning environment highlighted that more time spent by teachers on discussion and interaction with the whole class and preparation and use of teaching and learning materials by the teacher was significantly associated with better 'academic self-concept' (defined as one's general perceptions of the self in given domains of functioning[116]) in students. Both disciplinary action taken by the teacher and the temporary absence of the teacher are seen to have a negative significant association with students' academic self-concept.

In 2002, 59 per cent of Older Cohort children at age eight reported being beaten by the teacher and peers as the main reason for disliking school. Poorer children were more likely than less poor children to report punishment and a slightly higher proportion of children in government schools reported punishment compared to children in private schools.[117] Children from more disadvantaged households (measured using household expenditure or caregiver's level of education) are significantly more likely to be punished in India in both younger and older cohorts and boys experienced more corporal punishment than girls.[118]

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110 Singh and Sarkar (2015b); Singh and Bangay (2015)

111 Singh (2015)

112 Grover (2013)

113 Murray (2014)

114 Singh and Sarkar (2012)

115 Singh and Sarkar (2015a)

116 Bong and Sklaavik (2003)

117 Morrow and Singh (2015)

118 Morrow and Singh (2015)

In Round 1 of the qualitative survey, children mentioned being punished by teachers using various forms of punishment including *goda kurchi* (sitting on the edge of the wall by balancing on legs), verbal abuse and hitting. Boys aged nine to ten explained: 'The teachers beat us with sticks and rulers and make us sit on our haunches until our legs swell up. They also abuse us and use foul language and say *''you look like bullocks and donkeys- the herdsman is better than you.''* This makes us very sad.*'*

Young Lives data on the Younger Cohort further reported that corporal punishment experienced at age eight was associated not only with negative effects on children's maths scores at age ten but was also negatively associated with maths scores at age 12 (after controlling for maths scores at age five).

3.2.6. Secondary education

The Young Lives data show that as the Older Cohort moved from middle adolescence to late adolescence, the young people found it exceedingly difficult to continue schooling and that over time girls were more likely to cease schooling.[119] Enrolment for the Older Cohort children at age 15 had reduced to 77.8 percent, with the gender gap increasing with age to 7.5 percentage points in favour of boys and the urban-rural gap increasing to 12 percentage points in favour of urban locations. At age 15, 67.8 per cent of the Older Cohort children had completed elementary education (Grade 8) and 22.3 per cent had already dropped out of school.[120]

By the time the Older Cohort turned 19,[121] we find that more than half of them (51.1%) had dropped out of school (Figure 10). The gender gap had almost doubled from 7.5 percentage points at age 15 to 14.4 percentage points by age 19. Furthermore, the differential in enrolment between consistently least poor and persistently poor doubled from 21.1 percentage points at age 15 to 42.4 percentage points at age 19 (Table 6). Amongst the Older Cohort children, 42 per cent had completed senior/higher secondary education and 71.5 per cent had completed secondary education (Grade 10), with fewer than half (45.7%) completing their secondary education at an age-appropriate level.[122] Boys were more likely to complete secondary school than girls, while those from the poorest households, Scheduled Caste, Scheduled Tribes, those whose parents had little or no education and those with many older siblings were less likely than others to complete secondary school.[123] The longitudinal analysis also show that children who did not undertake domestic chores at age 12 were 3.3 times more likely to complete secondary school than children who did three 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 did paid work.[124] Full-time education was a luxury that very few children could afford.[125]

119   Singh and Mukherjee (forthcoming)

120   Singh and Mukherjee (2016)
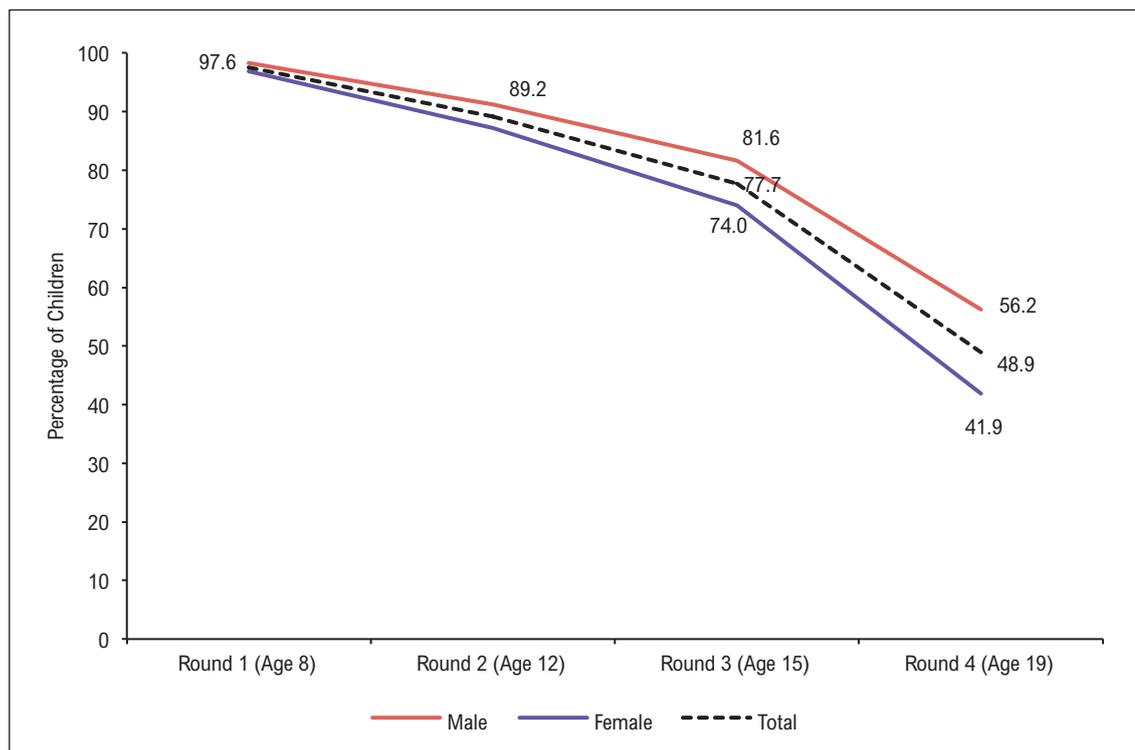
121   At the time of the Round 4 survey in 2013

122   Singh and Mukherjee (2016)

123   Singh and Mukherjee (2016)

124   Singh and Mukherjee (2016)

125   Singh (2016)

Figure 10: *Enrolment by year and gender (%)*

Location mattered for young people's educational status.[126] At the age of 19, only 49 per cent of young people from urban areas were in full-time education compared to 27 per cent of those in rural areas. Moreover, only seven per cent of young people from urban areas were combining education and work compared to 18 per cent of those from rural areas. Consistent with this, a higher proportion of young people in rural areas were engaging in unpaid work alongside their studies (11%) than those in urban areas (2%). Those from the top tercile households were more likely to be in full-time education (43%) than those from the bottom tercile (23%). In terms of caste, children from Other Castes households were more likely to be enrolled in full-time education (51%) than those from the Scheduled Caste (30%), Scheduled Tribes (30%) and Backward Class (27%). Young people from the Scheduled Tribes were most likely to be managing both education and work (19%), followed by those from the Backward Class (17%), Other Castes (14%) and Scheduled Caste (10%).

Qualitative interviews conducted in 2011 with a sample of children engaged in agricultural work highlighted that many of them had started working at an early age, with girls in particular taken out of school as they reached puberty.[127] Devi Sri, a Backward Class girl, started combining work and school in Grade 7 and got married soon after completing Grade 9. She said that her first job was in flower harvesting over the weekends, but she soon started working in the paddy fields and started missing school. She informed us that her mother felt that 'we were poor and she used to send my sister and me to make as much money as possible, even though it was difficult (for us).'

Young Lives has asked caregivers and children at different points about their aspirations for the children's future education and life. Agency and aspirations may be a channel through which inequalities between the sexes are reproduced over time.[128] When the children are aged eight, parents in India have significantly higher educational aspirations for their sons than for their

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126   Vennam *et al.* (2016)

127   Singh and Mukherjee (2015)

128   Dercon and Singh (2013)

daughters. This pattern in parental aspirations is transmitted (albeit not completely) to children's aspirations at the age of 12. This in turn is associated with a lower sense of self-efficacy, lower test scores and lower school enrolment among girls at the age of 15. Maternal aspirations are consistently and substantially lower for girls than for boys, and this had a strong causal effect on the grade achieved at age 15.[129]

It is disappointing that out of those discontinuing their education by age 19, half had done so without completing secondary education, 14 per cent had only completed upper primary and another 6 per cent had not even completed primary schooling.[130] An analysis of dropout across survey rounds found that most school dropout had occurred by Grade 8 (67.5%), with a further 32.5 per cent of the enrolled children dropping out during secondary schooling, something that may be explained, in part, by the Grade 10 Board Exam, which many children may not expect to pass.[131] Looking at the reasons cited by children for not continuing schooling at various ages, there appear to be three interrelated categories of reasons cited by adolescents (12-19 years old) for dropping out of school:[132] (1) **push-out,** related to factors within the school such as the fees being too high, dismissal from school, bullying, poor teaching, infrastructure etc.; (2) **pull-out**, focussed on out-of-school factors such as household poverty, engagement in paid work or domestic chores etc.; (3) **opt-out factors**, related to individual characteristics and behaviour of the student such as loss of interest in school, illness, truancy etc. They found that pull-out factors were most often cited across adolescence, with more girls giving household-related reasons for dropping out than boys. However, opt-out factors particularly truancy and absence from school emerge as the second most cited reason during early and middle adolescence, with more boys citing these as reasons for discontinuing education, something which may well be associated with pressure to provide financial support to their households.

Salman, a Muslim boy living in the old city of Hyderabad, lost his father when he was ten and has four siblings. He said that his mother had stopped him from going to school since he and his older brother had to earn money to pay the rent and buy provisions. His mother works as a domestic maid in three houses and his older brother worked as a mechanic. She said that 'our situation is like that … the children had to take up [paid] work. We cannot educate them, [so I thought that] if they go to work, they can learn something. At 19, Salman was working as a driver and was keen to support the education of his younger brother studying in Grade 9, though he did not wish his younger sister in Grade 10 to continue her studies. When asked why his sister should not study, he explained, 'girls might study … but ultimately they have to come back to the house and wash utensils.'[133]

Clearly, by age 19 children took up various life trajectories and pathways to either remain in or discontinue education and often take up paid work to support their families financially or, in the case of girls, enter into early marriage. An analysis of the determinants of teenage marriage supports the assertion that non-enrolment in education at age 15 was one of the strongest predictors of early marriage.[134] A boy bias appears to emerge in the educational aspirations of parents for their children at age 8, and is transmitted to the aspirations of children at 12 and then transformed into gender gaps in cognitive outcomes at age 15.[135]There was a significant association with the parents' educational aspirations when the children were 12 years old and

129 Serneels and Dercon (2014)

130 Galab *et al*. (2014)

131 Singh and Mukherjee (2015)

132 Singh and Mukherjee (2017c)

133 Singh and Mukherjee (2017 b)

134 Singh and Revollo (2016)

135 Dercon and Singh(2011)

parental aspirations for girls who were married by the age of 19 were markedly lower. Whereas 64 per cent of the caregivers of unmarried women had reported an aspiration for post-secondary education, only 32 per cent of the caregivers of now-married young women had done so. Substantial variation in mothers' educational aspirations for their children at age 12 and a strong causal effect on grade achieved at age 15 has also been found[136].Persisting patriarchy and preference for sons were key factors in girls being denied an opportunity to develop skills and agency that would put them in a stronger position to make decisions regarding their lives.[137] Focus group interviews held with community members in 2011 as part of the qualitative sub-study on agriculture revealed that within the village 'boys get married at the age of 18 and girls from 12 years on ….parents continue [to educate] the boys until college … but they don't send girls to college because when girls attain puberty, parents arrange their marriage'. This is a reflection of the persistence of gender discrimination and as one community member explained: "Some parents think that if they gave a good education to a girl child it would be useful to their father-in-law's family. But if you provide a good education to [the] boy it is useful to them [the parents]."

3.2.7. Tertiary education (vocational and formal)

As already mentioned, only 48.5 per cent of the Older Cohort children were found to be still in education at 19 years of age. Amongst them, while nine per cent of the children were overage and still pursuing their secondary education, 32 per cent were enrolled in higher education institutions and another 7.5 per cent were pursuing technical or vocational education. While more than half of the boys were still continuing to study at 19, far fewer girls are continuing education at 19 years of age. Children with more educated mothers and those with a high wealth index are more likely to be enrolled in university.[138] The university enrolment figures reveal that marginally more boys enrolled than girls and only one in five of the Scheduled Caste children went to university compared to almost one in two of Other Castes children.[139] Individuals in the middle and upper wealth terciles are ten and 21 percentage points respectively more likely to enrol in higher education in India than those in the lowest tercile of the wealth distribution.[140] The urban-rural gap apparent at earlier education levels continued at tertiary level with 46.7 per cent of urban children entering college as against only 27.5 per cent of those from rural areas. The majority of those enrolled in vocational courses at age 19 were boys and belonged to Scheduled Caste households.[141] Even amongst those enrolled in education, there exists great inequality based on wealth status (see Table 8). Interestingly more girls from least-poor households are in higher education, although more boys are taking vocational courses.

