What inequality means for children: evidence from young lives

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“What inequality means for children: evidence from Young Lives”

by

Martin Woodhead, Paul Dornan and Helen Murray

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Key Words

Inequality, child poverty, gender, development, well being, malnutrition, education, social protection

Abstract

Understanding how poverty and inequalities impact on children is the major goal of Young Lives, a unique longitudinal, mixed-methods study. Two cohorts totaling 12,000 children are being tracked since 2001, growing-up in Ethiopia, the state of Andhra Pradesh (AP) India, Peru and Vietnam. Earlier versions of this paper were prepared as Young Lives contribution to a UNICEF/UN Women consultation on the post-2015 Development agenda, (www.worldwewant2015.org/inequalities) and published as Woodhead, Dornan and Murray (2013).
We summarise Young Lives evidence to date on eight research issues that are central to any child rights agenda:

1. How inequalities interact in their impact on children’s development, and the vulnerability of the most disadvantaged households.
2. The ways inequalities rapidly undermine the development of human potential.
3. How gender differences interconnect with other inequalities, but do not always advantage boys in Young Lives countries.
4. The links between poverty, early ‘stunting’, and later outcomes, including psycho-social functioning, as well as emerging evidence that some children recover.
5. Inequalities that open up during the later years of childhood, linked to transitions around leaving school, working, and anticipating marriage etc.
6. Children’s own perceptions of poverty and inequality, as these shape their well-being and long-term prospects.
7. Evidence of the growing significance of education, including the ways school systems can increase as well as reduce inequalities.
8. The potential of social protection programmes in poverty alleviation.

We conclude that since inequalities are multidimensional, so too must be the response. Equitable growth policies, education and health services, underpinned by effective social protection, all have a role to play.

The authors
Martin Woodhead is Associate Research Director of Young Lives at University of Oxford, and Emeritus Professor of Childhood Studies at the Open University, UK.

Paul Dornan is Senior Policy Officer for Young Lives. He was previously Head of Policy and Research for the Child Poverty Action Group in the UK.

Helen Murray was Young Lives Policy Officer from 2008 to 2012 and is now a programme manager at the Open Society Foundations.

Introduction
Young Lives is an international study of childhood poverty tracking 12,000 children’s lives over 15 years in 4 developing countries – Ethiopia, India (in the state of Andhra Pradesh), Peru and Vietnam. The pro-poor sample is drawn from 20 sites in each of four countries, and includes two age cohorts (2,000 children who were born in 2001-02, and 1,000 children who were born in 1994-95 in each country). Although these countries experience distinct political and economic circumstances, they reflect many wider trends in low- and middle-income countries. This paper summarises Young Lives’ research (to date) on the ways poverty and inequalities are shaping the lives of children in the study, drawing on findings from both quantitative and qualitative data. Inequalities, which are central to the realization of children’s rights, is one of several key research topics being examined by Young Lives (www.younglives.org.uk).
Data from three core Young Lives survey rounds (in 2002, 2006-7 and 2009) provide the main resource for this paper, (with scope in due course for extending the analysis from further based on data collected in 2013 and 2016). The core survey includes extensive community, household and child-level data, which is comprehensive and multi-sectoral in scope. The survey is complemented by a longitudinal qualitative component (since 2007), including a specific focus on children’s experience of poverty, inequalities and well-being. Young Lives also features an extensive school-based component to study quality and effectiveness of the education experienced by Young Lives children (introduced in 2010). Through this comprehensive multi-methods design, Young Lives is able to contribute a stronger understanding of contemporary children’s lives, including the ways inequalities impact on realisation of their rights in these four contrasting countries. As a cohort (or ‘panel’) study, with information on the same children at key moments during their childhood, we are able to track changes over the life-course, as well as looking for causes and consequences of events or circumstances. Young Lives samples are broadly representative of a range of groups and children’s circumstances in each country but they were selected to be pro-poor and exclude the very richest communities. Consequently our focus is on understanding patterns of inequality and processes of transmission rather than comparing the levels of poverty or inequality between countries. Also the disparities identified within our pro-poor sample are likely to underestimate the scale of inequalities.

