

'I Will Achieve Everything On My Own'

The Association Between Early Psychosocial Skills and Educational Progression Through Adolescence in India

Renu Singh, Ranjana Kesarwani, and Protap Mukherjee



'I Will Achieve Everything On My Own': The Association Between Early Psychosocial Skills and Educational Progression Through Adolescence in India

Renu Singh, Ranjana Kesarwani, and Protap Mukherjee

© Young Lives 2018 ISBN 978-1-912485-00-0

A catalogue record for this publication is available from the British Library. All rights reserved. Reproduction, copy, transmission, or translation of any part of this publication may be made only under the following conditions:

- · with the prior permission of the publisher; or
- with a licence from the Copyright Licensing Agency Ltd.,
 90 Tottenham Court Road, London W1P 9HE, UK, or from another national licensing agency; or
- · under the terms set out below.

This publication is copyright, but may be reproduced by any method without fee for teaching or non-profit purposes, but not for resale. Formal permission is required for all such uses, but normally will be granted immediately. For copying in any other circumstances, or for re-use in other publications, or for translation or adaptation, prior written permission must be obtained from the publisher and a fee may be payable.

Core-funded by



Young Lives, Oxford Department of International Development (ODID), University of Oxford, Queen Elizabeth House, 3 Mansfield Road, Oxford OX1 3TB, UK

Tel: +44 (0)1865 281751 • Email: younglives@younglives.org.uk

Contents

	The a	uthors	4
	Ackno	4	
	Summ	nary	5
1.	Introd	uction	6
2.	Data		7
	2.1.	Dependent variable	7
	2.2.	Independent variables	8
3.	Methods		10
	3.1	Factorial logistic regression	10
4.	Results		11
	4.1.	Univariate analysis	11
	4.2.	Bivariate analysis	13
	4.3.	Multivariate analysis	15
5.	Discussion and conclusions		18
6.	References		
	Apper	24	

The authors

Renu Singh has over 25 years' experience in teaching, teacher education, education policy analysis and research, both in India and abroad. Her research interests are early childhood development, teacher education, inclusion and gender. She has held a number of prestigious positions at NGOs, including Save the Children, and in university departments. She has also advised the Indian Government by serving in a variety of working groups, and on committees and boards. She is the Country Director at Young Lives India.

Ranjana Kesarwani is a Quantitative Research Associate at Young Lives India. She has an MPhil and PhD in Population Studies from the International Institute for Population Sciences, Mumbai, and an MSc in Statistics from Banaras Hindu University. Her research interests are maternal and child health, social determinants of health, mortality analysis and small area estimation. Prior to joining Young Lives she worked as a Research Fellow at the Public Health Foundation of India, and as a data analyst for the Annual Health Survey.

Protap Mukherjee is a Quantitative Researcher at Young Lives India. He has an MSc in Geography from Banaras Hindu University, Varanasi, and an MPS (Master of Population Studies) from the International Institute for Population Sciences (IIPS), Mumbai. Before joining Young Lives, he worked at IIPS, the National Population Stabilisation Fund, Microsoft Corporation India and Jawaharlal Nehru University.

Acknowledgements

We are grateful to Patricia Espinoza Revollo and an anonymous reviewer for their valuable comments.

About Young Lives

Young Lives is an international study of childhood poverty, following the lives of 12,000 children in four countries (Ethiopia, India, Peru and Vietnam) over 15 years. **www.younglives.org.uk**

The views expressed are those of the authors. They are not necessarily those of, or endorsed by, the University of Oxford, Young Lives, DFID or other funders.

Summary

Psychosocial skills are an important element of the confidence and motivation to progress in academic life. This working paper utilises a factorial logistics model to highlight the association between psychosocial skills at age 12 and educational progression through adolescence (to age 19), analysing Young Lives quantitative survey data of Older Cohort children and longitudinal qualitative data collected between 2007 and 2014 in undivided Andhra Pradesh, India.

Quantitative data analysis shows that psychosocial skills such as subjective well-being and self-efficacy at 12 years old are significantly positively associated with retention in education at 19 years old. These findings are supported by qualitative data. Findings reveal that household wealth, children's paid work at age 12, as well as caregivers' education and occupational aspirations for their children play a significant role in shaping the self-efficacy and subjective well-being of children. Gender, birth order and caste also play a significant role in framing the association between psychosocial skills at 12 years old and educational outcomes at 19 years old. Given these findings, it would be useful for programme interventions aiming to retain children throughout secondary schooling to focus on building parental aspirations, particularly for girls and socially and economically disadvantaged households. Other areas that require policy attention are around providing social protection to disadvantaged households and developing teachers' skills in order to encourage and build the psychosocial competencies of children.

1. Introduction

Policymakers around the world are keen to understand what factors influence school completion, and in recent years there has been much attention paid not only to cognitive skills, but also what are often termed psychosocial/non-cognitive/social emotional skills. A growing body of literature suggests that student's psychosocial domain not only predicts children's future outcomes (Cunha and Heckman 2008; Levin 2012), but also influences success later in life (Bowdon 2013; Poropat 2009). Heckman et al. (2006) found that increasing non-cognitive ability has a larger effect on educational attainment than increasing cognitive ability by the same magnitude. There is also growing evidence of the malleability of non-cognitive skills compared to cognition, which peaks during adolescence (Almlund et al. 2011). This has led to growing interest in the role of psychosocial skills in school-aged populations. DiPrete and Jennings (2012) found that girls have a sizeable advantage in social and behavioural skills during early elementary school, which grows in magnitude throughout the first six years of schooling.

While the link between psychosocial skills and cognition is accepted, debate continues about the direction of the association between the two. Some scholars argue that while noncognitive skills foster the development of cognitive skills, cognitive skills do not promote the development of the former (Cunha and Heckman 2008). Jodl (2015) highlights how, despite recognition of the relative importance of psychosocial or non-cognitive skills, scholars continue to debate the specific skills and underlying mechanisms through which these skills operate, and the magnitude of the effects relative to cognitive factors. In the research undertaken in this area, very few studies have focused on the association between psychosocial skills accumulated during early adolescence and educational progression by late adolescence. This is particularly important in the context of Goal 4 of the Sustainable Development Goals, as globally the number of primary school-age children out of school rose by 2.4 million between 2010 and 2013, reaching a total of more than 59 million. Of these, 41 per cent or 24 million of all out-of-school children have never attended school, while about 20 per cent attended school in the past but have not continued their education (UNESCO eatlas, n.d.). Bhatty (2015) stated that as many as 124 million children and adolescents worldwide are out of school, and as many as 17.7 million (14 per cent) of these are Indian. Therefore, considering the importance of school enrolment and school retention during adolescence, this working paper explores the association between psychosocial skills at 12 vears old and school progression between the ages of 12 and 19. We analyse the following question: are psychosocial skills during early adolescence associated with educational progression through late adolescence?