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136 Serneels and Dercon (2014)

137 Singh and Vennam (2016)

138 Singh and Mukherjee (2016)

139 Singh and Mukherjee (2016)

140 Sanchez and Singh (2016)

141 Singh and Mukherjee (2016)

Table 8: *Type of tertiary education at age 19 (in 2013) by poverty status (%)*

	Higher education or University	Technical or Vocational Institute
Poverty dynamic Status		
Consistently least poor	56.6	10.2
Boys	53.0	14.5
Girls	60.2	6.0
Persistently poor	17.1	4.7
Boys	17.8	5.5
Girls	16.1	3.6
Difference	39.6	5.6

In terms of Older Cohort children's learning outcomes at age 19, the mean score in mathematics was 40.5 per cent and in reading 59.8 per cent. In mathematics, the gap between boys and girls was only 8.5 percentage points, with boys performing better than girls. The largest difference in mathematics scores at age 19 was found to be related to maternal education (23.6 percentage points). The next most important differences were related to household wealth and between Other Castes and Scheduled Caste children.[142] Once again, children from urban areas and the least poor households performed better. There were also found to be significant positive average effects linked with attending private schooling on the probability of the children still being in secondary school until the highest grade, and increasing the probability of attending post-school education, that is, at vocational, technical or degree level.[143]

3.3. Implications for policy

The criticality of early learning

Early literacy skills, such as the ability to read words and sentences fluently at the age of eight, were linked with a 1.7 times increased chance of the child completing secondary school than children who were not able to do so. Similarly, where children showed better writing skills at age eight this increased the chance of making progress than children who were not able to write without errors by 3.3 times. Similarly, children who showed better writing skills at age eight were 3.3 times more likely to progress than children who were not able to write without errors. Recently the Sarva Shiksha Abhiyan has launched an early education programme (Padhe Bharat Badhe Bharat) with the goal that 85 per cent of children in Grade 1 and Grade 2 should reach specified learning indicators in 2016-7. It is critical that pre-school and primary teachers are effectively trained to develop early literacy in order to ensure children both acquire cognitive and social skills and retain an interest in learning. The ongoing process to formulate a new National Policy on Education is an opportunity that must be seized to focus on adding a pre-primary class to every primary school and ensure that laying a strong foundation in literacy in the early years is given the highest priority. In addition, pre-schooling for the under-six age group needs to be included as a Fundamental Right under the Right to Free and Compulsory Education Act, 2010.

Growing inequality and declining enrolment as children grow older

We notice declining enrolment rates as the Older Cohort enter later adolescence, with less than half the children still enrolled and less than a quarter of the girls from the persistently poor households still pursuing education. Wealth, maternal education, urban advantage and caste all

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142   Singh and Mukherjee (2016)

143   Singh (2016)

play a role in determining children's smooth transition to higher education or vocational training. Children are seen to cite pull-out factors as the key reason for leaving school and this is clearly related to the finances of the household whereby both boys and girls from the poorest households are seen to need to combine work and school from an early age. Thus, poverty influences children's education by increasing risk factors and limiting protective factors.[144] Undertaking more than three hours of domestic chores and paid work at age 12 is seen to have a bearing on whether secondary education is completed and it is critical that adequate social protection is provided to the poorest households, in order to allow children to continue their education.

Gender gaps also need to be addressed and the Young Lives analysis has shown that there exists greater gender bias in parents' aspirations than girls and boys showed in their own aspirations. In other words, Indian girls' aspirations exceeded those that their parents had for them.[145] This is exacerbated by the fact that 37 per cent of the Older Cohort girls were already married by the age of 19. Parents still quote safety, the increasing burden of dowry and their view of girls as *paraya dhan* (somebody else's property) – and therefore not investing in daughters' education in the same vein as their sons' – as dominant reasons for taking girls out of school and getting them married. It is therefore important that India charts out a strategy for addressing patriarchy and promoting gender-equitable development to meet development objectives for the most disadvantaged children, particularly girls, in a sustainable and comprehensive way.

Choice of school

There is growing evidence from Young Lives data of the proliferation and increasing enrolment into low-fee-charging private schools. The research indicates that choice of school is largely enabled by wealth and social status, with children from the top wealth quartile being five times more likely to be enrolled in private schools at elementary level and ten times more likely to be enrolled at secondary level than children from the poorest quartile In the top wealth quartile 86 per cent of the Younger Cohort and 71 per cent of the Older Cohort attended private school, rates that are more than five times those amongst the poorest quartile at primary level and ten times those at secondary level.[146] Equity and social justice must remain the focus of education services in a country where nearly 37 per cent of the population continue to live below the poverty line.[147] Schooling is a key part of long-term anti-poverty policy. In this light, the stratification of schools must be avoided, or else the poorest and most socially disadvantaged children, particularly girls, will continue to be short changed and not get access to the skills that they require and that will enable them to escape from the p cycle of poverty. Better implementation of the 25 percent reservation of seats in private schools for children belonging to economically disadvantaged households could be considered. While the quality of schooling in government schools in general needs attention, the 25 per cent of places reserved for disadvantaged children must prioritise the enrolment of girls.

Decline in learning achievement despite increasing enrolment

It is evident from the cross-cohort analysis that while enrolment at both 12 and 15 years of age has increased with the Younger Cohort due to the success of the SSA and Right to Education Act, learning levels remain an area of concern. The decline in learning levels can be attributed to a multitude of reasons, including the vast expansion of the number of elementary schools in the

144   Engle and Black (2008)

145   Dercon and Singh (2011)

146   Winter (2016)

147   Planning Commission (2009)

country in the past decade, with no concurrent expansion in school management systems. The XVI Joint Review Mission conducted by the Ministry of Human Resource Development in 2012 highlighted the fact that at state level a quarter of programme management jobs for elementary education are vacant, and that this figure was 46 per cent at block level. The focus of Indian government schemes has largely been on improving school facilities, infrastructure and teacher recruitment, while effective school monitoring and mentoring have remained sorely neglected. It is important for the education system to ensure that a regulatory mechanism to support and improve quality in schools is evolved in order to ensure that all children not only attend school but also learn the skills that are relevant for them to earn a livelihood.

Building a quality framework

As the country gets ready to formulate a new Education Policy, we need to focus on providing all children with 21st century skills with a focus not just on the three Rs but also the three Cs, creativity, communication and collaboration. This is a conclusion that is also apparent in the research done by Young Lives in Vietnam. As SDG indicators for education are developed, they must be accompanied by robust investment in national, state and district statistical capacity so that we can analyse and utilise the data that exists to take corrective action to build quality. Currently, the large data sets being collected by states may lead to 'teaching to the test' on the one hand and not show what is happening for the most disadvantaged children. It would be useful if State and National data sets captured the progress that the most disadvantaged child is making rather than state or national averages. This requires schools to engage in school reform by capturing the progress made by each child and this information needs to feed into sub-district, district and state information systems. Only then will data collection be drive by goal of quality improvement across various contexts.

Way Forward

Clearly the education system must give greatest priority to those children most at risk of being excluded from learning so that unequal opportunities in one generation do not lead to unequal outcomes for the next. If children enrolled in schools are unable to gain basic literacy and skills such as problem solving and critical thinking they are unlikely to improve their prospects of entering the labour market with the requisite skills required for the 21st century. Educational inequalities are set in motion in early childhood and tend not to reverse, while achievement gaps relating to location, ethnicity, wealth, parental education and gender pursue children throughout their school careers.[148] Poor quality schools, low levels of school attendance, weak basic skill acquisition and high levels of school drop-out threaten to entrench the inequalities associated with poverty and disadvantage, while the converse offers a potentially protective or even compensatory mechanism with respect to poverty transmission.[149] Therefore, inequalities based on gender, location, caste and poverty must be addressed, particularly in the early years but also as children transition to secondary school, in the face of rising costs of secondary and higher education. Only then will we be able to fulfil the promise of 'no one left behind'.

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148   Murray (2014)

149   Rolleston and James (2014)

Chapter 4: Children's work and youth employment

P. Prudhvikar Reddy and S. Galab

4.1. Context

The Young Lives longitudinal data enable us to identify how and why factors early in life shape later outcomes in children's lives and how inequalities emerge, thus giving insights for key entry points for policies to support children's development. This chapter outlines findings from the Young Lives study in relation to the work that children undertake and their employment as they make the transition into adulthood.[150]

India has made a number of legal commitments in the area of child labour. The Constitution of India[151] lays down that:[152]

- No child below the age of 14 years shall be employed to work in any factory or mine or engaged in any other hazardous employment (Article 24).

- The State shall direct its policy towards securing that the health and strength of workers, men and women and the tender age of children are not abused and that they are not forced by economic necessity to enter vocations unsuited to their age and strength (Article 39-e).

- Children shall be given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity, and childhood and youth shall be protected against moral and material abandonment (Article 39-f).

In May 2015, the Cabinet approved the Official revisions to the 2012 Child Labour (Prohibition and Regulations) Bill, 2012.[153] The Bill seeks, among other changes, to specify 14 years as the minimum age of employment, except in cases where the child helps the family, to bring adolescents (14-18 years old) under the coverage of the Act, to prohibit hazardous work for 14-18-year-olds and to increase penalties for non-compliance. This Amendment Bill is aimed towards alignment with provisions of the Right of Children to Free and Compulsory Education Act 2009 (RTE Act) which guarantees free and compulsory education of children in the age group six to 14 years.

Nevertheless, according to a recent report,[154] India has 5.8 million child labourers (as defined by international standards rather than whether the work is necessarily damaging), in absolute terms the highest number of all countries. As in many countries, in India the largest amount of children's work is reported as in unpaid family agricultural work. Over 56 per cent of working children aged between seven and 14 and close to 52 per cent of those aged 15–17 work in the agricultural sector. Manufacturing occupies about 27 per cent and 19 per cent of the two age groups respectively, and 13 per cent of the older group are in construction. Those involved in

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150   Morrow and Boyden (2018)

151   Dated 26 January 1950

152   Singh and Khan (2016)

153   The Child Labour (Prohibition and Regulation) Amendment Act, 2016

154   Khan and Lyon (2015)

unpaid family work amount to 54 per cent and over 39 per cent of the two age groups respectively.[155]

The National Youth Policy (2014) aims to create a productive workforce that can make a sustainable contribution to India's economic development; to develop a strong and healthy generation equipped to take on future challenges; and to support youth at risk and create equitable opportunity for all disadvantaged and marginalised youth. The National Skill Development Agency is responsible for harmonising and coordinating 'all skill development efforts of government and the private sector during the Twelfth Plan Period in order to bridge the social, regional, gender and economic divides in skills across all regions of the country'.[156] Further, in 2011 the then Government of Andhra Pradesh launched an innovative public–private partnership called Rajiv Yuva Kiranalu (RYK) to promote youth employment. RYK aims to train young people between the ages of 18 and 35 in rural and urban areas, to help them gain employment in the private sector.

The present chapter seeks to enhance understanding of the kinds of work children are involved in and the implication of children's work on their long-term educational outcomes and occupational choices. The term 'child labour' is often used in a flexible way, sometimes referring to work that is harmful to children and impedes their development, and sometimes referring to age of employment irrespective of whether the employment is harmful. Consequently, Young Lives prefers to avoid the term and to refer generally to children's work.[157]

Young Lives longitudinal data allow us to link educational and nutritional status in different phases of childhood with early entry of youth into the labour market, a distinct contribution in the context of the literature on India. Apart from this, the data also connect the occupational pattern of working youth with their parents' occupation.

In India, due to fragmentation of land holdings, a small farm economy has emerged and exposure to markets has led to agricultural diversification. In the process, new institutions in marketing areas emerged. Despite the small contribution from agriculture to GSDP, about half of the people still depend on agriculture, and tenancy farming and allied agriculture[158] have expanded. Also many people have moved from farming to non-farming activities. It is important to understand how youth fit into these processes.

4.2. Children's paid work

The Young Lives data show the number of children involved in paid work growing as they grow older. Although work increases as children grow, a comparison between the Older Cohort and the Younger Cohort indicates that workloads for particular ages are decreasing over time (Figure 11).
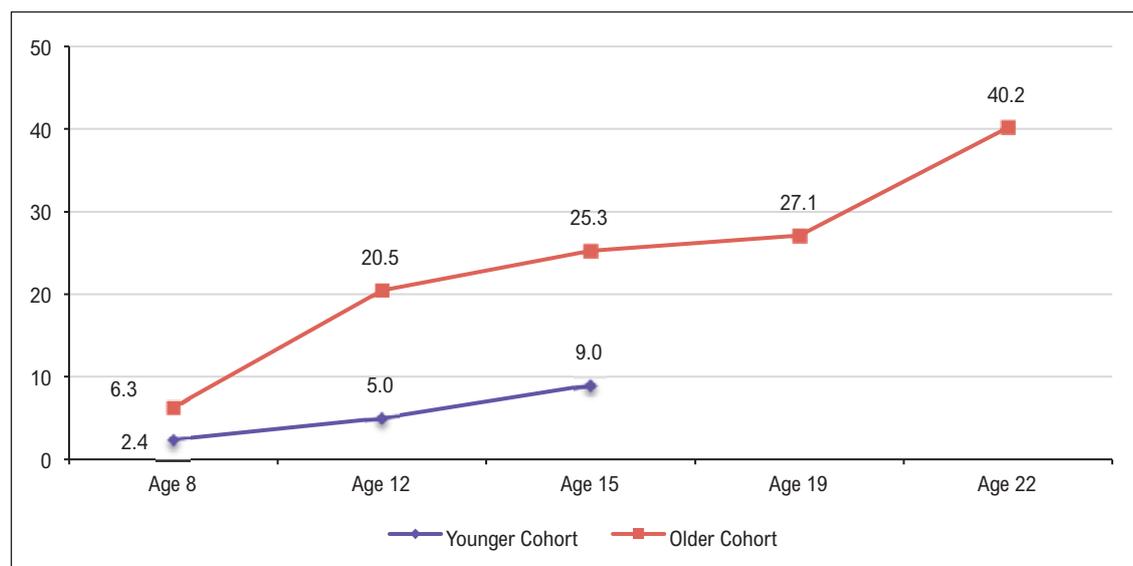
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155 Singh and Khan (2016)

156 Galab *et al.* (2014)

157 Morrow and Boyden (2018)

158 Allied agriculture refers to all activities that depend on agriculture directly or indirectly, including animal husbandry, fisheries, poultry, and agroprocessingagro-processing industries.

Figure 11: *Proportion of children in paid work: comparing cohorts*

It is heartening to see that only nine per cent of the Younger Cohort children were working for pay at age 15 in comparison to a quarter of the Older Cohort children at the same age.

Table 9 breaks this down further by comparing Older Cohort and Younger Cohort children at ages eight, 12 and 15. At 12 and 15, the numbers of Older Cohort and Younger Cohort who are working are much greater in rural areas than in urban areas, amongst the persistently poor than for the least poor, more for Scheduled Tribes, Scheduled Caste and Backward Class than for Other Castes (a difference more significant than wealth).