Our starting point is that child poverty and inequalities are the expression of political-economic-cultural forces that structure societies, and children’s lives, in terms of distribution of resources and opportunities in ways that align to greater or lesser degree with ethnicity, caste, religion, urban/rural location, gender etc., (Dornan and Boyden, 2011). We understand the concept of inequalities as covering a broad spectrum of differences in both household circumstances and child development outcomes, as these may be linked to ethnicity, gender, rural-urban location, etc. Inequalities are typically about disparities in resources and power and often link to social exclusion.

This paper summarises Young Lives current research evidence on eight key themes. We begin with evidence on the ways multiple inequalities interact in their impact on children’s development, including evidence that the most disadvantaged households are most vulnerable to adversities and have least resources to overcome them. We also illustrate the ways inequalities undermine the development of human potential, with children from disadvantaged families quickly falling behind, in terms of early learning. Our third area of research draws attention to the major impact of inequalities in children’s household circumstances on key developmental indicators during the early years. Gender differences are much less apparent at this stage, they take different forms within and between countries, and they are not always pro-boy in Young Lives contexts. Next, we look at two life phases that are critical for inequalities. Young Lives research reinforces the weight of evidence on the links between socio-economic disadvantage, early ‘stunting’, and later developmental outcomes. A particular contribution is in demonstrating that these impacts extend to psychosocial functioning, including, self-efficacy, self-esteem and educational aspirations. Young Lives is also finding some evidence of recovery from early stunting for some children, which may also extend to their cognitive development.

A fifth research area is about inequalities that open up during the later years of childhood, especially transitions around leaving school, working, anticipating marriage etc., as well as the impact of ill-health or becoming an orphan. Gender is a major focus, with evidence on the ways
parents’ and children’s changing expectations interact with socio-economic opportunities and perceived long-terms risks and realistic prospects. Next we turn to a neglected dimension within much research on child poverty and inequalities. Children’s own perceptions and understanding of their situation and their well-being is not just an indicator of inequalities. It is also a clue to some of the processes through which these inequalities are transmitted, in so far as children’s subjectivity affects how they cope with and try to improve their situation. Respecting children’s participatory rights is one of the core principles of Young Lives research.

The role of policies and services is crucial to any study of the impact of inequalities. Themes seven and eight focus on the impact of policies and services in Young Lives countries in variously reducing (or increasing) inequalities for children. We note the growth in expectations for schooling, but also the gulf between these expectations and the realities of access and quality, low attendance, grade repetition, early school leaving etc. Young Lives research draws attention to the ways initial inequalities in children’s lives are all too often reinforced through inequitable access to pre-school services, and the resultant diverging trajectories. Educational systems in Young Lives countries vary, which is evident as we track children’s progress. For example, growth of low-fee private schooling India appears to be increasing gender-linked decision-making about choice of school for boys and girls. In the very different context of Vietnam, Young Lives research demonstrates that a school system focused on supporting all children can narrow achievement gaps.

Finally, we report on various social protection programmes within our study countries. Overall, our data shows the potential of social protection as a key way of underpinning pro-poor policies. But there are also lessons from, for example, the Juntos programme in Peru, the Productive Safety Net Programme in Ethiopia and Mahatma Gandhi National Rural Employment Guarantee Act in India. Young Lives research draws attention to the limitations of narrow targeting as well as the risks of unintended (and possibly adverse) consequences for children from poorly designed or implemented schemes.

This paper draws on the evidence emerging from Young Lives which is of course embedded in much wider research literature, which is acknowledged in the specific research papers on which each of these summaries is built. Our focus is also specifically on the evidence from the four Young Lives countries, and so care is needed in drawing lessons beyond these countries; indeed we draw attention to important differences in the expression of inequalities within and across these countries which are themselves instructive of the need for a nuanced approach to the ways poverty and inequalities impact on children’s development, their well-being and respect for their rights.