2. Data

The paper uses longitudinal data from the Young Lives study of childhood poverty in Andhra Pradesh and Telangana. Since 2001, Young Lives has followed two age cohorts of 3,000 children and young people – an Older Cohort born in 1994–95, and a Younger Cohort born in 2001–02 – over five survey rounds. Each round has collected information at the community, household and individual level. Young Lives has a sentinel site design, and the sample in Andhra Pradesh and Telangana is clustered in about 98 communities (villages or urban wards) in 20 *mandals* (sub-districts), which were purposively selected. With sites oversampled from poorer areas, Young Lives is not a representative study, but it enables analysis of change and effects in the lives of children and young people over time. The survey also captures psychosocial aspects in each round, which includes children's own views about their subjective well-being, self-esteem and self-efficacy. The analysis in this paper is limited to the Older Cohort, who were about 19 years old at the time of the fourth survey round. The longitudinal data allow us to undertake statistical analyses of the predictors and determinants of school continuation during adolescence.

Attrition in the data was low over the 12-year period of data collection from Rounds 1 to 4. In the fourth survey round (2013-14), 486 out of 517 girls (~94 per cent) and 466 out of 491 boys surveyed in 2002 (~95 per cent) were still in the study sample. The low attrition rate enables us to study the long-term association between psychosocial skills in children aged 12 and educational status at age 19 since we have retained 94.5 per cent of the sample.

Young Lives data showed that nearly all Older Cohort children were enrolled in school at the start of adolescence, but the rate of enrolment declined after this (Winter 2016). The quantitative panel survey provides data at the household and child level, as well as data on education history. For this paper, we used the Older Cohort education data from three survey rounds (Round 2, Round 3 and Round 4) conducted in 2005, 2009 and 2013, respectively. Psychosocial indicators related to self-efficacy and subjective well-being were taken from Round 2, when the Older Cohort were about 12 years old. Birth order and household's economic prosperity in terms of wealth index were taken from Round 1 (collected in 2002 when children were around 8 years old). Basic socio-demographic information like gender and caste was also considered. Caregivers' aspirations for the education and occupation of the children were taken from Round 2 (2006).

In addition, four rounds of longitudinal qualitative data collected in 2007, 2008, 2010 and 2014 in four communities with a nested sample of 24 Older Cohort children and their caregivers have been used to provide deeper insight into psychosocial and other factors influencing adolescent children's retention in education.

2.1. Dependent variable

Our dependent variable was school retention by age 19, so the sampled children could fall into one of two groups: (1) children who were retained in school between the ages of 12 to 19; or (2) children who were enrolled at age 12 and had dropped out by age 19. We created a binary variable, 'currently enrolled in school at 19', categorised into 'yes' or 'no' from all three survey rounds (Rounds 2 to 4). The procedure used to create educational status can be defined as:

Educational status = 1 if child was continuously enrolled between Rounds 2 to 4 (between ages 12 to 19)

Educational status = 0 if child was enrolled at age 12 and had dropped out by age 19.

We excluded children from the sample who had dropped out by age 12 (88 children) as well as those who discontinued and/or re-joined school between Round 2 and Round 4, that is, between the ages of 12 and 19 (nine children). The final sample was 834 children.

2.2. Independent variables

The list of independent variables was selected based on the existing literature and preliminary findings on the current school enrolment status and psychosocial status of the children. We have examined the factors associated with educational status through several sets of independent variables: psychosocial indicators, household factors, caregivers' aspirations, and individual characteristics. Each set of factors includes several variables. The effects of these four sets of independent variables on the dependent variable have been examined through bi-variate and multivariate techniques.¹

2.2.1. Psychosocial skills

Several studies have highlighted the importance of psychosocial factors such as self-efficacy in determining both individual learning as well as educational outcomes (Chugh 2011; Bandura 1997; Pajares and Schunk 2001; Liem, Lau, and Nie 2008). Different psychosocial constructs have previously been assessed using the Young Lives survey data. Singh and Sarkar (2015) found a significant and positive correlation between academic self-concept and achievement in mathematics of students in primary schools. Using cross-sectional data from the Young Lives survey for a cohort of 12-year-old children in Vietnam, Nguyen (2011) found that children from ethnic minority and poor households have lower subjective well-being, on average, than those from ethnic majority and non-poor households. Ko and Xing (2009) highlighted that most studies that focus on the relationship between education and subjective well-being examine adults or college students.

As this paper assesses the status of psychosocial skills at age 12, we drew upon two psychosocial variables, self-efficacy and subjective well-being, from Round 2:

- (i) Self-efficacy: This is a composite index of seven variables (see Table A2 in the Appendix). Self-efficacy includes the cognitive, social, behavioural, and emotional attitudes of a person (Singh and Mukherjee 2015). Self-efficacy affects one's behaviours and the environments with which one interacts, and is influenced by one's actions and conditions in the environment (Jain 2015). The total range of the score is 0 to 7, and the mean of the score is 6.3. On the basis of the mean value, a score between 0-6 is considered low self-efficacy and 7 is considered high self-efficacy.
- (ii) Subjective well-being: This asks individuals to make their own assessment of their well-being. There is growing evidence to show that subjective well-being is an important construct (Albuquerque et al. 2012; Hicks 2011). We use Cantril's (1965) ladder of life measure, which asks respondents to imagine a ladder where the bottom (1) is the worst possible life and the top (9) the best possible life, and asks each child

¹ See Table A1 in the Appendix for a detailed description of the sets of variables.

to assess 'where on the ladder do you feel you personally stand at the present time?' So, the value of the subjective well-being index lays between 1 to 9 and mean value of the index is 3.4, which is rounded to 3. Therefore, values were converted in binary and coded as low (below the mean level) = 0 (1 to 3), and high (above the mean level) = 1 (4 to 9).

2.2.2. Household characteristics

The relationship between household characteristics and school enrolment is well established in social research. However, most studies compare higher socio-economic and household conditions to lower socio-economic conditions to examine their effects on educational outcome. Household conditions such as poverty have been found to play a main role in children's educational opportunities (Sabates, Hossain, and Lewin 2013). Vijverberg and Plug (2005) also stated that a strong relationship exists between educational attainments, household income, and family size. We did not include the place of residence in the study (urban or rural) as the sample in India is mainly rural, with only 76 per cent of children at age 19, and the results are therefore misleading. We therefore only used the wealth index as the variable considered under household characteristics.