Table 9: *Cross-cohort comparison of children in paid work*

	Age 8		Age 12		Age 15	
	Older Cohort	**Younger Cohort**	**Older Cohort**	**Younger Cohort**	**Older Cohort**	**Younger Cohort**
Gender						
Boys	5.5	2.7	23.0	4.5	26.1	10.1
Girls	7.0	2.1	18.2	5.7	24.6	7.8
Location						
Urban	6.8	3.0	3.7	3.1	9.3	4.2
Rural	6.1	2.3	25.9	5.6	30.4	10.5
Caste						
Scheduled Caste	5.7	3.1	21.9	4.3	35.1	13.0
Scheduled Tribes	17.4	2.8	30.8	6.7	37.7	17.4
Backward Class	5.6	1.7	22.7	5.7	24.2	7.4
Other Castes	2.7	3.3	9.3	2.8	11.9	2.9
Dynamic poverty status						
Persistently poor	10.0	2.9	34.4	6.7	51.1	18.7
Consistently least poor	6.4	3.9	0.8	1.1	3.2	1.4
Total	**6.3**	**2.4**	**20.5**	**5.0**	**25.3**	**9.0**

An analysis of survey data from Round 2 data showed that work often increased as a result of income shocks, such as illness or the death of a breadwinner, crop failure or other financial

disaster. Families in poverty are less able to handle these and contributions from children are often essential to their own well-being as well as that of the family as a whole.[159] The same analysis also showed that entry into paid work is sometimes related to the child's aptitudes and skills.

Children aged 12 undertaking paid work were less likely to have completed secondary or higher secondary schooling and were more likely to have dropped out of school altogether by age 19.[160] Since children who suffer other disadvantages of status and poverty with respect to schooling are also those most likely to be working, it appears that children's work is – at least partially – a product of the social inequalities that need to be addressed.

A large proportion of the children combined school and work (both paid and unpaid) as they grew older. While 16 per cent of the children at the ages of 11–12 were involved in paid and unpaid work, this increased to almost 58 per cent by the time the children were aged 14–15, near the end of their elementary education. For the whole sample, school and study comprised the dominant activity, followed by leisure and then unpaid family work. But there were differences. The incidence of boys working for wages increasing more sharply than reported for girls between the ages of eight and 12 years old, with girls catching up and narrowing the gap, reporting a faster increase in the numbers undertaking work between the ages of 12 and 15. Not surprisingly, children belonging to the poorest households reported a higher incidence of working (35%) than children belonging to least-poor households (27%) at age 15.[161]

Ranadeep aged 15, a Backward Class boy living in Poompuhar, a poor *mandal* of Telangana, dropped out of school after failing his Grade 10 examination. He said that only 23 students out of a class of 43 had passed and that he failed because he was absent from school for long periods of time due to working on the cotton farms. He complained: 'If the plants come into flower, my parents stop me from going to school, since we cannot afford to pay Rs 100 per day to hire labour.*'*

4.3. Children's use of time and work patterns

Besides paid work, unpaid work in the form of domestic chores and work on family farms was also important, and accounted for girls having less time for study and leisure than boys had.

Time use data collected across survey rounds provides a perspective on children's engagement in work, schooling, leisure and other activities in a typical day. Table 10 presents the overall results at different ages, showing growing gender disparities as the children matured.

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159 Krutikova (2009)

160 Singh and Khan (2016)

161 Singh and Khan (2016)

Table 10: *Daily use of time by boys and girls at 12, 15, and 19 years of age*

Time in hours on various activities	12 years	15 years	19 years
Boys (time in hours)			
Sleeping	8.92	8.30	8.11
Caring for others/Domestic chores	0.84	0.97	1.25
Working in family farm	0.39	0.51	1.24
Paid work	0.39	1.08	2.90***
At school	6.06	6.74***	2.89***
Studying (after school)	1.98**	2.12**	1.24
Leisure	4.07***	4.26**	5.00
Girls (time in hours)			
Sleeping	8.92	8.26	8.37
Caring for others/Domestic chores	1.66***	2.46***	3.98***
Working in family farm	0.21**	0.48	0.96
Paid work	0.40	1.00	1.31
At school	6.16	6.05	1.31
Studying (after school)	1.84	1.91	1.13
Leisure	3.51	3.95	5.07

**Significant at 5% ***Significant at 1%
Note: A t-test has been done to test the significant differences in time use by boys and girls at a particular age. These figures are averages for those children who report having spent time on the task
Source: Singh and Khan (2016)

Table 10 highlights significant gender differences in use of time appearing from early adolescence, with girls engaging in a significantly higher number of hours in domestic work than boys, and boys spending more time in paid work and leisure. Moreover, many girls undertake substantial work that may have gone unrecorded, suggested by the fact that at age 19, 27 per cent of girls were recorded as neither studying nor working, in contrast to four per cent of boys.[162] The average time for schoolwork decreased for all, but less so for boys than for girls.[163] These differences applied to poorer boys and girls more than to those who were less poor, particularly when families had to respond to economic shocks. Poorer girls are likely to leave school and enter into marriage at a younger age, while poorer boys become increasingly responsible for providing for their families through their work.[164]

If we compare the daily use of time at age 15 of the Older Cohort and the Younger Cohort, we find that children in rural areas spent less time on school and study and more time in household and productive work than did children in the urban areas (Table 11). Of the Older Cohort children who spent a large amount of time on unpaid work the largest amount was spent by Scheduled Caste children, followed by Backward Class and Scheduled Tribes children, irrespective of social category. In contrast, at the age of 15 the Younger Cohort children spent less time on unpaid and paid work with Backward Class children engaged in the largest amount of household chores and Scheduled Tribes children in paid work. In both cohorts, children from Other Castes households spent less time than others on paid and unpaid work and had more time for study and leisure.

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162   Vennam *et al.* (2016)

163   Vennam *et al.* (2016)

164   Vennam *et al.* (2016)

Table 11: *Daily time allocation in hours of Older Cohort and Younger Cohort at age 15*

Variables	Household chores		Paid work		School and study		Leisure	
	Older Cohort	Younger Cohort	Older Cohort	Younger Cohort	Older Cohort	Younger Cohort	Older Cohort	Younger Cohort
Urban	0.99	1.04	0.63	0.28	9.61	10.75	4.28	3.49
Rural	1.59	1.24	1.17	0.55	7.99	9.63	4.05	3.61
Scheduled Caste	1.61	1.08	1.35	0.59	8.11	9.67	4.01	3.89
Scheduled Tribes	1.35	1.19	0.99	0.70	8.10	9.24	4.30	3.92
Backward Class	1.50	1.33	1.07	0.43	8.00	9.81	4.27	3.40
Other Castes	1.22	0.98	0.69	0.35	9.63	10.79	3.73	3.45
Total	1.45	1.19	1.04	0.48	8.39	9.90	4.10	3.58

Time spent on domestic chores at age 12 correlated with lower educational outcomes at age 19 even more strongly than time spent on paid work, a result that may surprise those who rely on international standards for child labour. Those who spent more than three hours a day on domestic chores are likely to be in disadvantaged groups, and around two-thirds had failed to complete secondary school by the age of 19, although half were still continuing their schooling (Table 12).[165] Mother's level of education also contributed significantly to the patterns of time usage: children of mothers with education above primary level enjoyed less leisure, spent more time on studies, and spent less time on household chores and very little time on paid work. This is true for children of both the cohorts.

Table 12: *Work and later school outcomes*

Round 4 status	Completed secondary	Completed higher secondary	Continuing education
No paid work in Round 2	77.3	51.6	50.5
Paid work in Round 2	48.5	20.6	20.1
Three or more hours of domestic chores per day	34.5	20.7	50.0

Qualitative studies show how children struggled to manage school, home and farm work, particularly for the two to three months from the end of August to early November. Unable to strike a balance between the three, some children periodically missed school and then found it difficult to continue attending school. Others found insufficient energy or time for out-of-school study, which can also affect school outcomes.[166]

Qualitative interviews and the group exercises carried out in 2008 with children then aged around 12-13, also mirror the survey data and demonstrate that most of the children were engaged in household activities, although these were distinctly different for boys and girls. While the girls were engaged in household tasks inside the home (washing-up, cleaning, laundry, cooking and fetching water) boys were more likely to be engaged in tasks outside (fetching water, getting provisions etc.).

Children were also asked to rank their daily activities through a group exercise. The ranking showed that they liked school the most, followed by domestic tasks, and farm work was disliked by most of the children. Children from households who had some land were also required to work on the family farm during the peak agricultural season, which affected the time spent in

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165 Singh and Khan (2016)

166 Vennam *et al*. (2016); Morrow and Vennam (2010)

school. Unable to strike a balance between the different forms of work, some children missed some school and then found it difficult to continue at school.[167]

In Round 2 in 2005, 12-year-old Ramya was working on her farm, even though she belonged to a better-off family which owned land, but which also had incurred a debt connected with the marriage of her two older sisters. Ramya was expected to work on the land, demonstrating that work is not always directly caused by poverty but also the need to provide labour within the household to work on family land, and the pressures that family debt may place on households. Describing her experiences of combining school and work, Ramya says: 'I try to read, but I feel tired. I miss school, so I don't know what is happening at school.' Ramya also finds the work hard and tiring: 'It is very hard … my legs hurt. We walk a long way… we have to do the same work every day, even if it is hot. At that time, I cover my head with a towel. Sometimes I get a fever, but mostly it is only my hands and legs that ache. I feel tired after a long day, and do not feel like doing anything when I get home, not even studying.' Her father is too busy and cannot help her with her homework. She said her mother understands her problems with work: 'If I say I don't want to go to the fields every day she [her mother] understands and does not force me. If I want to go to school, she lets me. ..but she doesn't let me go (to school) during the cotton harvest.'[168]

Clearly, there are various social, demographic and family circumstances and shocks that affect young people living in both persistently poor and less poor households, leading to children trying to balance work and education for as long as they can.

4.4. Children's perceptions of their work

Young Lives data show a growing emphasis by children on school both for their well-being in the present and for their future prospects—a possible pathway out of poverty.[169] Many see extensive work as impeding their studies and reducing their chances of success in examinations.[170] Sometimes this impediment is seasonal, as in peak times for the cotton industry.[171] Although children attend school regularly at other times, they sometimes find it hard to catch up, and schools make no allowances for their seasonal work. Having time to study and be free of hard work has become an established ideal for many. Poverty makes this ideal impossible for some.

Children can, however, be discouraged by their failure to succeed in the school system. The chapter on education in this report has pointed out that greater enrolment in school has not resulted in corresponding improvements in literacy and numeracy. Moreover, Young Lives studies show that schools generally fail to enable children from disadvantaged backgrounds to achieve outcomes on a par with their more privileged peers.[172] Achievements in school can be thwarted by the hindrance of work, the quality of teaching, the facilities and support for study in their homes or lack of aptitude on the part of the children. Failure at school, for whatever reason, leads to modifications of aspirations and to alternative life trajectories. It leads some to conclude that they cannot rely on school for their future and must gain other kinds of experience. But work experience is considered desirable especially if it also imparts useful skills. Qualitative studies show that in some cases work is a response to failure at school rather than its cause. The quality

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167 Singh and Khan (2016)

168 Singh and Khan (2016)

169 Crivello *et al*. (2012)

170 Morrow and Vennam (2010)

171 Morrow and Vennam (2009)

172 Rolleston and James (2014); Murray (2014)

of teaching as children move into higher grades is clearly a reason for some students not being able to secure admission to higher education.[173]

Harika, a Backward Class rural girl living in Poompuhar in southern Telangana, had completed her senior secondary schooling at a government hostel and was keen to go to college but did not secure admission in the college of her choice, she said that she had applied for admission but could not secure a place and therefore discontinued her studies. She felt lack of preparedness was one reason for not getting admission and complained about teachers in senior secondary school: 'Teachers just go through the subject. They conduct classes for intermediate students from morning till afternoon and there were 180 of us intermediate students in one section [classroom]. The teachers never paid any attention to students. They just take the lesson and leave. We have to study on our own. … The teachers never bothered about teaching or cared about the students.'

Apart from risks to their studies from work, children were also very aware of other risks arising from their work, especially in agriculture. While some had little chance of avoiding risk, children generally weighed risks against potential benefits, and often were able to take their own action to minimise risks.[174] In research in 2011 with 42 young people aged 15-16 in two rural communities Young Lives investigated children's understandings of risk at work, as well as their experiences and strategies for trying to manage risks.[175] While admitting to the heavy drudgery of agricultural work, and awareness of the difficulties faced in combining school and work, children also highlighted the importance of contributing to the family's income. A young boy interviewed in Andhra Pradesh commented that 'I cannot imagine a life without working. Work means everything to me. Unless I work, we cannot run our house. …. We need to buy food to run our home… and I have to work to raise money to buy all these.'

Children felt responsible towards their family, parents and siblings. This is particularly evident in times of poverty, debt, illness and death. In such situations children often choose to work, in contradiction to much child labour discourse that assumes children are compelled to work. One of the boys who had left school to take up paid work to support his mother explained that he felt happy that the community thought he was responsible and people would tell his mother: '"Look, you are blessed. You are being looked after by your son and there is no need for you to work. He is not only earning but also taking care of you…." I feel very happy. I want to get a good name, [and] still want to work hard and do better things.'[176]

Boys assume greater responsibility for providing economic support to their families than girls, and the working responsibilities of boys can prevent them from gaining education or training from school or vocational training. In this way, families' heavy reliance on boys for financial support can limit their future employment prospects.[177] Young people have to weigh such responsibilities against their personal ambitions, which frequently concede to economic pressures.[178]

4.5. The status of youth at 19 and 22 years of age (Older Cohort)

The chapter on education describes the huge decline in the overall school enrolment from 78 per cent in 2009 when the Older Cohort children were around 15 years old, to 48 per cent in 2013 when they were 19 years old, and 21 per cent when they were 22 years old, with girls and those

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173 Singh and Mukherjee (2017b)

174 Morrow and Vennam (2012)

175 Morrow and Vennam (2012),

176 Morrow and Pells (2012)

177 Vennam, *et al.*(2016)

178 For case studies and discussion, see Morrow (2013).

belonging to disadvantaged social groups particularly negatively affected. By age 22, 51 per cent – and 60 per cent of the young men – of the Older Cohort were employed, many of them combining work and education. In rural areas youth were mostly engaged in agriculture either for wages or self-employed, whereas in urban areas youth tended to be in waged employment, mostly in the informal sector.[179]

There are huge inequalities in almost all activities of youth at the age of 22 between genders, by social group, by wealth status and by location of the household. For instance, the proportion of those who are only working is much higher in the Scheduled Caste than in Other Castes; it is three times higher among those whose mothers have no education than those whose mothers have more than ten years of education; it is twice as high among the poorest households as the richest households; and it is lower in urban areas than in in rural areas (Figure 12). In 2016 those who were only studying or neither studying nor working are mostly from the households which are wealthy or those located in urban areas. This could suggest that they can afford to be studying without work, or can afford to be idle, or it could be due to being married, or they may be looking for work. This trend is also seen for the Other Castes compared to the socially marginalised groups.