1: Inequalities, vulnerabilities and children’s long-term outcomes

The most marked inequalities among Young Lives children relate to household wealth, urban-rural location, belonging to an ethnic/language minority or low-caste group, and level of parental education. A typical pattern is shown in Figure 1 for the percentage of children in Peru who were
‘stunted’\(^1\). When these different inequalities are combined, the negative impacts may be compounded. Specifically, Figure 1 draws attention to the limitation of only focusing on one dimension of inequality, for example, urban versus rural. Thus, child stunting in Peru is lower in urban than in rural areas, but poorer children in urban areas are four times more likely to be stunted than children from the least poor quintile in urban areas.

Figure 1. High levels of stunting are linked to multiple disadvantages (Peru, Younger Cohort, age 8 in 2009)

Note: The sample is divided into five ‘quintiles’ in order to identify ‘least poor quintile’ and ‘poorest quintile’, using a Young Lives wealth index which is based on housing quality (number of rooms relative to household size, wall/roof and floor material); service quality (drinking water, electricity, fuel and sanitation); and consumer durables (radio, refrigerator, bicycle, mobile phone etc). Highly educated means the mother has completed some post-school education (including higher education). Less educated means the mother has incomplete primary education level. * indicates fewer than 20 cases.

The different experiences of girls and boys also provide a source of inequalities, but the effects are less marked at this age and more variable across Young Lives countries (see Sections 2 and 5).

\(^1\) Stunting is defined as having a height more than 2 standard deviations below the average height of an age- and gender-adjusted reference group population. See Section 4 for more extensive evidence on stunting.
Multiple impacts on development

Inequalities combine to produce negative impacts: children with low parental education levels, in rural areas, poor, ethnic minority households are consistently over represented among low scorers across a range of indicators (Cueto, Leon and Muñoz 2011). For example, among our sample of 15 year olds in Peru, the poorest quintile were twice as likely as the least poor children to be in the group of children with poor health and learning outcomes (Pells, 2011a). These children are subject to ‘multiple disadvantage’ in both their household circumstances and their long-term prospects, pointing to the importance of a holistic approach to policy and services.

Inequalities in vulnerability

Analysis of Young Lives data reveals some of the processes through which inequalities impact progressively on households and, in turn, on children during critical phases of their lives. Children and families living in poverty are: (i) most at risk of experiencing adverse events such as economic or environmental shocks, illness or death; and (ii) they have fewer resources to cope with these adverse events. Dividing the sample into five groups (referred to as ‘quintiles’) reveals the different levels of risk experienced by the ‘poorest’ compared with the ‘least poor’ quintile. Ninety per cent of the poorest households of Older Cohort children in Ethiopia experienced at least one risk between 2002 and 2006. Many reported multiple risks, with an average of 4.2 types of risk per household. By contrast, 78% of the least poor quintile, experienced at least one risk and the average was 2.1 types of risk per household. In short, the poorest households were exposed to a larger number and a wider range of types of shocks or adverse events than were wealthier households (Boyden, 2009).

For example, Figure 2 illustrates major differences in the numbers of reported shocks across the communities in which data is collected in Ethiopia. Multiple shocks were concentrated among poor rural communities, which were most affected by crop failures due to pests and disease or climatic events, and death of livestock, which was frequently compounded by high levels of illness/death among household members.
Families’ responses to shocks include the household eating less, reduction of household assets, and debt accumulation, all of which are likely to have long-term consequences for children’s development. It is often the same households who suffer multiple shocks over time. For example, in Ethiopia about 71% of those households reporting an environmental shock in 2006 also reported an environmental shock in 2009 (Dornan, 2010). Children’s vulnerability is further emphasised by research in Andhra Pradesh, where children in households reporting at least one environmental shock were half as likely to have a healthy height-for-age, compared with children in households with no shocks reported (Pells, 2011a).