2.2.3. Caregivers' aspirations

Froiland and Davison (2013) highlighted that the path coefficient between parent expectations and school outcomes was larger than the coefficients of family socio-economic status, children's ethnicity, and family structure. Pells (2011), analysing parental aspirations from all four Young Lives study countries, stated that caregivers frequently expressed very positive attitudes towards schooling. It is also important to note that caregiver refers to the person who is taking care of child, and could be either the mother or father or any other person from within or outside the family. Caregivers' aspirations about the children's occupation and education levels in the future is drawn from the household survey questions 'when the child is about 20 years, what job do you think s/he will be doing?' and 'ideally, what level of formal education would you like the child to complete?'. Here, caregivers' aspirations about children's occupation are categorised into four categories: professionals (e.g. accountant, artist, civil servant, district collector, lawyer, teacher, etc.); skilled (e.g. computer operator, administrative assistant, tailor, etc.); semi-skilled/entrepreneur (e.g. domestic worker, labourer, market trader, businessman, etc.) and full-time parents/student/others. Caregivers' aspirations about children's education are categorised into two categories: below secondary education; and secondary education and above.

2.2.4. Individual characteristics

In addition to the household and caregivers' attributes, we also examined the association of several child characteristics. Research provides evidence that certain socio-demographic factors have influence on educational outcomes (Hammond et al. 2007). Variables included under this category are gender, caste, birth order, and engagement in paid work at age 12.

3. Methods

A bivariate analysis was first carried out to study the association between dependent and independent variables. The significance of association was estimated by a chi-square test. To identify the factors affecting school continuity and to see how psychosocial skills are associated with school continuity, a factorial binary logistic regression was applied on the dependent variable 'education status by age 19'. All the independent variables presented in previous section were tested in the model.

3.1 Factorial logistic regression

A factorial logistic regression is used when we have two or more categorical independent variables but a dichotomous dependent variable (DV), which is also known as the outcome variable. We therefore undertook a factorial logistic regression, since the outcome variable in this paper is of a dichotomous nature and if we ran multiple regression, the probability will go out of range (i.e. 0-1) and it will violate the assumption of linearity. The factorial logistic regression specification is:

Definitions:

Y= binary response variable (DV)

1: success

0: failure

X= any type of covariate (e.g. continuous, dichotomous)

So, the general likelihood ratio model with multiple covariates for factorial logistic regression would be:

$$\log it(\pi) = Log\left\{\frac{\pi}{\pi + 1}\right\} = \alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k$$

where π is the probability of success at covariate level x .

Above model can also be expressed as:

$$\frac{\pi}{\pi + 1} = \exp{\{\alpha + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_k\}}$$

where e^{β} represents the change in the odds of the outcome by increasing x by 1 unit – odds ratio. That is, every one unit increase in x increases the odds by a factor e^{β} . So, the estimate of β can be interpreted as:

$$\beta = 0(e^{\beta} = 1)$$
 > Pr(success) is the same at each level of x

$$\beta > 0(e^{\beta} > 1)$$
 > Pr(success) increases as x increases

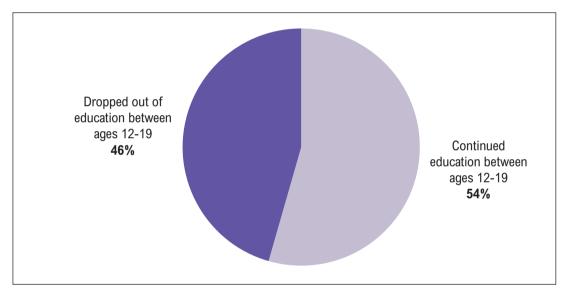
$$\beta < 0(e^{\beta} < 1)$$
 \blacktriangleright Pr(success) decreases as x increases

4. Results

4.1. Univariate analysis

Figure 1 shows the current educational status of the sampled children (N=834). While 54 per cent (454) of the children continued schooling to the age of 19, nearly 46 per cent (380) had discontinued schooling between the ages of 12 to 19. Among the children who were still in education at age 19, 58.4 per cent were enrolled in private institutions, 29.4 per cent were in public/government educational institutions, while 12.2 per cent were in mixed (public and private) private-aided institutions.

Figure 1. Educational status of the sampled children at 19 years old



Source: Young Lives Older Cohort data (Rounds 2 to 4)

Figure 2 captures psychosocial domains such as self-efficacy and subjective well-being at 12 years old. While 60 per cent (573) of the children had a high level of self-efficacy, 40 per cent (378) reported low self-efficacy. Half the children (50.8 per cent) reported a high level of subjective well-being.

70.0 60.3 60.0 50.8 49.2 50.0 39.7 Percentage 40.0 30.0 20.0 10.0 0.0 Self-efficacy Subjective well-being Psychosocial skills Low High

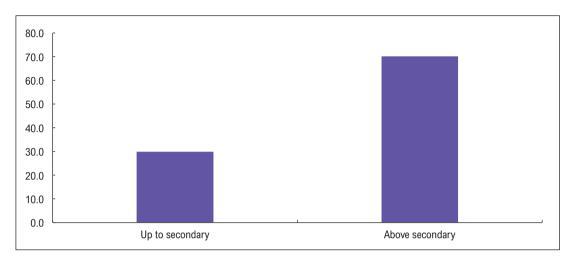
Figure 2. Levels of psychosocial skills at 12 years old

Source: Young Lives Older Cohort data (Round 2, 2005)

Figure 3 presents caregivers' future educational aspirations for their children by age 20, which were collected when the children were 12 years old. It shows that about 70 per cent of caregivers in our sample aspired for their children to reach secondary education and above, whereas only 30 per cent hoped for their children to reach less than secondary level education. Clearly, high educational expectations are evident among Young Lives parents and there is absence of 'aspirational poverty' that much of the dominant western literature talks about (Besley 2016; Appadurai 2004).

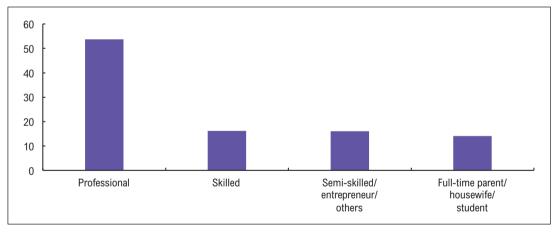
Figure 4 shows caregivers' future occupational aspirations for their children by age 20, when the children were aged 12. More than 50 per cent of caregivers aspired to see their children become professionals. An almost equal number (16 per cent) of caregivers aspired to see their children become skilled or semi-skilled workers/entrepreneurs, as caregivers (nearly 14 per cent) who aspired to see their children not working – which includes full-time parenting, being a housewife (for girls), or studying full time. Here, it is important to note that only two caregivers (0.22 per cent) aspired to see their children become a student. Therefore, we decided to merge these into the non-working category.