Figure 12: *Activities of 22-year-old youth (%)*
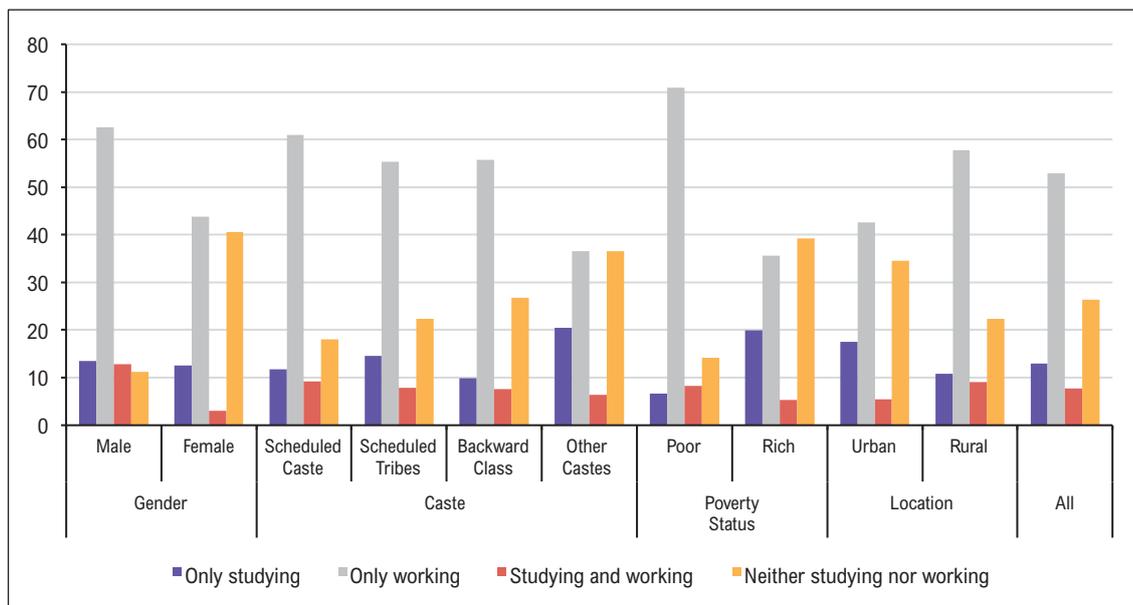
About 24 per cent of 22-year-olds have received or are receiving training, a higher proportion of whom are in the top wealth tercile and in urban areas. Inequalities between social groups persist with respect to training. Only about eight per cent of the youth received or completed training with a certificate. Whilst there is no obvious gender difference in receiving training, this gap emerges where more young men (10%) expect to receive or complete their training with a certificate than young women (7%). A greater proportion of young people from richer households also expect to receive a certificate by the end of their training. This may indicate that more men and those from better-off households (urban or top wealth tercile) are enrolled in formal training or apprenticeships.

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179   Vennam *et al.* (2016)

Figure 13: *Labour market skills of 22-year-olds (%)*
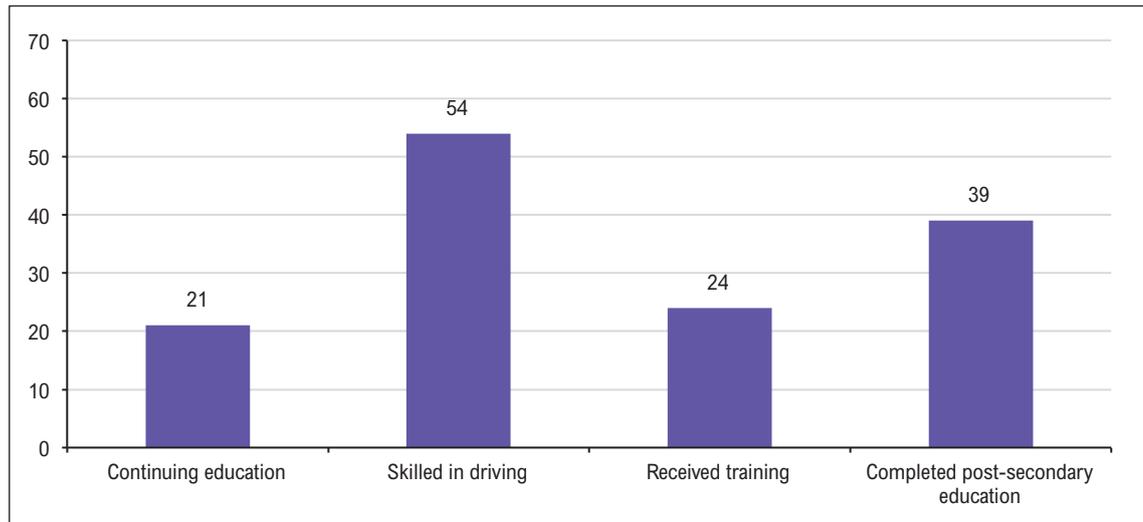
Note: CE=Continuing education; CPSE=Completed post-secondary education; RT=Received training; SD=Skilled in driving

There were clear gender disparities (Figures 14 and 14.1). By the age of 22, many more men (63%) than women (43%) were working and not studying whatever their poverty status. Over 40 per cent of men were working outside the home as opposed to only 15 per cent of women. On the other hand, more women had dropped out of educational institutions. Over a third of young women, but very few young men, were married at the age of 19, a differential that had increased to 56 per cent of females and 11 per cent of males when they were 22.

Figure 14: *Status of 19-year-old Older Cohort children in united AP (%)*
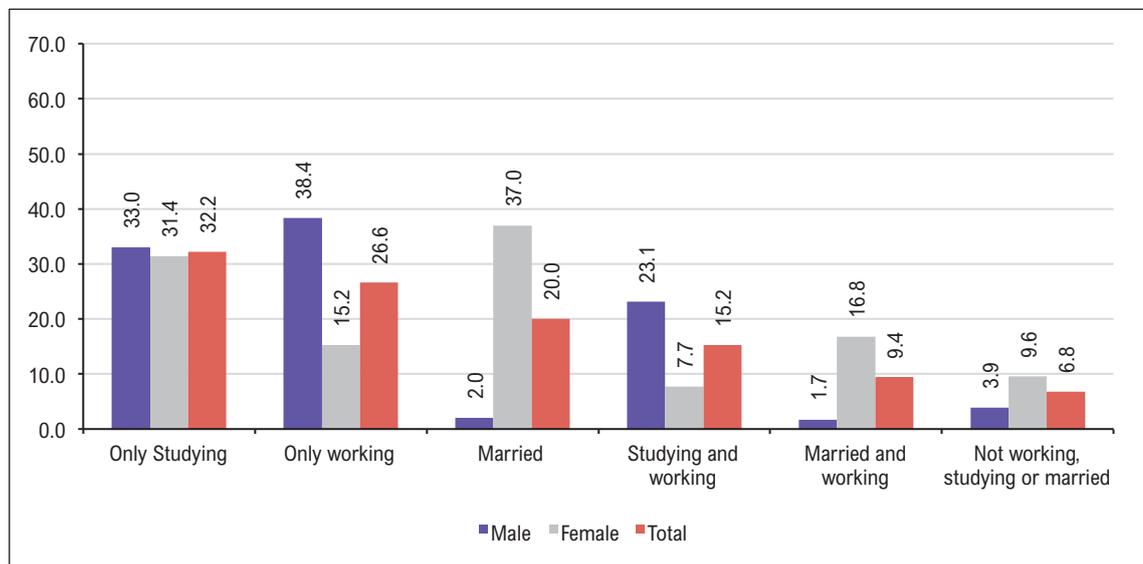
Figure 14.1: *Status of 22-year-old Older Cohort children in united AP(%)*
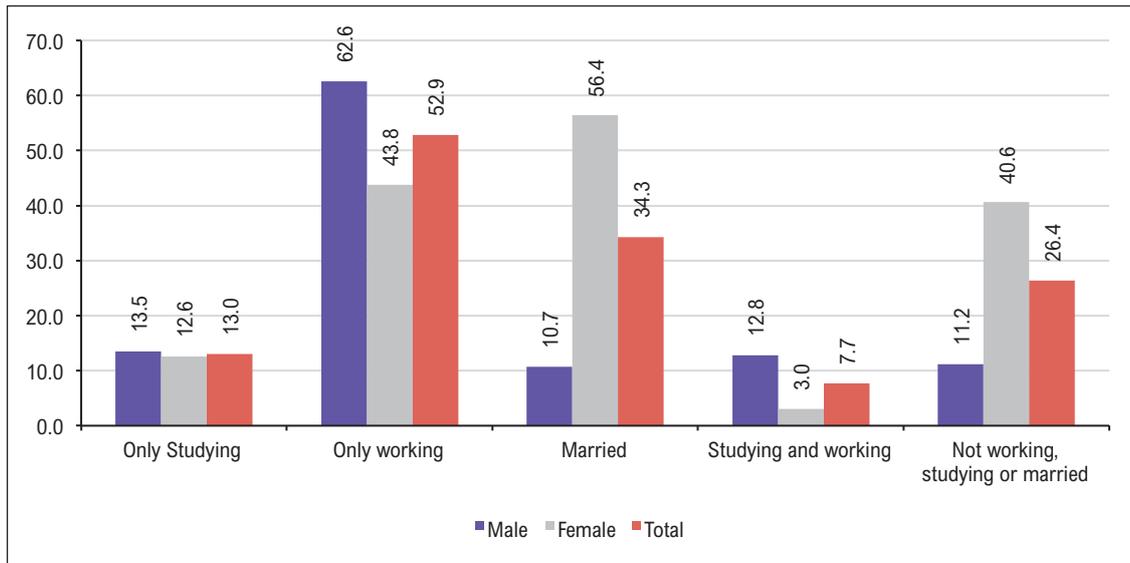
The Young Lives study has collected information on the aspirations of children as well as of their caregivers. In 2009, the Older Cohort (aged about 12) were asked about the type of job they thought they would be doing when they reached around 20 years old; the opinions of their parents were also sought. On the whole, the aspirations of children and their caregivers converged both in the earlier survey and in the adjusted aspirations when they were asked again later. 54 per cent of boys and 62 per cent of girls expected that they would be in professional non-agricultural work. However, at the age 19, of those who said that they would be in professional non-agricultural work, 43 per cent of boys were still studying, 35 per cent were in work related to agriculture, and 13 per cent were in waged employment or regular salaried work outside agriculture. A similar pattern is observed among girls.

Santhi, a Scheduled Caste girl living in a tribal *mandal* of coastal Andhra Pradesh, belonged to a well-off family as her father was a government teacher in an Ashram school. Her experience shows parental support for schooling, and a sense this would bring generational change. In 2014, she was pursuing a bachelor's degree in computer science, and said that her parents 'want to provide us the facilities they lacked while they were growing up. They say that they want to give us everything but not to spoil us … my father recently bought me a laptop. He says that I should study well and he will provide anything to further my studies. He says that it is alright even if I come home late as long as it is for studies.'[180]

Proportions of those employed in agriculture and elsewhere were uneven, and differed between the women and the men, and whether they were in waged employment or self-employed (Figure 15)".

> "As the age increasing i.e. when the youth turned 22 years, the proportion participating in employment has increased but with considerable gender differences (Figure 15.1). Little over half of young women were not working as against a quarter of young men. Higher proportion of young men shifted from agriculture compared to young women when they turned 22 years".

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180   Singh and Mukherjee (2017b)

Figure 15: *Usual employment status of Older Cohort at 19 years of age (%)*
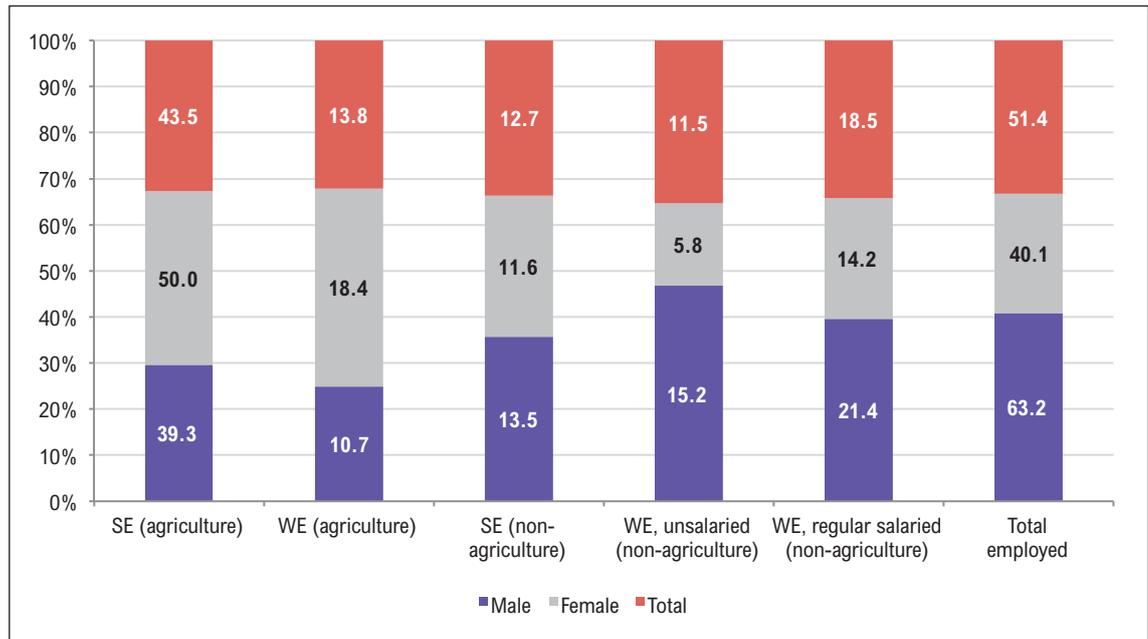
SE=Self employed; WE = Wage employed