These findings draw attention to the multiple factors that progressively undermine children’s development. Policy formulation tends, however, to focus on one dimension of inequality through the targeting of particular groups, such as girls or orphans. Young Lives evidence points to the importance of also addressing broader structural inequalities (Crivello and Chuta, 2012; Pells, 2011b).

**2: Impacts on the development of human potential**

Learning outcomes are a key indicator of growing inequalities. Analysing Young Lives Younger Cohort data across the four study countries, Cueto, Leon and Muñoz (2011) identified factors that accounted for the largest differences already emerging by age 8 in scores on vocabulary, reading and maths tests, as well as the variation across the four countries. Level of parental education was linked to gaps in children’s learning outcomes in all countries. Urban-rural divisions were also important across the four countries, particularly for Ethiopia. Household wealth represented similarly large achievement gaps across all countries, though was less important in Andhra Pradesh.
Figure 3 illustrates for Peru, the strong impact of low maternal education, and minority language at home on children’s achievement scores in vocabulary, maths, and reading. Note the impact of gender is relatively small at this age.

**Figure 3. Achievement gap (standard deviations) for cognitive measures (Peru, Younger Cohort, age 8 in 2009)**

Note: The Early Grade Reading Assessment (EGRA) and the Peabody Picture Vocabulary Test (PPVT) include only the children who took these tests in Spanish.

* The gap between groups is significant at 95% level on a t-test for independent samples.

Source: Cueto, Leon, and Muñoz, forthcoming, 2014

**Poor children quickly fall behind**

Inequalities in household circumstances rapidly translate into inequalities in learning, as revealed by tracking children’s progress on cognitive and vocabulary measures between 5 and 8 years old. In an earlier version of this paper, four groups were identified based on their scores at the age of 5 (Woodhead et al., 2013). Group 1 children were from poor households with high cognitive test scores; group 2 children were from poor households with low scores; group 3 children were from better-off households with high scores; and group 4 children were from better-off households with low scores. The trajectories of these four groups through to the age of 8 was strikingly different, with the average scores of group 1 dropping dramatically, group 2
staying low, while group 3 stayed high and group 4 improved their scores. Similar trajectories were found for all four countries, on several measures (Woodhead et al 2013).

This evidence of diverging trajectories is compelling, yet care is needed. Multiple test observations overtime are subject to regression to the mean, (see Jerrim and Vignoles 2013). These tests are multi-choice and so some children may guess answers. Disadvantaged children typically perform worse on such tests and it is conceivable that the higher initial scoring children appear to do well because they had made more lucky guesses (i.e. test error), which they were unlikely to repeat at the second point of observation, all of which may translate into apparent rapid reductions in average rank position for these ‘more able’ poorer children.

In order to reduce the impact of regression to the mean, the data have been reanalysed for this paper, as illustrated in Figure 4, for the sample in Andhra Pradesh, India. Children were assigned to the four groups (as above) based on their initial scores on a test of early mathematical concepts (CDA), but then their progress between 5 and 8 years was tracked on their vocabulary test scores (PPVT). While Figure 4 still shows convergence (regression to the mean), the differences in the gradients suggest initially higher performing children hold their relative advantage; more advantaged initial low performers overtake less advantaged children who were initially performing well; and poorer children tend to lose relative position. Multiple factors no doubt explain these growing inequalities, which in many cases happen before the start of formal schooling. These factors include the resources for learning in children’s home environment, as well as differential access to quality early education and primary school (Woodhead et al. 2009; Orkin, Yadete and Woodhead, 2012).
Figure 4: Learning trajectories between 5 and 8 years (Andhra Pradesh, India)

Note: high/wealth level is defined as household wealth in the top/bottom quarter. Children assigned to groups at 5 based on the early mathematical concepts test (CDA), and tracked at 5 and 8 on a vocabulary test (PPVT).