Figure 3. Caregivers' future educational aspirations by age 20 for children at 12 years old



Source: Young Lives Older Cohort data (Round 2, 2005)

Figure 4. Caregivers' future aspirations regarding occupation by age 20 for children at 12 years old



Source: Young Lives Older Cohort data (Round 2, 2005)

4.2. Bivariate analysis

A bivariate analysis was performed to discover the association between educational status of children (those who dropped out vis-a-vis those still in education at age 19) and various psychosocial, household, individual, and socio-demographic characteristics of the children.

4.2.1. Psychosocial characteristics

The psychosocial characteristics of children were examined through the self-efficacy index and subjective well-being (at age 12) and associations with educational status by age 19. The bivariate analysis in Table 1 shows that there is significant association between self-efficacy and subjective well-being at age 12 with the educational status of children by age 19.

Among the children with a high self-efficacy index value, 57.3 per cent continued education between the ages of 12 to 19, and 42.7 per cent had dropped out by age 19. However, among children with a low self-efficacy index, less than half (48.5 per cent) were still in education by age 19, and 51.5 per cent had dropped out by age 19. We also found that among the children who have high subjective well-being, 64 per cent had continued in education by 19 years old, and 36 per cent had dropped out between the ages of 12 to 19. On the other hand, among children with low subjective well-being, only 44.2 per cent continued in education and 55.8 per cent had dropped out by age 19.

We draw on longitudinal case studies from the Young Lives qualitative sub-study to highlight the critical nature of the psychosocial characteristics of children and the role of parents' aspirations.

Keerthi is a Scheduled Tribe girl from a tribal hamlet in Andhra Pradesh. Her mother worked in a school as a helper and her father worked in the Home Guard. She has three brothers and her mother despairs that two of her sons have become vagabonds, and the eldest son left school after Grade 9. Keerthi has been financially supported by the Integrated Tribal Development Agency (ITDA) through secondary and senior secondary school. In the second round of the qualitative study (2008) Keerthi was studying in a hostel in Grade 10. Her mother recalled that Keerthi refused to accept any help from teachers in her Grade 10 exam, emphasising Keerthi's self-efficacy. Keerthi is reported to have said that: "I will achieve everything on my own. I'll study and score marks on my own hard work alone". Her teachers complained to Keerthi's mother that: "your daughter is refusing to accept any help. She wants to write the exam on her own and it is difficult to get through in this way. Why don't you convince her to take the slips from us [answers written by teachers using unfair means]." Despite her mother explaining to Keerthi that if she got low marks, she could lose the chance to study further, Keerthi was confident that she could write the exam without any unfair assistance since "I have studied well".

Table 1. Educational status by psychosocial characteristics

Psychosocial characteristics	Continued in education between ages 12-19	Dropped out between ages 12-19	N
Self-efficacy index***			
Low	48.5	51.5	274
High	57.3	42.7	560
Mean raw score***	6.6	6.4	
Subjective well-being***			
Low	44.2	55.8	394
High	64.0	36.0	431
Mean raw score***	4.1	3.4	
Total	54.4	45.6	834

Notes: Chi-square test of association: ***p<0.01, **p<0.05, *p<0.1. Source: Young Lives Older Cohort data, Round 2 (2005) and Round 4 (2013)

4.2.2. Individual characteristics

Table 2 shows the educational status of children by their socio-demographic and individual characteristics. Gender is observed to be significantly associated with educational status at age 19. Significantly more boys (61.2 per cent) were continuing their education than girls

(47.6 per cent). Only 38.8 per cent of boys discontinued their education between the ages of 12 to 19, as oppose to 52.4 per cent of girls. The gender differential in educational outcomes is in line with earlier research using Young Lives data in India (Singh and Mukherjee 2017). Children from Scheduled Castes and Backward Classes were less likely to continue education by the age of 19, 44.9 per cent and 52.9 per cent, respectively, as oppose to 64.9 per cent of Other Caste children. The relationship between birth order and educational progression of children is evident, with nearly 61 per cent of first-born children continuing school by age 19, as oppose to 40.3 per cent of children who were fourth-born or later. It is also interesting to note that more than 85 per cent of children who were engaged in paid work at age 12 had dropped out of school by age 19.

Table 2. Educational status of children by individual characteristics

Individual characteristics	Continued in education between ages 12-19	Dropped out between ages 12-19	N
Gender***			
Male	61.2	38.8	420
Female	47.6	52.4	414
Caste***			
Scheduled Castes	44.9	55.2	165
Scheduled Tribes	57.8	42.9	84
Backward Classes	52.9	47.1	399
Other Caste	64.9	35.1	185
Birth order***			
First born	61.0	39.0	246
Second born	58.9	41.1	275
Third born	50.0	50.0	164
Fourth born and above	40.3	59.7	149
Paid work at age 12***			
No	54.7	45.3	825
Yes	14.3	85.7	7
Total	54.4	45.6	834

Notes: Chi-square test of association: ***p<0.01, **p<0.05, *p<0.1. Source: Young Lives Older Cohort data, Round 1 (2002), Round 2 (2005) and Round 4 (2013)

4.3. Multivariate analysis

The previous section presented the bivariate analysis to observe the association between the list of predictors and educational progression through adolescence. However, the bivariate analysis does not allow us to observe the intensity of the association. We therefore carried out binary logistics regression to discover the important factors predicting educational progression through adolescence.

4.3.1. Testing the association

Table 3 shows the odds ratio for the likelihood of continuation in school at age 19 compared to discontinuing education between the ages of 12 to 19. We ran four models. Model 1 is specific to the psychosocial skills (self-efficacy index and subjective well-being) of the child at age 12. Model 2 includes household wealth with psychosocial skills. Model 3 includes household wealth and caregivers' aspirations for education and occupation with psychosocial skills. Model 4 includes all the variables related to psychosocial skills, household wealth,

caregivers' aspirations about education and occupation, as well as the individual characteristics of the child.

In Model 1, using psychosocial skills as an independent variable, we find that children with a high level of self-efficacy are 1.4 times more likely to continue in education at age 19, compared to the children with a low level of self-efficacy. Children with a high level of subjective well-being were twice as likely to continue education as children with low subjective well-being.