Figure 15.1: *Usual employment status of Older Cohort at 22 years of age (%)*
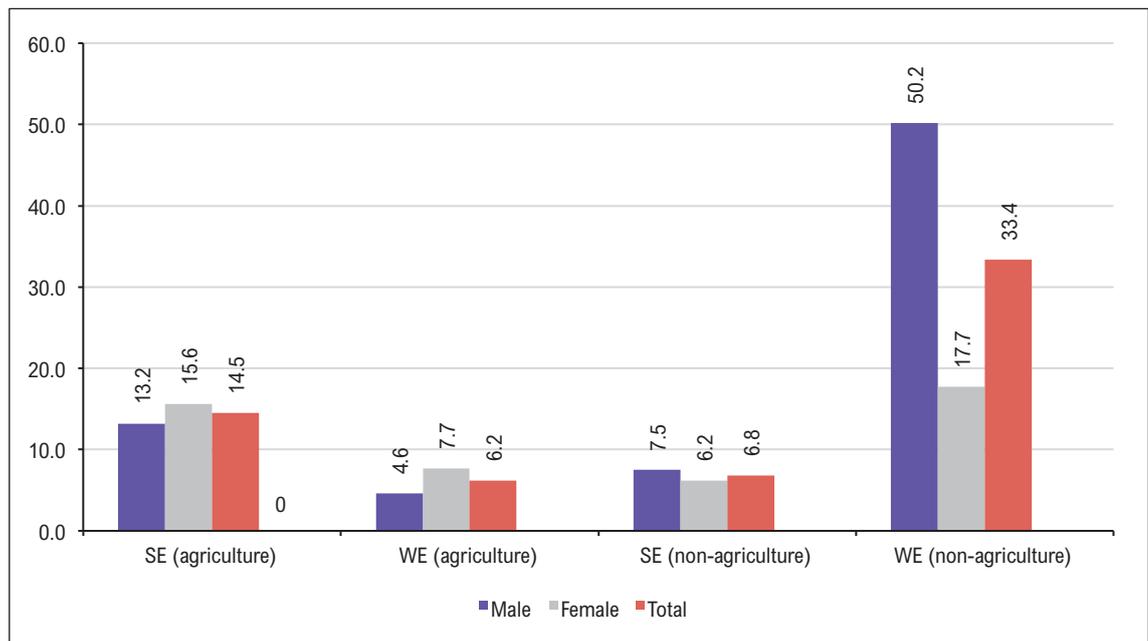
SE=Self employed; WE = Wage employed

Besides the gender differences, social groups are occupied differently at 19. The highest proportion of young people working are from the Scheduled Caste, and Other Castes have the highest proportion in full time study (see Figure 16). This trend continued even up to the age of 22.

Figure 16: *Status of Older Cohort at 19 years of age by social group (%), Total AP*
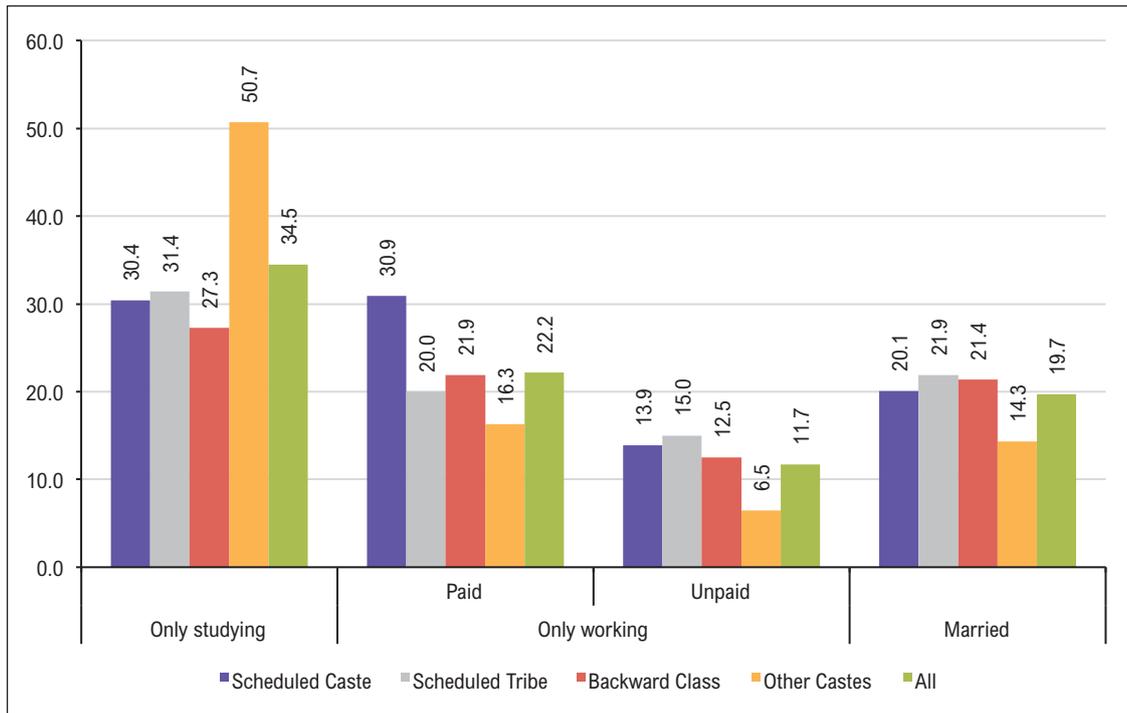
Note: SC=Scheduled Caste; ST=Scheduled Tribes; BC=Backward Caste; OC=Other Castes;

At 22 years of age, the work in both agricultural and non-agricultural sectors combined are significantly higher among Scheduled Caste young people (70%), bottom wealth tercile households (81%) and those living in rural locations (68%) than others.[181] Further analysis shows that the difference in work participation rate amongst the different socioeconomic groups is larger in agricultural work than in non-agricultural work. While there is a seven and 16 percentage-point difference in work participation rate in non-agricultural sector by location (urban vs. rural) as well as by wealth (poorest tercile vs. top tercile) these gaps are much wider amongst those working in the agricultural sector. i.e.27 (rural vs. urban) and 25 percentage-points (poor vs. rich).

As indicated in the chapter on poverty, the families in the Young Lives study were classified according to wealth and two groups were identified for poverty analysis: consistently least poor, who were among the wealthiest in all five rounds of the study; and persistently poor who remained in the lowest wealth tercile across all rounds.

At age 22, there are huge differences in various activities of young men and women and by poverty status (Figure 17).

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181 Reddy *et al.* (2017)

Figure 17: *Status of youth at 22 years of age (%)*
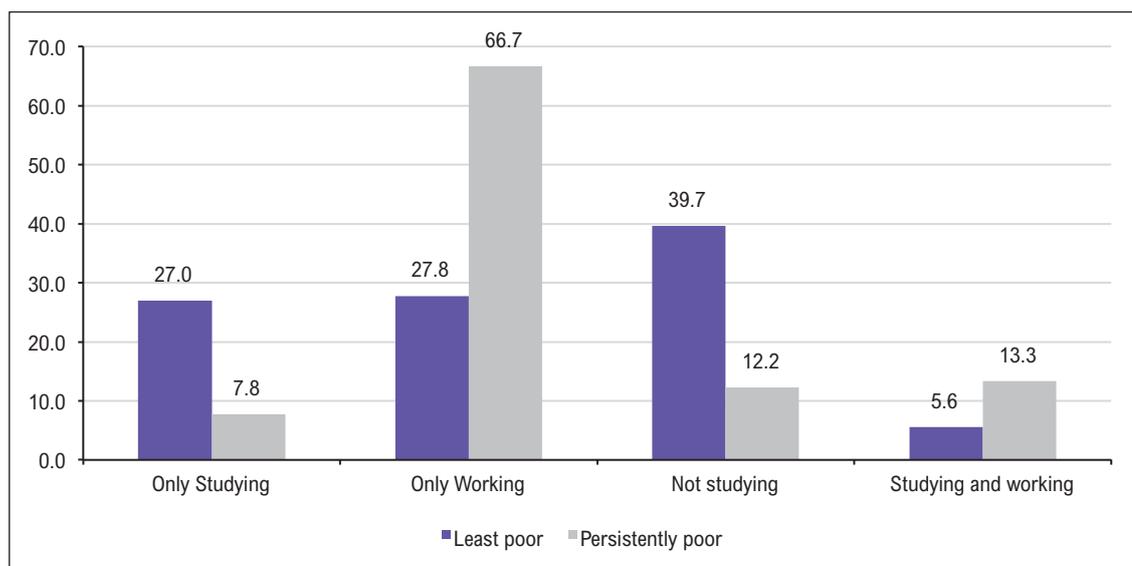
66 per cent of young men from persistently poor families were dependent on agriculture as against 16 per cent of those from the least poor families (Figure 18). Around 27 per cent of persistently poor young men work outside the agricultural sector, as opposed to 52 per cent of the least poor. Almost one third of the least poor are earning their living through salaried income; only a negligible proportion of the persistently poor are in salaried employment. Aspirations to move out of agriculture through education have not on the whole been fulfilled for the persistently poor, who had to give up education to take on work for subsistence.

Indeed, in early adulthood the pattern is the opposite for girls. By and large, boys followed their fathers into agriculture; nearly half of the fathers and a little over half of the young men were working in agriculture, either self-employed or for wages, and one-third of mothers and nearly two-thirds of the young women were working in agriculture.

Figure 18: *Young men in different occupations by wealth (%)*
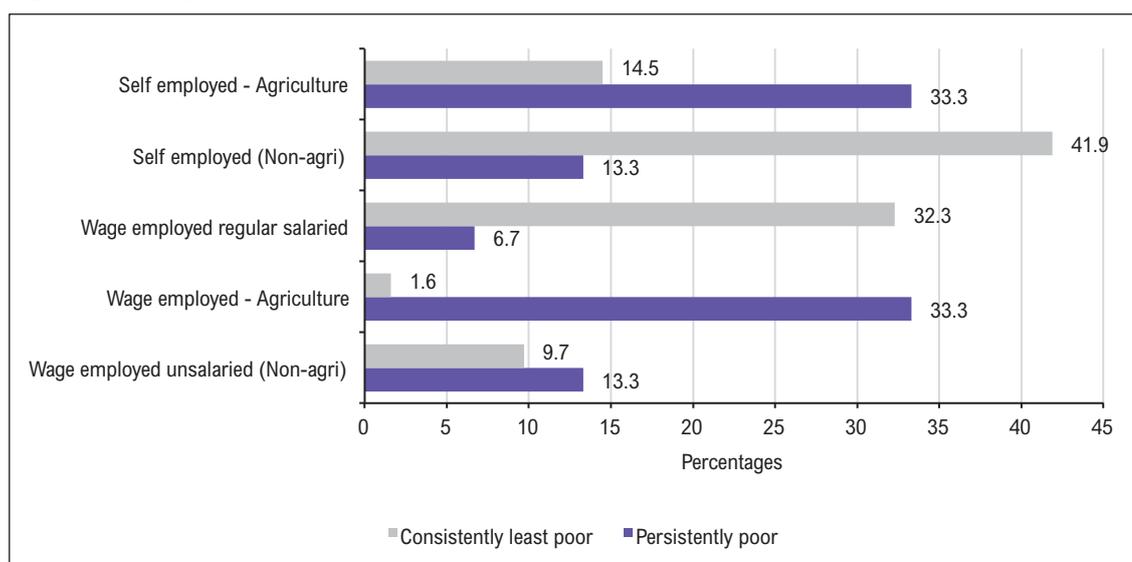
Consistent wealth and social status of families remain closely linked, with large disparities in the occupation of youth, notwithstanding near universal primary education and growing attention to continued enrolment in school.

4.6. Implications for policy

Household poverty is influencing the education and work of youth. Children from poor families, and from scheduled tribes and castes, are more likely to drop out of educational institutions, and to start working, than their more privileged counterparts. Youth from poorer households generally end up working in the agricultural sector, while youth from the least poor households are likely to end up working in the non-farm sector. These disparities also apply to rural areas, where most of the persistently poor live, as opposed to urban areas, where the majority of the least poor live.

Our study also reveals increasing gendered differences with age. More young women than young men dropped out of educational institutions, across all economic and social classes. More young men are in paid work compared to their female counterparts and young women are more likely to end up working in the agricultural sector.

The Government of India has a strong policy commitment to expanding education for young people in order to build a skilled workforce. Yet only half of the young people in the Young Lives Older Cohort were still in education at the age of 19. Many young people, especially in rural areas or from marginalised social groups – and among girls – had already left school. Moreover, few from these groups had been able to break away from their families' ties to poorly paid agricultural work. On the other hand, young people from other social groups exceeded the level of education they had anticipated when they were aged 12, and most of those who had started working were not working in agriculture. Although some girls continued their education beyond what they themselves had expected when they were aged 12, many had married young and dropped out of school.

Young Lives data have shown that while many in the Older Cohort dropped out of school as they grew older, the Younger Cohort stayed longer in school and spent less time in work than the Older Cohort did at the same age. Therefore, the policy of getting children out of work and into school has had some success. However, when we consider outcomes in classroom skills and later employment, the data show that even when they are able to stay in school, children from disadvantaged families do not generally get equal benefit from school compared to their more privileged peers.

All these points indicate the need to focus efforts across departments and Ministries to realise the goals of the 2014 National Policy on Youth. In order to reap the large demographic dividend of the young population, policymakers must find ways to support all children and young people – particularly those from rural areas and the most marginalised groups – to remain in school, to benefit from school and to take their education as far as they can. Attention must also be paid to learning levels, to ensure that children are gaining useful skills that will help them to find secure employment and livelihoods. This is necessary to pave the way not only for more economic growth and better employment, but also for young people to realise their full personal and professional potential.