With three rounds of data, Young Lives researchers have analysed how these inequalities in cognitive and school achievement measures have evolved over time. As is evident from the data presented so far, significant gaps open up already by the earlier years of schooling, but these ‘plateau’ in middle childhood when most children are in school. For example, while gaps in education outcomes relate to household wealth in all four countries, determinants of additional differences at the age of 12 were better explained by previous test scores at age 8 (with typically no additional negative effect of wealth at that point) (Rolleston and James, 2011). This suggests some compensatory potential/effect of schooling, but also that early gaps were predictive of lower later performance. The same study found that the inequalities in education outcomes widened again during the later years of schooling, when pressures to discontinue school rise, especially because of rising costs (including opportunity costs of labour) (See also Sections 5 and 7).

3: Country variations in the significance of gender

Gender is an important factor shaping expectations of children, how they are treated and the ways they think about themselves, which is often related to expectations about future roles: marriage, livelihoods etc. But Sections 1 and 2 highlighted other variables that typically account for the greatest disparities in children’s physical and cognitive development, especially at
younger ages. Gender differences also take different forms within and between countries, for example pro-boy gender bias is more evident in India, and to a lesser extent in Ethiopia, whereas some gender gaps favour girls in Vietnam. Gender-based inequalities affect both boys and girls at different ages and in different ways according to intra-household dynamics, socio-cultural context, institutional structures and economic pressures.

During early childhood, Young Lives analysis of pre-school access for children aged between 3 and 5 years found only small differences between boys and girls (compared with socio-economic differences), which were often not significant (the largest being a 5 percentage point difference favouring boys in rural Peru, much smaller than other socio-economic related gaps) (Woodhead et al. 2009). In middle and later childhood, analysis on a range of child outcomes (education and cognition, educational aspirations, subjective well-being, psychosocial competencies, and nutrition) did not show consistent ‘pro-boy bias’ (with the exception of AP India). For instance although boys are more likely to be in school at age 15 in AP India, girls were more likely to be in school in the other three countries (Dercon and Singh, 2011). Similarly, boys in AP India did better on maths tests than girls. But in Vietnam girls outperformed boys (Pells, 2011b).

**Figure 5. Gaps in maths scores between boys and girls grow with age, but differences do not always favour boys (Younger Cohort age 8 and Older Cohort age 12 and 15)**

** Shows significance at 95% level. Other gaps are not significant.

Acknowledging that the impacts of gender on child outcomes are not as marked as other sources of inequality, gender is still very much a driving factor shaping the experiences of Young Lives children, especially in terms of their opportunities, responsibilities, and social constraints. Diverging gendered trajectories are revealed most strongly through qualitative research, and especially during middle and later childhood (see Section 5).

**Gender interacts with other inequalities**
Young Lives evidence demonstrates how household factors may shape the opportunity costs open to households (and so the treatment of boys and girls). For example, in Andhra Pradesh, household wealth, belonging to a low-caste group and level of maternal education are important predictors of unequal outcomes for children (Galab et al. 2011) and these also intersect with gender. Figure 6 is designed to show the significance of gender when combined with other factors, based on maths scores for the Younger Cohort in Andhra Pradesh, India at age 8. Overall, there appears to be little difference between boys and girls, but disaggregation shows differences are stronger among poorer groups, and among groups with low maternal education.