Table 3. Odds ratio for the likelihood of education continuation by age 19

Characteristics	Psycho	osocial	Hous	ehold		jivers' ation	Indiv	ridual
	Model 1		Model 2		Model 3		Model 4	
	Odds ratio	Z-value	Odds ratio	Z-value	Odds ratio	Z-value	Odds ratio	Z-value
Self-efficacy index								
Low								
High	1.441 ***	2.39	1.396***	2.13	1.299	1.57	1.309*	1.56
Subjective well-being								
Low								
High	2.277***	5.74	1.867***	4.18	1.537***	2.69	1.639 ***	2.39
Wealth index tercile (R1)								
Bottom								
Middle			1.302	1.49	1.231	1.11	1.167	0.79
Тор			2.913***	5.7	2.603***	4.78	2.413***	4.09
Caregiver's future educa	ational aspi	ration for cl	nild at age 2	20				
Up to secondary								
Above secondary					3.081***	4.96	2.817***	4.44
Caregiver's future occup	oation aspir	ation for ch	ild at age 2	0				
Professional								
Skilled					1.603***	2.15	1.664***	2.24
Semi-skilled/ entrepreneur/other					0.8916	-0.43	0.86	-0.53
Full-time parent/ housewife/student					0.552**	-1.81	0.614	-1.44
Gender								
Male								
Female							.657***	-2.45
Caste								
Scheduled Castes								
Scheduled Tribes							2.009***	2.27
Backward Classes							1.256	1.07
Other Caste							1.3	1
Birth order								
First born								
Second born							0.909	-0.47
Third born							0.719	-1.42
Fourth born and above							.434***	-3.47
Paid work at age 12								
No								
Yes							.118**	-1.87

Notes: N=834. (Ref) = Reference category. Significance levels: ***p<0.01, **p<0.05, *p<0.1. Dependent variable: Education status ('1' enrolled by age 19; '0' dropped out between ages 12-19).

In Model 2, we added household wealth as a predictor variable after controlling for the net effect of the psychosocial covariates. Results show that the children with a high level of subjective well-being are 1.4 times more likely to continue to be in education at the age of 19. Children with a high level of subjective well-being are 1.9 times more likely to continue to be in school than children with low subjective well-being. Children of the top wealth tercile were three times more likely to continue education, compared to children of the bottom wealth tercile.

In Model 3, we assessed caregivers' future aspirations for the education and occupation of their children by age 20 when children were 12 years old, by educational progression through adolescence. Interestingly, after adding the caregivers' aspirations to the household variables and psychosocial skills, the significance levels change. This change can be explained by the relationship between some of the newly added variable and dependent variables which in turn affect the significance level. After controlling the effect of caregivers' and household characteristics, self-efficacy is found to be positively associated with educational progression, but not significantly. Children with a high level of subjective well-being are 1.5 times more likely to continue in education at age 19 than children with a low level of subjective wellbeing. Caregivers' aspirations for education also show a substantially positive association with educational progression. Children whose caregiver aspired for them to complete secondary education or above are three times more likely to continue schooling at age 19 than their counterpart. The findings also indicate that children whose caregiver aspired to see them become skilled workers are 1.6 times more likely to be in education by age 19, compared to children whose parents aspired to see them in professional roles. Furthermore, children whose caregiver aspired to see them become either a full-time parent or housewife at age 20, are significantly 1.8 times less likely to continue education than children whose caregiver aspired to see them become a professional by age 20. The findings also reveal that children belonging to the top wealth tercile were twice as likely to continue in education by age 19 compared to children belonging to the bottom wealth tercile.

Vinay, a Scheduled Tribe boy living in a northern coastal district of Andhra Pradesh, was studying in his third year of BTech in 2014 (Round 4) and had plans to pursue MTech and join the civil service, so that he could directly serve his people. He explained that "we have to work hard, as per elder's instructions, we have to have a strong will to do so." Vinay considered himself fortunate to have a father who was a government school teacher and his "role model". His father had high aspirations for his education and Vinay was always supported by him.

Son preference is clearly visible among parents of the Older Cohort children, as seen in the case of Govindh's household. Govindh is a rural Backward Class boy who studied in a hostel, and his mother worked very hard on her farm. She stated that she wanted him to become an engineer. Govind's sister was performing very well in her studies in higher secondary school, but Govindh's mother felt that she was not in a position to pay for her daughter's education. She explained that "I can't, and I want to give education to my son only, my daughter must be married, while our son must get a job".

Model 4 examines the effect of various individual characteristics of the children on education progression, after controlling for psychosocial skills, caregivers' aspirations, and household wealth. After adding the psychosocial skills, caregivers' aspirations and household wealth to the individual characteristics, we find that boys are significantly 1.5 times more likely to continue in education at age 19. Caste also plays a significant role in shaping children's

educational progression. Scheduled Tribe children are twice as likely to be in school at age 19 than Scheduled Caste children. However, no significant association was found between the Other Caste and Backwards Class children and continuing in school.

An interview in a tribal community in Round 4 (2014) highlighted some reasons why Scheduled Tribe girls are going into higher education. One community member stated that:

Girls have high self-discipline and also pursue higher education for security reasons [in this area]. They think if they study well they will have a good life ahead, particularly since there is polygamy problem in this area. Sometimes a man has two or three wives ... this practice is not against the tribal laws, so it is legal. But the younger generation of girls doesn't want to lead that kind of life and they go in for higher education.

Birth order of the child remains another prominent factor in shaping children's education progression through adolescence. First-born children were substantially more likely (2.3 times) to be in education at age 19 as compared to fourth and later-born children. This suggests that the higher the child's place in the birth order, the lesser the likelihood of continuing in education. In terms of paid work at age 12, our analysis highlighted that children engaged in paid work at age 12 were 89 per cent less likely to be in school at the age of 19 than children who were not in paid work at age 12. After controlling for the effect of individual and household characteristics in the final model, the analysis also found that a high level of self-efficacy and subjective well-being at age 12 is significantly associated with continuity in education by age 19. Children with a low level of self-efficacy index are 3.3 times less likely to continue to be in education at age 19 compared to children with a high self-efficacy level. Furthermore, children with a low level of subjective well-being at age 12 are 1.5 times less likely to continue to be in education by age 19 than children with high subjective well-being.

5. Discussion and conclusions

This research aimed to discover the association between psychosocial skills at early age and continuing to be in education at age 19 among the Young Lives pro-poor sample of children in undivided Andhra Pradesh. The analysis found that there are multiple factors helping in school progression through adolescence, including psychosocial skills.