However, it is not in itself a solution to educate young people and then not provide them with employment opportunities. In rural areas, aspirations to use education to escape working in agriculture have been realised for very few. The school system must recognise that many of their pupils need training for, and appropriate experience in, the kinds of work that is likely to be available to them. There is a danger that to deprive them of such experience deprives them of useful opportunities, without offering realistic alternative opportunities. Schools need to take account of the need of some pupils to work while they study, especially at particular seasons in the year, and to develop ways in which such children will not be disadvantaged. The Young Lives

study reveals that children who miss school for a specific period because of seasonal agricultural work receive little attention from policymakers.[182]

While excessive work, whether paid or unpaid, can have deleterious effects on children's schooling and development, Young Lives data suggest that simply preventing children from working and enforcing school enrolment fails to overcome the problems faced by children from disadvantaged backgrounds. In cases of severe poverty, and particularly in the face of economic shocks, children's livelihood may depend on their work. The school system needs to give more specific attention to the needs of children from disadvantaged backgrounds; programmes such as expanded social protection are needed to deal with persistent poverty, and particularly with the ability of poor families to deal with economic shocks; the need for income and for work experience, particularly in agriculture, need to be addressed. In these ways, it may be possible for children to develop responsibility for their families and communities without this interfering with their development of skills for their future.

182 Vennam and Komanduri (2009)

Chapter 5: Transitions into marriage and parenthood

Renu Singh

5.1. Introduction[183]

Marriage at a young age has far-reaching consequences, with implications for the development and well-being of both boys and girls. It reduces opportunities for continuing education and earning potential, and it burdens young people with family responsibilities before they are psychologically mature. For girls, child marriage often results in teenage pregnancy, leading to the intergenerational transmission of poverty and malnutrition.

India ranks sixth in the world for high rates of marriage before the age of 18.[184] Despite the Prohibition of Child Marriage Act (PCMA) 2006, which makes illegal in India all marriages for girls under 18 years and boys under 21, India has by far the largest number of child marriages compared to any other country in the world. In 2011 for example, the Census of India reported that almost 17 million children or young people aged between ten and 19 were already married, 76 per cent of whom were girls. Further analysis reveals that in 2011, 5.1 million girls and 6.9 million boys had married before their respective legal age.[185] Comparison of data at national level from the 2001 and 2011 censuses shows a small decline in the incidence of child marriage amongst rural girls, but an increased incidence amongst urban girls. Between 2005-6 and 2015-6, prevalence rates of child marriage declined from 47.4 to 26.8 per cent for females and reduced from 32.3 to 20.3 per cent for males (as reported by women aged 20-24 and men aged 25-29)[186]. Importantly, behind these national averages lie huge variations across districts and state/s.

Most child bearing in India occurs within marriage, so for many girls child marriage results in early child bearing[187]. Young girls and boys entering marriage at a young age lack awareness of the advisability of delaying the first pregnancy and are put under a lot of social pressure to produce a 'son' to the family, due to the existing gender bias. According to the National Family Health Survey 4 (NHFS) (2015-16), 7.9 per cent of girls aged 15-19 were already mothers or were pregnant at the time of the survey. The incidence of early pregnancy was higher in rural areas (9.2%) than urban areas (5 %). Death rates among girls and young women giving birth before the age of 19 are double those of women over 20, and they are five times higher for girls giving birth at the age of 15 or younger[188]. Besides the effect on their reproductive health and the well-being of their offspring, girls are likely to face greater challenges in entering the workforce and gaining financial independence if they discontinue their education early in order to get married.[189]

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183 This chapter draws upon quantitative data from Young Lives Round 4 and 5 surveys in 2013 and 2016 in relation to the Older Cohort, a 2014 qualitative survey and a sub-study conducted in 2016 to understand fertility decision-making.

184 UNICEF (2014)

185 Singh (2017)

186 NFHS IV compared to NFHS III

187 Gupta (2000)

188 Brown (2012)

189 Singh and Vennam (2016)

5.1.1. Legislation related to child marriage

There are various laws and programmes that India has initiated post-independence to address both child marriage and teenage pregnancy. The Child Marriage Restraint Act (1929) was amended in 1978 to bring the minimum age of marriage for girls to 18 years and for boys to 21 years. However, it was only with the passing of The Prohibition of Child Marriage Act (2006) that child marriages below the stipulated age was recognised as a cognisable offence. The National Plan of Action 2016 has abolition of child marriage as one of its objectives and aims to reduce the incidence of early marriage, especially among girls. Besides these policy documents the government has initiated various programmes such as Rashtriya Kishor Swasthya Karyakram aimed at empowering adolescents; Conditional Cash Transfers to provide instant financial incentives to girls belonging to disadvantaged families to continue in education and delay the age of marriage and pregnancy; Bal Vivah Virodh Abhiyan (Campaign against Child Marriage); and Indira Gandhi Matritva Sahyog Yojana. Nevertheless, we find that enforcement and implementation of this legislation and these schemes on the ground requires much more attention. For example, registration of child marriage needs to be made mandatory and implemented in a simple and user-friendly manner.[190]

5.1.2. Data from Andhra Pradesh and Telangana

United Andhra Pradesh had the ninth-highest number of people who were married as children in India in 2011, although the percentage of those effectively married before 18 was only marginally higher than the national average[191]. Since the bifurcation, Telangana has a higher incidence of child marriage amongst both girls between ten and 18 years old and boys between ten and 21 than the newly formed state of Andhra Pradesh (Table 13).

Table 13: *Number (#) and percentage (%) of girls and boys ever married (EM) below legal age in Andhra Pradesh, Telangana and Undivided Andhra Pradesh*

State	Girls		Boys	
	10-<18		10-<21	
	# EM	% EM	# EM	% EM
Andhra Pradesh	1,71,083	6.34	1,72,934	3.86
Telangana	1,48,025	7.11	1,48,139	4.4
Undivided Andhra Pradesh	3,19,108	6.72	3,21,073	4.13

Source: Author's calculations based on bifurcation of districts of undivided Andhra Pradesh according to Census 2011

5.2. Evidence from Young Lives

A key challenge in assessing the prevalence of early marriage and teenage pregnancy is that so many of these marriages and pregnancies remain unregistered and unofficial. They are not counted in surveys or picked up in cross-sectional studies, where respondents will often give the legal age of marriage as the age at which they got married, and there is no means to verify this. Young Lives longitudinal data help to overcome this challenge, since we have been following the two cohorts from the age of eight (Older Cohort) and one year (Younger Cohort) and in 2016 these children turned 22 and 15 respectively. Thus, we are in a better position to ascertain when children actually got married as well as the age at which they became parents.

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190   Singh (2017)

191   Census of India 2011

Figure 19: *Marital status of girls and boys by age 22 (Older Cohort)*
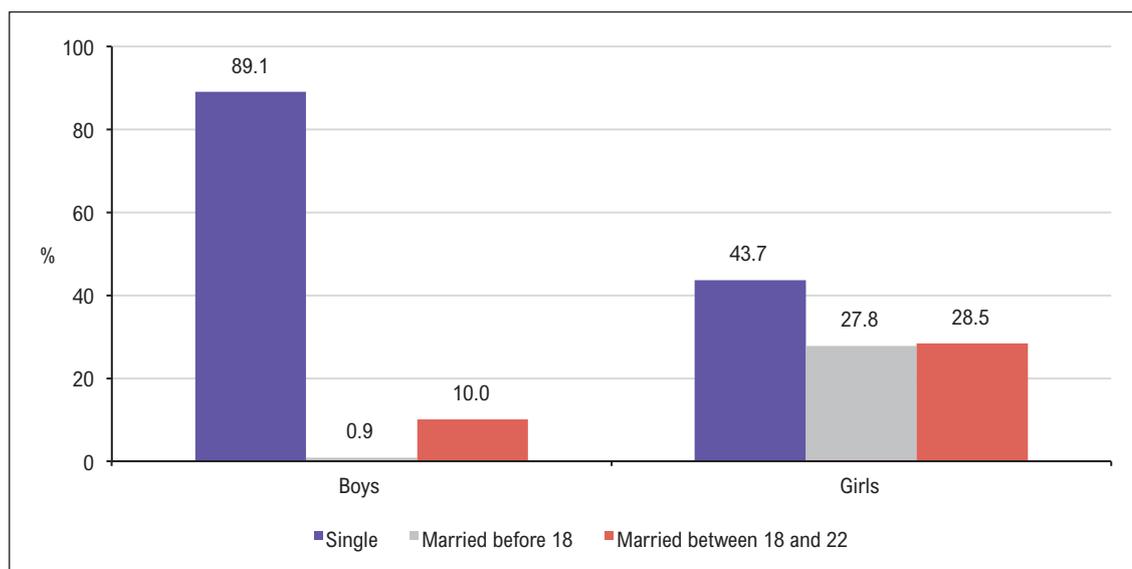
Source: Young Lives Round 4 and 5 data (2013 and 2016)

5.2.1. Profile of married young women

Figure 19 reveals that 28 per cent of the girls in the Young Lives Older Cohort were married before the legal age of 18 years and 56 per cent were married by 22 years of age. Amongst those who had married when they were children, 13 per cent had already given birth by 18. While fewer than one per cent of boys were married before the age of 18, seven per cent of boys were married below the legal age of 21.[192]

There is a significant difference seen in age of marriage in respect of mother' education, caste and wealth (Table 14). While one in three girls who had child marriages had a mother with no formal education, only four per cent of children whose mothers had secondary education and above were married by 18. Similarly, while only 12 per cent of girls in urban areas got married by 18 years of age, a third of the girls in rural locations had been married before the legal age. Girls from the poorest wealth tercile were twice as likely to get married early as girls belonging to the least poor households and almost a third of those from persistently poor households were married by 18 years of age.

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192   Reddy *et al.* (2017)

Table 14: *Association of family characteristics with age of marriage of girls (by 22 years of age) (%)*

	Single	Married		
		Total	Before age 18	18 and after
Average of all girls	43.7	56.3	27.8	28.5
Family characteristics				
Mother's education ***				
No formal education	36.2	63.8	33.3	30.5
Primary	37.8	62.2	31.1	31.1
Middle	64.1	35.9	10.3	25.6
Secondary and above	80.4	19.6	3.9	15.7
Father's education***				
No formal education	31.1	68.9	39.0	29.8
Primary	42.6	57.5	27.7	29.8
Middle	38.9	61.1	13.0	48.2
Secondary and above	72.7	27.3	10.1	17.2
Wealth-Index (R1)***				
Bottom	35.2	64.8	35.9	28.9
Middle	40.1	59.9	32.5	27.4
Top	56.3	43.7	14.6	29.1
Dynamic Poverty Status***				
Consistently least poor	65.6	34.4	6.5	28.0
Persistently poor	41.9	58.1	31.4	26.7
Place of Residence (R2)***				
Urban	58.9	41.1	12.2	29.0
Rural	39.2	60.8	32.5	28.3
Caste***				
Scheduled Caste	51.0	49.0	29.6	19.4
Scheduled Tribes	48.3	51.7	29.3	22.4
Backward Class	32.7	67.3	32.7	34.6
Other Castes	57.0	43.0	15.0	28.0

Chi-square test of association is significant @*p<0.01

Many more girls living in rural areas were married as children than girls living in urban areas. Girls from the poorest tercile were twice as likely to get married as girls belonging to the least poor households. Young Lives data showed that girls whose parents had the lowest educational aspirations for them at age 12 were more than twice as likely be married before age 18 (39%) as girls whose parents had the highest aspirations for their daughters' education (15%). In terms of caste, we find barely any difference between the percentage of child marriages amongst Backward Class, Scheduled Tribes and Scheduled Caste girls, though a significantly smaller percentage of girls got married from Other Castes households.

Caregiver's expectations regarding the age of marriage of the girls also seems important since girls expected to marry by 19 were twice as likely to experience child marriage.[193] In addition, girls with parents who had the lowest educational aspirations for their daughters were twice as likely to be married by the time they were 18 as girls with parents with high educational aspirations for them. Young Lives research suggests that caregivers have lower expectations and aspirations at 12 for their daughters than for their sons and these are reflected in lower aspirations girls have for themselves by the age of 15, although the gender disparities were

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193   Singh and Espinoza (2016)

much higher in rural areas.[194] Aspirations declined during adolescence along the lines of caste, gender and socio-economic status.[195] It is suggested that aspirations reflect and are determined by both 'external constraints' such as household circumstances, social norms etc. and 'internal constraints', that is, people's belief about their own capacities.[196] Both parents' and children's own high aspirations have a protective role, lessening the chances that girls will marry early; three-quarters of the girls who at age 12 aspired to go on to higher education remained unmarried at 19. Educational aspirations have an effect on school retention and are a key factor that deflects the trajectories of certain girls away from child marriage.[197]

Sarada, who is a Backward Class girl living in Poompuhar, a poor rural community in Telangana, is an example of how a young girl has surmounted many barriers to continue her education at the age of 20 years. Sarada has a physical impairment and belongs to a poor family, who wash clothes for a living. Her father married twice and has a second family in Mumbai, while Sarada lives with her mother and younger sister in the village; until quite recently, her stepbrother also lived with them. Sarada's younger sister and older brother had to discontinue their education in order to clear a debt taken on by the family to repair their home, which had collapsed. Despite pressure to leave school, Sarada is the only one who resisted being taken out of school to work on the cotton farm. She did this by lodging a complaint with the labour inspector, with support from a self-help group for disabled people and from her teacher. Sarada continued her senior secondary education in a government institution and received a scholarship of Rs.7,000. She has been getting a monthly allowance from the government, allocated for persons with disabilities. She then joined a degree course and took up a job at night school teaching children in her village, which pays her Rs.1,000 per month and gives her enough money to travel to college and buy books and stationery. She does not receive financial support from her family. Sarada had very clear aspirations as is apparent from an interview conducted in 2014:

> **Interviewer:** If you did not get the allowance and you did not earn money from tuition, would it have been a problem to study?
>
> **Sarada:** I would not have stopped my studies. I would have gone to college at any cost. Earning money by giving tuition benefited me. Because I am handicapped, they did not make me pay fees [for my] degree … Sometimes there won't be money in the house when I need it. Because of the household expenses, money is not always available [from] the elders in the family. I boldly decided to study as I have my own income.

Boys were 1.8 times more likely to complete secondary education than girls, even after controlling for variables related to household and individual characteristics.[198] Enrolment at age 15 had the largest and most significant (negative) effect on the probability of teenage marriage of girls, decreasing its likelihood by 32.2 per cent.[199] While 68 per cent of girls who had not completed elementary education got married before 18 years of age, only ten per cent of girls who had completed higher secondary education got married before the legal age.