**Figure 6. Differences in maths scores are more marked when combined with other household characteristics rather than gender alone (AP India, Younger Cohort, age 8 in 2009)**

These disparities are shaped by the context in which families find themselves, including cultural, structural and financial constraints. For example, parents in AP India tend to spend more on boys than on girls (Himaz, 2009a); they are more likely to pay the fees required to enrol boys in (better regarded) low-fee private schools resulting in girls being over represented in government schools (Woodhead et al. 2013). If gender inequalities result from a combination of parents’ resource shortages to invest in their children as well as their (and their children’s) understanding of future economic and social opportunities for work and partnership (Pells, 2011b), then policies to redress such biases need to address these underlying socio-economic drivers, as well as discrimination per se.
4: Early malnutrition and stunting

Inequalities have critical impact during children’s formative years, with early malnutrition having multiple adverse impacts over time. Children who were assessed as ‘stunted’ were at a disadvantage in terms of later cognitive, health, well-being and psychosocial outcomes. For example, children who were stunted at the age of one, showed lower levels of cognitive ability at age 5, and those stunted at 8 years old had lower reading, writing and mathematical skills by the age of 12 (Helmers and Patnam, 2009; Le, 2009; Sanchez, 2009; Dercon and Sanchez, 2011). In Ethiopia, stunted children are nearly one whole grade behind non-stunted children at the age of 12 (Dercon, 2008). While the link between nutritional deficits and school performance is well known, Young Lives extends the evidence on early stunting to include measures of psychosocial well-being, finding that low height for age at around 8 years was associated with lower self-efficacy, self-esteem and educational aspirations among children at 12 years (Dercon and Sanchez, 2011).

The links between socio-economic disadvantage and stunting are also clear. For example, in Peru over 50% of Younger Cohort children from households in the poorest quintile were stunted in 2006, compared to just under 10% in the wealthiest quintile. Rural children are also more likely to be stunted than their urban counterparts (Pells, 2011a). There is a higher prevalence of stunting among children from ethnic minority or lower-caste groups in Peru, Vietnam and Andhra Pradesh, even controlling for other factors. For example, 60% of ethnic minority children in Vietnam were stunted at the age of 5, compared to 19% of ethnic majority kinh children (Le et al. 2008).

Despite the frequent assumption that economic growth will benefit all children, the reality is more complex (Boyden and Dercon, 2012). Stunting persists despite economic change in Young Lives countries. For example, in Andhra Pradesh, GDP nearly doubled between 2002 and 2009, but cohort comparisons show the stunting rate within our samples at age 8 only fell by four percentage points (Dornan, 2011) with no improvement at all among the poorest 40% of children in the sample (Kumar, 2012). The negative effects of stunting are increasingly concentrated among more marginalised children.

**Evidence of some later recovery**

Between a quarter (Vietnam) and a half (Ethiopia) of children who were initially measured as physically stunted (at around 1 year old) ceased to be stunted by 5 years (Lundeen et al. 2013). And although height at age 1 is predictive of height at age 5, between about 40% and 70% of the variation in height at age 5 is not explained by height at 1 (Schott et al. 2013). Physical recovery by age 5 appears to be most likely among children who were least stunted during infancy (Crookston et al. 2010). Probability of recovery is also linked to inequalities, because recovery between 1 and 5 years was most common among better-off households in Ethiopia (especially among girls in households with more resources) (Outes, and Porter, 2013).

There is some evidence that physical recovery may be associated with improved cognitive development (see Crookston et al, 2013). Analysis from Peru suggests a stronger relationship between vocabulary test scores at the age of 5 and concurrent stunting than stunting at age 1 year (Crookston et al. 2011). A second study on the Peru sample looked at quantitative and vocabulary test performance, comparing children who were never stunted with those who were
stunted at age 1 but appeared to have physically recovered by 5. No significant differences were found in the test scores of the two groups (see Figure 7) (Crookston et al. 2010).

**Figure 7. Children who were stunted at age 1 but physically recovered by age 5 have similar test results as children who were never stunted (Peru, Younger Cohort, age 5, 2006)**

*** Is significantly different from the reference group (not stunted) at 99.9% level.

Source: (Crookston et al. 2010)

5: Inequalities during middle and later childhood

Earlier sections make clear that early childhood is a critical period when inequalities become established, and also the long-term consequences for children’s health, cognitive and psychosocial development. But Young Lives research also points to the need for a more balanced picture which recognises the ways some inequalities develop progressively through childhood, others can open up through specific life events, and yet others are amplified as children face key life transitions.