At the individual level, girls are 35 per cent less likely to continue to be in education at age 19. This finding is substantiated by Singh and Mukherjee (2017), who found that girls were 8 per cent less likely to complete secondary education, compared to boys. White, Ruther, and Kahn (2016) highlighted that girls are kept out of school due to the hidden opportunity cost of engaging girls in activities (such as childcare and domestic chores) that have economic value for the family. While girls continue to be disadvantaged compared to boys, our analysis also highlights the importance of birth order, with first-born children being more likely to continue studying by late adolescence. The logistic regression analysis revealed that fourth or later-born children are 57 per cent less likely to continue education at age 19 compared to first-born children. This is contradicted by Kumar (2016), who stated that later-born children have substantially better educational outcomes compared to earlier-born children. Interestingly, Scheduled Tribe children are found to be more likely to continue in education at age 19 than Scheduled Caste children.

A higher household wealth index is found to have a positive correlation to children continuing their education. The findings reveal that household income remains one of the significant determinants of school progression, a finding similar to other studies (Cardoso and Verner 2007). High parental income makes it convenient to provide more resources to support children's education, including access to better-quality schools, private tuition, and more support for learning within the home (Chugh 2011).

We also found significant association between caregivers' aspirations related to the future education and occupation of children at age 12, and their children's educational status at age 19. It is important to point out that in the logistic regression, children whose caregiver aspired to see them become skilled workers as well as those whose caregiver aspired to see them complete secondary education and above, are more likely to continue education by age 19.

Another interesting finding relates to paid work at age 12. Children who were engaged in paid work at age 12 are 88 per cent less likely to continue education by age 19, compared to those who did not. Although the Child Labour (Prohibition and Regulation) Amendment Act (2016) stipulates that children under 14 years old should not be employed, and the Right to Compulsory and Free Education Act 2009 ensures free and compulsory education to all children between 6-14 years old, a large proportion of children are still engaged in work and around 18 per cent of children are out of school (Chugh 2011).

The paper's main focus was on the association between the psychosocial well-being of children and school progression by age 19. We found that after controlling for the effect of household and individual characteristics, both self-efficacy and subjective well-being at age 12 are significantly associated with continuity in education by age 19. In the last model of factorial logistic regression, children with a higher level of self-efficacy index and subjective well-being are 30 per cent and 64 per cent, respectively, more likely to continue in education by age 19.

Given that other authors have also highlighted the importance of self-efficacy and subjective well-being in transitions during adolescence (Leary 2005; Zimmerman and Cleary 2006), it is vital that schools, families, and communities recognise and ensure that adolescents' self-efficacy and identity is enhanced. Understanding the needs of girls and those belonging to economically and socially disadvantaged backgrounds is also key to any programme intervention addressing adolescent needs. In addition, parental counselling to ensure that they project and maintain high educational expectations from both girls and boys is necessary to ensure that all children are able to continue studying through adolescence.

Clearly, the lofty goal of the Sustainable Development Goals of 'leaving no one behind' and 'to reach the furthest behind first', within and among countries and population groups (United Nations 2015) needs careful planning by all nations. The poorest households need social protection in order to provide children with a secure childhood and ensure that children are not withdrawn from school into paid work during early adolescence. This in turn will provide children with fertile ground for developing high self-efficacy and subjective well-being. Schools are powerful areas to provide a level playing field to enhance children's self-efficacy and self-identity, and teachers must be provided with the requisite skills to enhance these psychosocial skills, which have long-term effects on children's educational trajectories.

6. References

Acharya, N., and S. Joshi (2011) 'Achievement Motivation and Parental Support to Adolescents', *Journal of the Indian Academy of Applied Psychology* 37.1: 132-139.

Albuquerque, I., M.P. Lima, M. Matos, and C. Figueiredo (2012) 'Personality and Subjective Well-Being: What Hides Behind Global Analyses?', *Social Indicators Research* 105.3: 447-460.

Almlund, M., A.L. Duckworth, J.J. Heckman, and T. Kautz (2011) 'Personality Psychology and Economics', in E.A. Hanushek, S. Machin, and L. Woessmann (eds.) *Handbook of the Economics of Education*, 1–181, Amsterdam: Elsevier.

Appadurai, A. (2004) 'The Capacity to Aspire', in V. Rao and M. Walton (eds.) *Culture and Public Action*, 59-84, Washington, DC: World Bank.

Arshad, M., S.M. Zaidi, and K. Mahmud (2015) 'Self-Esteem and Academic Performance among University Students', *Journal of Education and Practice* 6.1: 156-162.

Bandura, A. (1997) Self-Efficacy: The Exercise of Control, New York: W.H. Freeman and Co.

Besley, T. (2016) 'Aspirations and the Political Economy of Inequality', revised version of Hicks Lecture, delivered at Oxford University on 3 November 2015.

www.lse.ac.uk/economics/our-people-

profiles/facultyPersonalPages/facultyFiles/TimBesley/AspirationsAndThePoliticalEconomyOfl nequality.pdf (accessed 1 September 2017).

Bhatty, K. (2015) 'The UN Report on Out-of-School Kids is Bad News for India. The Real Picture May Be Worse'. *The Wire* (7 July 2015). https://thewire.in/5671/the-un-report-on-out-of-school-kids-is-bad-news-for-india-but-the-real-picture-is-worse (accessed 17 March 2017).

Bowdon, J. (2013) 'The Origins, Growth, and Implications of Black-White Non-cognitive Skill Gaps During Elementary School.' PhD Thesis. University of Wisconsin-Madison.

Cantril, H. (1965) *The Pattern of Human Concerns*, New Brunswick: Rutgers University Press.

Cardoso, A.R., and D. Verner (2007) *School Drop-out and Push-out Factors in Brazil: The Role of Early Parenthood, Child Labor, and Poverty*, IZA Discussion Paper No 2515, Bonn: Institute for the Study of Labour (IZA).

Chugh, S. (2011) *Dropout in Secondary Education: A Study of Children Living in Slums of Delhi*, NUEPA Occasional Paper 37.

http://nuepa.org/new/download/Publications/Occasional%20Paper%20No.%2037.pdf (accessed 10 March 2017).

Cigman, R. (2004) 'Situated Self-Esteem', Journal of Philosophy of Education 38.1: 91-105.

Cunha, F., and J. Heckman (2008) 'Formulating, Identifying and Estimating the Technology of Cognitive and Noncognitive Skill Formation', *The Journal of Human Resources* 43.4: 738-82.