Girls' participation in paid work at age 12 was significantly associated with age of marriage, so that 63 per cent of girls doing paid work at 12 were married by the age of 19.[200] Besides this, age of menarche also emerges as an important factor associated with child marriage, with those

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194   Dercon and Singh (2013)

195   Dercon and Singh (2013)

196   Roest (2016)

197   Singh and Vennam (2016)

198   Singh and Mukherjee (2015)

199   Singh and Espinoza (2016)
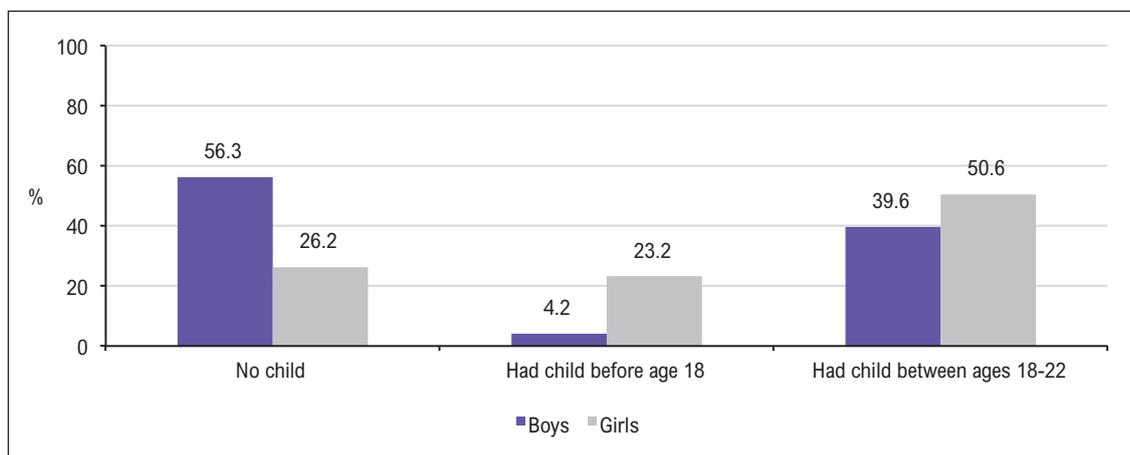
200   Singh and Vennam (2016)

reaching maturity at 11-12 years of age being almost 15 per cent more likely to be married before 18. Girls with an older sister were around six per cent less likely to be married before 18, whereas those with an older brother were 14 per cent more likely to be married before the legal age.[201]

Patriarchy, preference for sons and gendered social norms remain some of the key drivers of child marriage. Dowry was paid by all the families of the girls with 60 per cent paying up to one lakh[202]rupees while ten per cent had paid above three lakh rupees.[203] Dowries are a major burden for poor families who struggle for years to pay off loans taken out for a girl's marriage. Sania, who lives in Hyderabad, explained that both she and her brother had to leave school, since her family had taken a loan to marry off the older daughter; dowries can have a negative effect on both girls and boys in the family. 90 per cent of the girls in the Young Lives sample had arranged marriages. 29 per cent were married to their relatives by the time they were 19, with parents expressing their desire to see their daughters safely married in order to avoid reputational damage associated with elopement and 'love marriage'. Focus group interviews with community members revealed the mindsets related to adolescent girls: 'A girl child's education would be useful to their in-laws only.' Another major cause of girls discontinuing their schooling because of safety issues and threats of sexual harassment is the distance of upper primary and secondary schools from smaller settlements and the lack of residential schools for girls.[204]

5.2.2. Early child bearing

A recent report analysing data from 15 countries has stated that ending child marriage could reduce the national rate of fertility by 11 per cent and reduce the proportion of girls having a child by 18 by three-quarters.[205] Young Lives data highlight that the most powerful influence over child bearing is getting married at an early age.[206] In Round 4 of the Young Lives survey in 2013, 59 per cent of married girls had given birth by 19 years of age, all reportedly within marriage. Fig 20 shows that 23 per cent of the married girls had had a child before 18 years of age and another 51 per cent between the ages of 18 and 22.

Figure 20: *Parenthood by age 22 for young men and women*

Note: The analysis related to parenthood includes only those who were married.

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201   Roest (2016)

202   A lakh is 100,000 rupees.

203   Singh and Vennam (2016)

204   Singh and Vennam (2016)

205   Wodon *et al.* (2017

206   Roest (2016)

Finally, we find that girls with parents with no formal education, girls from the Backward Class, those living in rural areas and those from the poorest households were those most likely to have children before the age of 18 (Table 15).

Table 15: *Association of family characteristics with parenthood of married girls by 22 years of age (%)*

	No child	Had child before age 18	Had child between ages 18 - 22
Average all girls	58.5	13.1	28.5
Family characteristics			
*Mother's education ****			
No formal education	51.1	15.6	33.3
Primary	60.0	13.3	26.7
Middle	74.4	5.1	20.5
Secondary and above	94.1	2.0	3.9
*Father's education****			
No formal education	48.3	18.9	32.9
Primary	53.2	10.6	36.2
Middle	55.6	7.4	37.0
Secondary and above	84.9	6.1	9.1
*Wealth-Index (R1)****			
Bottom	47.8	17.6	34.6
Middle	56.7	14.0	29.3
Top	71.5	7.3	21.2
*Dynamic Poverty Status****			
Consistently least poor	80.7	3.2	16.1
Persistently poor	58.1	16.3	25.6
*Place of Residence (R2)****			
Urban	72.9	6.5	20.6
Rural	54.2	15.0	30.8
Caste *			
Scheduled Caste	59.2	14.3	26.5
Scheduled Tribes	63.8	10.3	25.9
Backward Class	51.7	16.1	32.2
Other Castes	69.0	7.0	24.0

Note: Chi-square test of association is significant @*** $p<0.01$, ** $p<0.05$ and *$p<0.1$
Only the married girls from the Young Lives sample are included in this table.

The predictors of teenage child bearing were largely similar to those for teenage marriage.[207] The girls most likely to have given birth by 19 were from the poorest households, were more likely to live in rural areas, had the least educated mothers, experienced earlier menarche, had lower educational aspirations, and were less likely to be enrolled in school at age 12 and 15. The most substantive predictor for identifying girls at risk of early child bearing was once again non-enrolment in school at age 15. Conversely, being enrolled at 15 brought down the probability of child bearing during the teenage years by 21 per cent.[208]

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207 Singh and Espinoza (2016)

208 Roest (2016)

The qualitative data highlighted the pressures young girls and women experienced to prove their fertility immediately after getting married. Importantly, young people reported having very little sexual and reproductive health knowledge and limited access to related services before first pregnancy. Latha, a Backward Class girl of 20, married and living in a poor urban slum of Rayalseema, and Ameena, a Muslim Other Castes girl of 16, married and living in Hyderabad, spoke of their ignorance of what to expect following marriage. As a consequence, both got pregnant immediately after marriage. Unmarried boys and young men also appeared to be no better informed than the young women, which indicates that both may struggle to make informed choices and plan for the birth of their first child.[209]

Social norms that encourage early child bearing are compounded by inequitable access to health and education services.[210] One young mother in Rayalaseema expressed the importance of giving birth to preserve her reputation: 'If the first child is born immediately after marriage, then it is for our own good…If we don't conceive immediately, then they (the community) will talk about us and keep taunting us. They will say 'look she has no children', and in this way, a finger will be pointed at us.

5.3. Consequences of early marriage and teenage pregnancy

Preliminary findings from the last round of Young Lives surveys show that the percentage of youth studying full time (13%) or combining work and studies (7%) is significantly higher amongst unmarried youth than married youth, of whom 0.3% study full-time and 0.3% combine work and studies. While the growth in access to education is impressive, only 41 per cent of married women and 58 per cent of married men had completed secondary education and above compared to 87 per cent of unmarried young women and 92 per cent of unmarried young men. Clearly educational trajectories for those who remain unmarried diverge sharply from those of married girls and boys.

5.4. Implications for policy

With close to one out of every three girls in the Young Lives sample transitioning into child marriage and 20 per cent into parenthood compared to one per cent of the boys getting married and none having a child by 18, there emerge clear gendered pathways. We find that transitions into adult roles such as marriage and parenthood are interconnected with transitions through school and work. The chronically poor children in the Young Lives sample, those located in rural areas and adolescents from the Backward Class, Scheduled Caste and Scheduled Tribes who are the majority of those who married before the legal age, remain the most disadvantaged in terms of not moving on into higher education or getting pushed into unpaid or paid work in agriculture and allied fields, which are not going to guarantee income security.

Family decisions about marriage are shaped by gender norms and local practices, worries about safety and risks to reputation faced by their daughters, and by poverty, educational provision, aspirations, and of course the wish to secure a positive future for their children. Effective actions to promote later marriage and childbearing must present positive alternatives, which take these drivers into account.[211] Undoubtedly, a multi-pronged approach must be adopted to address practices such as dowries and the preference for sons, in order to ensure that children (particularly girls) from the poorest and most socially disadvantaged homes are not left out of the development agenda and are provided with opportunities to attain their full potential.

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209 Roest (2016)

210 Winters and Nambiath (2016)

211 Roest (2016)

5.4.1. Recommendations to address child marriage and early child bearing include:

Promoting free and compulsory secondary education: given that the most substantive predictor for identifying girls at risk of child marriage and early child bearing was non-enrolment in school at 15 years of age, it is important for policymakers to ensure universalisation of secondary education. Expansion of residential facilities as well as access to safe transport are necessary measures to promote retention of the poorest children in schools.

Provide social protection to the most disadvantaged households: since it is the girls from rural, socially and economically deprived households that are most likely to become child brides, providing these households with adequate social protection from economic and other shocks is necessary to prevent child marriage and subsequent early child bearing.

Build a Campaign Against Dowry: the practice of dowry needs to be dealt with by a nationwide campaign, including rewarding and recognising 'dowry-free' blocks and districts. The school curriculum must also address the negative consequences of this practice by sensitising young people to challenge dowry as it is now practiced.

Enforcement of existing laws within an enabling environment: given that there is huge variation in the incidence of child marriage and teenage pregnancy across various states and districts, it is important for each state to compile a strategic action plan to curb this practice, based on local context and existing evidence. This will require work across all sectors and stakeholders, including partnership between the legal, health, education, women's and children's departments as well as voluntary organisations, communities and adolescents themselves, particularly to challenge gender stereotypes and discrimination.

Better access to reproductive health services for adolescent boys and girls: specific support must be given to young couples to ensure that they have information on the use of safe contraception and the means to delay child bearing.

Chapter 6: Conclusion

This country report has focussed on various domains such as household poverty, nutrition, education, work, and marriage and fertility, drawing upon the five rounds of longitudinal quantitative and qualitative research collected by Young Lives in India. Specifically highlighting the conditions of children and young people belonging to households that have remained persistently in the bottom wealth tercile, the report adopts a life course perspective and examines various trajectories of children as they transition from early childhood to adolescence and young adulthood.

Increasing Wealth but Inequitable Distribution

While there has been an increase in wealth levels (measured through the 'wealth index', of basic services, housing and so on) across all social categories for both older and younger cohort households, the gap between Other Castes and Scheduled Caste and Scheduled Tribes households remains, highlighting the persisting inequalities. Further analysis shows that Other Castes households and those in urban areas continue to have the advantage of access to the highest quality housing and services. Although access to clean water and electricity have become almost universal for all socioeconomic groups, in stark contrast only 50 per cent of the households in the Young Lives sample had access to sanitation facilities in 2016.

Around one in ten of the sample remained persistently poor in both cohorts (i.e. in the bottom wealth tercile in each round). Around a third of the persistently poor households were Scheduled Tribes households. These comprised 28 per cent and 32 per cent of such households in the two cohorts, compared to only two per cent of Older Cohort Other Castes households and less than one per cent of Younger Cohort Other Castes households. This indicates that poverty and caste are strongly associated. In addition, while 13 and 14 per cent of older and younger cohort rural households remained in the bottom tercile between 2002 and 2016, none of the Older Cohort urban households and only one per cent of the Younger Cohort urban households were persistently poor. Thus, despite upward mobility, Scheduled Tribes households amongst both cohorts and rural households across the whole sample continue to be trapped in poverty. Repeated shocks of various kinds added to the precariousness of their situation, with seven out of every ten persistently poor households reporting increases in prices as one of the biggest shocks between 2013-2016. This compares to just four out of ten of the least poor households.

The increase in highest levels of education achieved by the Older Cohort youth compared to their parents is a sign of success of educational policies implemented in the last decade. However, it is worrying that one out of every five Older Cohort girls and one out of every four Older Cohort boys had only completed primary education and discontinued their education. Given the strong association seen between parental education and children's outcomes, this may lead to inter-generational transmission of poverty for the next generation.

Poorest children remain malnourished

Undernutrition was very prevalent among the Younger Cohort children of the Young Lives sample in 2002, with around three in ten one-year-old children being stunted, more than a fifth being wasted, and close to a third being underweight. Scheduled Tribes children fared the worst in terms of chronic undernutrition compared to other ethnic groups, whereas acute undernutrition was most prevalent among Scheduled Caste children, as a quarter of them were wasted in 2002. Poverty, and especially persistent poverty, is positively correlated with undernutrition, as the prevalence of stunting and wasting remained much higher in persistently poor households than in households that were consistently among the least poor households in the sample. While overall stunting rates decreased from 34 per cent for one-year olds in 2002 to 26 per cent for the same

children when they were eight-year-olds in 2009, half of eight-year old children from persistently poor households continued to be stunted in 2009, compared to 39 per cent from similar households in 2002. Similarly slightly more children from Scheduled Tribes households suffered from chronic undernutrition in 2009 than in 2002. The cost of living, as represented by the prices of food in the community, is associated with changes in food consumption and increased short-term and chronic malnutrition in both Andhra Pradesh and Telangana. On the other hand, community factors such as the presence of a hospital in the community was significantly associated with growth between ages one and five, and between five and eight, suggesting that stronger basic infrastructure supports better healthy growth. Young Lives evidence also indicates that post-infancy recovery from stunting is associated with better outcomes in later childhood and later in life. Only 50 per cent of children who were stunted at one remained stunted at 15 and the prevalence of this change in stunting status was particularly high among children in urban locations. On the other side, around a fifth of children who were not stunted at age one were stunted at age 15, with the proportion being significantly higher among children who belonged to persistently poor households.

Children who were consistently stunted from ages one to eight performed significantly worse in tests of cognitive achievement than children who were never stunted between one and eight. Moreover, children who recovered from early stunting had higher cognitive achievement test scores at age eight than children who remained stunted.