Davis, K.P. (2005) 'The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment', *Journal of Family Psychology* 19: 294-304.

De Serf, M. (2002) 'The Effects of Family, Social and Background Factors on Children's Educational Attainment', Illinois Wesleyan University.

http://digitalcommons.iwu.edu/cgi/viewcontent.cgi?article=1009&context=econ_honproj (accessed 10 March 2017).

DiPrete, T., and J.L. Jennings (2012) 'Social and Behavioral Skills and the Gender Gap in Early Educational Achievement', *Social Science Research* 41.1: 1–15.

Dubow, E.F., F. Boxer, and L.R. Huesmann (2009) 'Long-term Effects of Parents' Education on Children's Educational and Occupational Success: Mediation by Family Interactions, Child Aggression, and Teenage Aspirations', *NIH Public Access* 55.3: 224–249. www.ncbi.nlm.nih.gov/pmc/articles/PMC2853053/pdf/nihms140890.pdf (accessed10 March 2017)

Flavio, C., J.J. Heckman, L.J. Lochner, and D.V. Masterov (2006) 'Interpreting the Evidence on Life Cycle Skill Formation', in E.A. Hanushek and F. Welch (eds.) *Handbook of the Economics of Education*, Amsterdam: North-Holland.

Froiland, J.M., and M.L. Davison (2013) Parental Expectations and School Relationships as Contributors to Adolescents' Positive Outcomes', *Social Psychology of Education* 17: 1-17.

Gouda, S.M., and T.V. Sekher (2014) 'Factors Leading to School Dropouts in India: An Analysis of National Family Health Survey-3 Data', *IOSR Journal of Research and Method in Education* (IOSR-JRME) 4.6: 75-83. www.iosrjournals.org/iosr-jrme/papers/Vol-4%20Issue-6/Version-3/K04637583.pdf (accessed 10 March 2017).

Gutman, L.M., and L. Feinstein (2008) 'Children's Well-Being in Primary School: Pupil and School Effects', London: Centre for Research on the Wider Benefits of Learning.

Halle, T., B. Kurtz-Costes, and J. Mahoney (1997) 'Family Influences on School Achievement in Low-income, African-American Children', *Journal of Educational Psychology* 89: 527–37.

Hammond, C., D. Linton, J. Smink, and S. Drew (2007) 'Dropout Risk Factors and Exemplary Programs', Clemson, SC: National Dropout Prevention Center/Network. https://dropoutprevention.org/wp-

content/uploads/2015/05/DropoutRiskFactorsandExemplaryProgramsCoverPages5-16-07.pdf (accessed 10 March 2017)

Heckman, J.J., J. Stixrud, and S. Urzúa (2006) 'The Effects of Cognitive and Noncognitive Abilities on Labor Market Outcomes and Social Behavior', *Journal of Labor Economics* 24.3: 411–482.

Hicks, S. (2011) 'Spotlight on: Subjective Well-being', London: Office for National Statistics.

Hirsch, B., and D. DuBois (1991) 'Self-esteem in Early Adolescence: The Identification and Prediction of Contrasting Longitudinal Trajectories', *Journal of Youth and Adolescence* 20: 53-72.

Jain, V. (2015) 'Achievement Motivation, Self-efficacy, Academic Performance, Subjective Well-being and Self-esteem Among Dalit Girl Students'. University Grants Commission, New Dehli. www.sdmcujire.in/userfiles/MRP/MRP_vandana_jain.pdf (accessed 1 February 2017)

Jimerson, S., B. Egeland, L.A. Sroufe, and B. Carlson (2000) 'A Prospective Longitudinal Study of High School Dropouts Examining Multiple Predictors Across Development', *Journal of School Psychology* 38.6: 525–549.

Jodl, J.M. (2015) 'Differential Effects of Family Context on Noncognitive Ability and School Performance during Adolescence', PhD Thesis. Graduate School of Arts and Sciences, Columbia University.

Ko, I., and J. Xing (2009) Extra Classes and Subjective Well-being: Empirical Evidence from Vietnamese Children, Young Lives Working Paper 49, Oxford: Young Lives.

Kumar, S. (2016) 'The Effect of Birth Order on Schooling in India', *Applied Economics Letters* 23.18: 1325-1328

Leary, M. (2005) 'Sociometer Theory and the Pursuit of Relational Value: Getting to the Root of Self-esteem', *European Review of Social Psychology* 16: 75-111.

Levin, H.M. (2012) 'More Than Just Test Scores', Prospects 42: 269-284.

Liem, A.D., S. Lau, and Y. Nie (2008) 'The Role of Self-efficacy, Task Value and Achievement Goals in Predicting Learning Strategies, Task Disengagement, Peer Relationship and Achievement Outcome', *Contemporary Educational Psychology* 33: 486-512.

Nguyen, N.P. (2011) What Makes a Child Happy? The Link Between Family Income, Social Networks and Subjective Well-being in Vietnam, Young Lives Working Paper 74, Oxford: Young Lives.

Pajares, F., and D.H. Schunk (2001) 'Self-Beliefs and School Success: Self-efficacy, Self-concept and School Achievements', in R. Riding and S. Rayner (eds.) *Perception*, 239-266, London: Ablex Publishing.

Pells, K. (2011) *Poverty and Gender Inequalities: Evidence from Young Lives*, Young Lives Policy Paper 3, Oxford: Young Lives.

Poropat, A.E. (2009) 'A Meta-Analysis of the Five-Factor Model of Personality and Academic Performance', *Psychological Bulletin* 135.2: 322–338.

Rosenberg, M. (1965) *Society and the Adolescent Self-image*, Princeton, NJ: Princeton University Press.

Sabates, R., A. Hossain, and K.M. Lewin (2013) 'School Dropout in Bangladesh: Insights Using Panel Data', *International Journal of Educational Development* 33: 225-232.

Singh, P. (2016) 'How Do the Effects of Private Schooling Evolve in the Long Run? How Have the Learning and Employment Outcomes of Children in the Latest Round of the Young Lives Study Changed?'

www.younglives.org.uk/sites/www.younglives.org.uk/files/Pratima%20Singh_Oct2016.pdf (accessed 10 January 2018)

Singh, R., and P. Mukherjee (2015) *Determinants of Successful Completion of Secondary Education: Evidence from Young Lives, Andhra Pradesh*, Young Lives Working Paper 143, Oxford: Young Lives.

Singh, R., and P. Mukherjee (2017) "Whatever She May Study, She Can't Escape From Washing Dishes". Gender Inequality in Secondary Education: Evidence From a Longitudinal Study in India', *Compare: A Journal of Comparative and International Education*, 1-19.

Singh, R., and S. Sarkar (2015) *Learning Environments in Andhra Pradesh, India: Children's 'Academic Self-Concept' and Mathematics Achievement*, Young Lives Working Paper 137, Oxford: Young Lives.

UNESCO e-atlas (n.d.). 'UNESCO eAtlas for Education 2030'. http://on.unesco.org/sdg4-map (accessed 10 January 2018).

United Nations (2015) *Transforming our World: The 2030 Agenda for Sustainable Development*, New York: United Nations.

Vijverberg, W., and E. Plug (2005) 'Does Family Income Matter for Schooling Outcomes? Using Adoptees as a Natural Experiment', *The Economic Journal* 115.506: 879–906.

White, G., M. Ruther, and J. Kahn (2016) *Educational Inequality in India: An Analysis of Gender Differences in Reading and Mathematics*, Working Paper No. 2016-2, India Human Development Survey.

Winter, F. (2016) Shaping Aspirations and Outcomes: Gender and Adolescence in Young Lives, Young Lives Policy Paper 9, Oxford: Young Lives.

Woldehanna, T., and A. Gebremedhin (2015) *Is Child Work Detrimental to the Educational Achievement of Children? Results from Young Lives in Ethiopia*, Young Lives Working Paper 140, Oxford: Young Lives.

Wooldridge, J.M. (2012) 'Instrumental Variables and Two Stage Least Squares', in J.M. Wooldridge (ed.) *Introductory Econometrics* (4th ed.), Nashville, TN: South-Western College Publishing.

Zimmerman, B.J., and T.J. Cleary (2006) 'Adolescents' Development of Personal Agency: The Role of Self-efficacy Beliefs and Self-regulatory Skill', in F. Pajares and T. Urdan (eds.) *Self-Efficacy Beliefs of Adolescents*, 45–69, Charlotte, NC: Information Age Publishing.

Appendix

Table A1. Description of all independent variables

Variable	Description	Rounds
Household		
Baseline wealth index tercile	Bottom ^(ref) = 1	R1
	Middle = 2	
	Top = 3	
Caregiver's educational	Up to secondary ^(ref) = 0	R2
aspiration at age 12	Secondary and above = 1	
Caregiver's occupational	Professional ^(ref) = 1	R2
aspiration at age 12	Skilled = 2	
	Semi-skilled/entrepreneur/other = 3	
	Full-time parent/housewife/student = 4	
Individual		
Gender	Male ^(ref) = 1	R4
	Female = 2	
Caste	Scheduled Caste ^(ref) = 1	R2
	Scheduled Tribes = 2	
	Backward Class = 3	
	Other Castes = 4	
Birth order	First born ^(ref) = 1	R1
	Second born = 2	
	Third born = 3	
	Fourth and later born = 4	
Paid work at age 12	$No^{(ref)} = 0$	R2
	Yes = 1	
Self-efficacy index	Low ^(ref) = 0	R2
	High = 1	
Subjective well-being	$Low^{(ref)} = 0$	R2
	High = 1	

 Table A2.
 Methodology for constructing psychosocial skill index

Index	Original variables	Methodology
Self-efficacy	Variables have been taken from the Round 2 survey of the Older Cohort. 1. If I study hard at school, I will be rewarded by a better job in future (V1) 2. If I try hard, I can improve my situation in life (V2) 3. Other people in my family make all the decisions about how I spend my time (V3) 4. I like to make plans for my future studies and work (V4) 5. Adults in my street/village treat me worse than the other children of my age (V5) 6. My teachers treat me worse than the other children (V6) 7. When I am at a shop/market, I am usually treated by others with fairness and with respect (V7) Labels 1 = Strongly disagree 2 = Disagree 4 = Agree 5 = Strongly agree	The variable has been categorised: (4 and 5 = 1), (1 2 = 0) 0 = "Negative traits" 1 = "Positive traits" *Note: All the considered variables have been converted in same direction The raw self-efficacy index = row sum (V1 to V7) Therefore, the raw score is obtained in a range from 0 to 7. Based on the mean value of raw self-efficacy index, the variable has been recoded further in binary form as outlined below. Below the mean value (up to 6 positives) = 0 Above the mean value (above 6 positives) = 1
Subjective well-being index	The question 'Where on the ladder do you feel you personally stand at the present time?' asked of Older Cohort children has been taken from the Round 2 survey. The raw variable takes values from 1 to 9, where increasing values show increases on the ladder of subjective well-being.	The index was constructed in binary form using the re-categorisation of original variables based on mean value. Values below the mean level are coded as 'low', and above the mean level coded as 'high'. Mathematically, defined as: Low level of well-being (1 to 3) = 0 High level of well-being (4 to 9) = 1

'I Will Achieve Everything On My Own': The Association Between Early Psychosocial Skills and Educational Progression Through Adolescence in India

Psychosocial skills are an important element of the confidence and motivation to progress in academic life. This working paper utilises a factorial logistics model to highlight the association between psychosocial skills at age 12 and educational progression through adolescence (to age 19), analysing Young Lives quantitative survey data of Older Cohort children and longitudinal qualitative data collected between 2007 and 2014 in undivided Andhra Pradesh, India.

Quantitative data analysis shows that psychosocial skills such as subjective well-being and self-efficacy at 12 years old are significantly positively associated with retention in education at 19 years old. These findings are supported by qualitative data. Findings reveal that household wealth, children's paid work at age 12, as well as caregivers' education and occupational aspirations for their children play a significant role in shaping the self-efficacy and subjective well-being of children. Gender, birth order and caste also play a significant role in framing the association between psychosocial skills at 12 years old and educational outcomes at 19 years old. Given these findings, it would be useful for programme interventions aiming to retain children throughout secondary schooling to focus on building parental aspirations, particularly for girls and socially and economically disadvantaged households. Other areas that require policy attention are around providing social protection to disadvantaged households and developing teachers' skills in order to encourage and build the psychosocial competencies of children.



About Young Lives

Young Lives is an international study of childhood poverty, involving 12,000 children in four 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 four 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
- Centre for Analysis and Forecasting,
 Vietnamese Academy of Social Sciences,
 Vietnam
- · General Statistics Office, Vietnam
- Oxford Department of International Development, University of Oxford, UK

ກ່າວ Young Lives

Contact: Young Lives Oxford Department of International Development, University of Oxford, 3 Mansfield Road, Oxford OX1 3TB, UK Tel: +44 (0)1865 281751

Email: younglives@younglives.org.uk Website: www.younglives.org.uk