Education Is Not An Equaliser For Everyone

The Young Lives data show that while 60 per cent of the Older Cohort attended pre-school, this increased to 91.4 per cent for the Younger Cohort. While only 19 per cent of the Older Cohort children attended private pre-schools, this increased to 50 per cent for the Younger Cohort, with 83 per cent of urban and 28 per cent of rural children enrolled in private pre-schools. Type of pre-school and age of entry into pre-school have a strong association with cognitive outcomes and subjective well-being of children at age 12, to the advantage of those who attended private pre-schools.

Analysis of the school enrolment data over time shows that many inequalities in enrolment which were seen for the Older Cohort reduced considerably for the Younger Cohort, for example in increased enrolment in school at age 12. This increase is particularly significant for girls, Scheduled Caste children and those living in rural locations. An increase in enrolment amongst 15-year-olds is particularly important for the children belonging to the bottom quintile and persistently poor girls in particular. The surge in private school enrolment is largely based on parental aspirations for education in the medium of English as a means of seeking a better future for their children. A decline in the mathematics scores of 12 year olds between 2006 and 2013 is seen both in government and private schools and in all the wealth terciles. There was a marginal decline in mathematics achievement scores in 2016 compared to 2009, and the average score was lower in public schools than in private schools. However, the premium for private school children was only modest and existed primarily in English for the Younger Cohort and in mathematics for the Older Cohort.

By the time the Older Cohort turned 19, more than half of them had dropped out of school. Just over four out of ten of the sample had completed senior secondary education and seven out of ten had completed secondary education. Boys were more likely to complete secondary school than girls, while those from the poorest households, Scheduled Caste, Scheduled Tribes, those whose parents had little or no education and those with many older siblings were less likely than others to complete secondary school. Inequalities are heavily entrenched by the time they are in secondary school, with the poorest children starting Class 9, the equivalent of more than three average school years in maths achievement behind the least poor.

While 57 per cent of the least poor children were enrolled in higher education at age 19, only 17 per cent of those belonging to chronically poor households were enrolled in college. A strong correlation was found between working at 12 years of age and completion of secondary education; children who did paid work and more than three hours of domestic chores per day were more than two and more than three times respectively more likely to complete secondary school. At 22 years of age, only 20 per cent of the Older Cohort were still studying; while 33 per cent of young people from the least poor households were among them, there were only 22 per cent of those from persistently poor households. There was a large gender gap at 22 years of age, with 26 per cent of young men enrolled in education as compared to 15 per cent of young women.

Gender disparity and limited job opportunities in the formal sector

As children grew older, many children combined school and work, while others discontinued education. Significantly fewer of the Younger Cohort children were working at age eight than had been the case for Older Cohort children at that age. This decreasing pattern continues at ages 12 and 15. The number of Older Cohort working children remained much greater in rural areas, amongst the poorest families, and in Scheduled Tribes, Scheduled Caste and Backward Class households. Pressure to work often increased for children as a result of income shocks, such as illness or death of a breadwinner, crop failure or other financial disaster.

The incidence of boys doing paid work increased more sharply than girls between the ages of eight and 12 years, with girls catching up and reporting a faster increase in working between the ages of 12 and 15. Girls were most likely to work inside the home, whereas boys more often worked outside the home. Not surprisingly, at the age of 15 children belonging to the poorest households reported a higher incidence of working than children belonging to least poor households. Children in rural areas spent less time on school and study and more time on household chores and paid work than did urban children, which in turn led to irregular attendance since children were trying to balance work and school. Among the Older Cohort, Scheduled Caste children, Scheduled Tribes and Backward Class children all spent a large amount of time on unpaid work. Children undertaking paid work at age 12 were less likely to have completed secondary or higher secondary schooling, and more likely to have dropped out of school altogether by the age of 19. The average time for schoolwork decreased for all, but less so for boys than for girls.

Among the Older Cohort young people employed at 19 years of age, there was a spread of agricultural, non-agricultural, waged and self-employed, with differences between young men and young women too in all areas. The percentage of youth working in agriculture from rich households and urban locations is very low compared to young people from bottom tercile households and in rural locations. Of the total number of those young people who were working, a far higher proportion of young men than young women were working for pay. Only a third of the youth in the study have had skills training, and only 8 per cent getting certification for the training. Amongst the employed youth, the highest proportion were employed in the non-agricultural sector, while 21 per cent of the sample were employed in agriculture. The proportions of those working was much higher among Scheduled Caste households, bottom wealth tercile households and those living in rural locations. While 65 per cent of youth belonging to consistently least poor households were only studying, 44 per cent of youth belonging to persistently poor households were working full time and only 20 per cent were studying.

Early marriage and teenage pregnancy limiting future options

Around 56 per cent of young women and 11 per cent of young men were married by the age of 22. Nearly seven per cent of young men were married below the legal age of 21 and about five per cent of men became fathers by 22. A large number of young women were married before the

legal age for marriage at 18, and nearly half of those became mothers before reaching the age of 18. A large majority of these girls lived in rural areas. We find barely any difference between the various caste groups with the exception of a significantly smaller percentage of girls from Other Castes households getting married early. Girls from the poorest tercile were twice as likely to get married early as girls belonging to the least poor households and almost a third of those from persistently poor households were married by the age of 18. That said, analysis of Young Lives data showed that school enrolment at age 15 had the largest and most significant effect in decreasing the likelihood of teenage marriage of girls. While just over two-thirds of girls who had not completed elementary education got married before 18 years, only one in ten girls who had completed higher secondary education got married before the legal age. Looked at the other way, the great majority of both unmarried young women and unmarried young men at the age of 22 had completed secondary education and above while only approximately half as many married young women and men had done so.

Patriarchy, preference for sons and gendered social norms remain the key drivers of child marriage. A dowry was paid by all the families of the girls, with many paying large sums. The predictors of teenage child bearing were largely similar to those for teenage marriage: girls most likely to have given birth by 19 were from the poorest households, in rural areas, had the least educated mothers, had experienced earlier menarche, had lower educational aspirations, and were less likely to be enrolled in school at the ages of 12 and 15.

Early marriage result in poorer educational trajectories of young women and results in a large number being engaged in domestic tasks. The percentage of young people studying full time or combining work and education is significantly higher amongst unmarried than married youth. Education trajectories seem to diverge sharply between girls and boys who remain unmarried and those who married early.

The way forward

This report has highlighted how caste, location, wealth and gender interact in complex ways to determine physical development, and educational and labour market outcomes for youth from the Older Cohort at age 22. The interaction of multiple factors on children's development underlines why it is critical for policy makers to recognise and address multi-dimensional childhood poverty.

We end by summarising some of the key conclusions for policy:

Physical growth is central to healthy child development, and has been found to support good cognitive development. While attention to physical recovery needs to be addressed through, for example, midday meals and ICDS programmes, it is essential that all households have access to sanitation and health facilities, which are significantly associated both with the incidence of stunting in the first place and with subsequent growth recovery or faltering.

A key overall message that emerges is that it is important to provide social security to the poorest households, to address persisting inequality between socially advantaged and socially disadvantaged households. While the urban poorest are very likely to face significant ongoing problems, the urban and rural differential remains very evident.

Gender inequality in access to good schooling, time given to domestic chores from an early age, access to secondary education, age of marriage, decision making and exercising agency all need to be addressed. Poverty reduction will assist this, since gendered choices are often forced partly by economic disadvantage. However, such transformation also requires change in persistent gendered social norms to ensure that girls can stay in school longer, marry later and have better later livelihood options.

Educational inequalities are set in motion in early childhood and tend not to reverse, while differences in achievement relating to location, ethnicity, wealth, parental education and gender pursue children throughout their schooling. There is a powerful policy case for early childhood education to be given policy priority so that the poorest children are given a fair chance to build a strong foundation for future learning through revamping of Padhe Bharat Badhe Bharat to focus on laying a strong foundation of reading and writing in early grades.

To be consistent with the importance identified for education, the Right to Education Act needs to be extended to cover all children between three and 18 years. It is equally important to ensure that elementary and secondary school curricula provide relevant and good quality education to equip children with not only the necessary literacy but also vocational and life skills such as problem solving and critical thinking, which are necessary for entering the labour market in the 21st century.

Given that 89 per cent of the girls in our sample, who completed senior secondary education, remained unmarried at 19 years of age, measures to help girls stay in school for longer are important to the reduction of child marriage. The provision of hostels until secondary level is recommended, particularly for the persistently poor and in socially and remotely located settlements so as to make secondary education accessible for every child.

Observing the strong correlation between paid work and more than three hours of domestic chores at age 12 with discontinuing education at age 19, it is critical that the poorest families are supported to be able to cope with economic and environmental shocks and protect their children from leaving school. It is necessary to provide social protection and cash transfers for socially and economically disadvantaged families to protect children at risk of being taken out of school.

Early marriage and teenage pregnancy further limit opportunities for young women and does not allow them to fulfil their potential. The practice of dowry and preference for boys go hand in hand and a large-scale campaign to promote female empowerment and challenge patriarchy must be given priority. Bringing gender norm change and building parental aspiration for adolescent girls is important to consider within programmatic intervention/s at the micro level.

One of the biggest challenges faced by the youth is scarcity of new jobs as they enter the labour market even after completing secondary and higher education. Young people's aspirations must be linked with commensurate skills and opportunities in the labour market, including entrepreneurship options under Government of India's initiatives such as 'Start Up India', 'Make in India', 'Support to Training and Employment Programme for Women (STEP) and National Skill Development Mission.

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Annex 1: Poverty and associated indicators in undivided Andhra Pradesh (Older Cohort and Younger Cohort households) (%)

VARIABLES	Wealth Index			Housing quality index			Consumer durable index			Access to service index		
	2002	2016	% change (2002 to 2016)	2002	2016	% change (2002 to 2016)	2002	2016	% change (2002 to 2016)	2002	2016	% change (2002 to 2016)
Older Cohort												
Total	**0.41**	**0.65**	**58.5**	**0.49**	**0.73**	**49.0**	**0.18**	**0.42**	**133.3**	**0.55**	**0.82**	**49.1**
Caste												
Scheduled Caste	0.33	0.59	79.3	0.42	0.65	54.1	0.11	0.36	238.2	0.45	0.75	65.8
Scheduled Tribes	0.31	0.57	82.3	0.39	0.64	64.4	0.12	0.36	206.4	0.43	0.71	64.4
Backward Class	0.41	0.67	63.1	0.50	0.74	49.5	0.18	0.43	142.0	0.55	0.82	49.8
Other Caste	0.54	0.75	39.2	0.61	0.82	33.4	0.28	0.49	71.3	0.71	0.94	31.5
Place of Residence												
Urban	0.65	0.76	16.9	0.71	0.80	12.9	0.33	0.51	54.2	0.92	0.98	6.5
Rural	0.33	0.62	87.9	0.42	0.70	65.3	0.13	0.39	199.0	0.44	0.77	76.6
Region												
New Andhra Pradesh	0.42	0.66	59.3	0.51	0.75	45.7	0.18	0.42	129.1	0.55	0.82	48.6
Telangana	0.39	0.64	64.9	0.45	0.68	51.4	0.17	0.41	150.2	0.55	0.82	50.1
Younger Cohort												
Total	**0.41**	**0.63**	**53.7**	**0.49**	**0.69**	**40.8**	**0.18**	**0.42**	**133.3**	**0.55**	**0.79**	**43.6**
Caste												
Scheduled Caste	0.36	0.58	61.1	0.47	0.66	40.4	0.12	0.37	208.3	0.50	0.73	46.0
Scheduled Tribes	0.25	0.53	112.0	0.30	0.58	93.3	0.09	0.33	266.7	0.37	0.68	83.8
Backward Class	0.41	0.65	58.5	0.50	0.72	44.0	0.18	0.43	138.9	0.55	0.79	43.6
Other Caste	0.55	0.72	30.9	0.64	0.75	17.2	0.28	0.49	75.0	0.72	0.91	26.4
Place of Residence												
Urban	0.64	0.75	17.2	0.73	0.76	4.1	0.31	0.52	67.7	0.89	0.97	9.0
Rural	0.33	0.58	75.8	0.42	0.66	57.1	0.14	0.38	171.4	0.44	0.71	61.4
Region												
New Andhra Pradesh	0.41	0.64	56.1	0.51	0.72	41.2	0.18	0.42	133.3	0.54	0.79	46.3
Telangana	0.39	0.61	56.4	0.46	0.65	41.3	0.16	0.41	156.3	0.55	0.78	41.8

Annex 2: Percentage of persistently poor households by caste and location

Variable	Bottom tercile (2002)		Persistently in bottom tercile (2002 to 2016)	
	n	%	n	%
Older Cohort				
Total	302	33.3	90	9.9
Caste				
Scheduled Caste	93	47.7	35	17.9
Scheduled Tribes	55	53.4	29	28.2
Backward Class	131	31.0	22	5.2
Other Castes	23	12.4	4	2.2
Place of residence				
Urban	5	2.4	0	0.0
Rural	297	42.8	90	13.0
Younger Cohort				
Total	631	33.6	209	11.1
Caste				
Scheduled Caste	137	39.7	47	13.6
Scheduled Tribes	187	66.8	91	32.5
Backward Class	268	30.7	68	7.8
Other Castes	39	10.3	3	0.8
Place of residence				
Urban	13	4.5	6	1.3
Rural	618	43.4	203	14.3

Young Lives

An International Study of Childhood Poverty

About Young Lives

Young Lives is an international study of childhood poverty, involving 12,000 children in 4 countries over 15 years. It is led by a team in the Department of International Development at the University of Oxford in association with research and policy partners in the 4 study countries: Ethiopia, India, Peru and Vietnam.

Through researching different aspects of children's lives, we seek to improve policies and programmes for children.

Young Lives Partners

Young Lives is coordinated by a small team based at the University of Oxford, led by Professor Jo Boyden.

• *Ethiopian Development Research Institute, Ethiopia*

• *Pankhurst Development Research and Consulting plc, Ethiopia*

• *Centre for Economic and Social Studies, Hyderabad, India*

• *Save the Children India*

• *Sri Padmavathi Mahila Visvavidyalayam (Women's University), Andhra Pradesh, India*

• *Grupo de Análisis para el Desarollo (GRADE), Peru*

• *Instituto de Investigación Nutricional, Peru*

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