In Section 3 we reported for Young Lives countries that gender *per se* was not consistently linked to inequalities in key development indicators during the early years. However, poverty was shown to impact on gender, especially by reinforcing differential expectations and practices towards girls and boys, as when girls are expected to take on significant domestic responsibilities, while scarce resources are invested in boys’ schooling. Gender differences are more marked in middle and later childhood and shaped by gendered understandings (among both children and their caregivers) of what constitutes successful transitions to adulthood.

For example, Young Lives qualitative research reveals that caregivers adjust their expectations for girls and boys according to their employment or marriage prospects, as well as household composition, financial circumstances and vulnerability to shocks (Save the Children, 2012). While these shifting expectations are observed for all four countries, they are especially marked in Ethiopia, where unemployment is as high as 50% in some urban areas, and employment opportunities for girls in the formal skilled labour market are particularly scarce (Camfield, 2011). Perceptions of social risk result in further constraints for girls (Boyden and Crivello,
Marriage is still a defining factor in Ethiopian girls’ lives from the onset of puberty (Boyden, Pankhurst and Tafere, 2012), although beliefs are in rapid flux. While some parents view completing school as the best way for girls to secure their future livelihood, for others, extended schooling is viewed as a potential risk to girls’ economic and reproductive futures (for instance by perceptions that more-educated girls might be less marriageable). In rural Ethiopia concerns are also heard that ‘free-will marriages’ (as opposed to the customary/traditional arranged marriages) make girls vulnerable to being ‘abducted’, cheated or abandoned by a man, without the traditional sources of community protection to fall back on (Camfield, and Tafere, 2011).

**Pressures of work and school**

The emergence of gender differences is most clearly seen during middle childhood as children typically balance expectations for schooling with domestic responsibilities and other economic activities (Heissler and Porter, 2010). Boys typically spend more time doing unpaid work on the family farm or business, while girls spend more time caring for others and on domestic tasks. On average, rural children spend more time on work (both paid and unpaid) while urban children spend more time in school and studying. Other factors affecting time-use are age–sibling order, composition and household shocks (Pells, 2011b; Heissler and Porter, 2010).

Young Lives research in Ethiopia shows that children’s paid work often contributes to the costs of schooling, thereby helping them (or their siblings) to stay in school (Heissler and Porter, 2010). However, in poorer countries the pressures to leave school become more intense through middle and later childhood as the opportunity costs of staying in school rise and children’s ability to support household livelihoods increases. As a rule, children from the poorest households are most likely to drop out early, but there are gender differences, which vary between countries. By 2009 (when the Older Cohort were age 15), rural boys in Ethiopia, Peru and Vietnam were more likely than girls to have dropped out of school, and the pressure to earn was a major factor, often felt by children themselves as much as it is imposed by adults. The higher drop-out rate of boys is likely explained by their higher wage-earning potential combined with the fact that girls tend to work within the family home, with greater potential to combine with schooling by comparison to paid work outside the home (Pells, 2011b).

**Impact of illness and death**

Figure 8 summarises children’s time allocations, and demonstrates strongly gendered school, work and domestic responsibilities are already evident in Ethiopia by the age of 12. This study also draws attention to the impact of health status in middle and later childhood on inequalities in children’s lives and prospects. While most children were enrolled in school, non-attendance was common, and many children progressed slowly from grade to grade. Child and parental illness as well as parental death were major reasons for patchy attendance and slow progression. Health care was expensive and difficult to access, so when children suffered from common illnesses, such as malaria, worms or diarrhoea, they were often absent or dropped out (Orkin, 2011).
The impact of parental illness and death on poor children is especially significant. In Ethiopia, one in five of the Young Lives children had lost at least one parent by age of 12 (Himaz, 2009b). The measurable outcomes of becoming an orphan vary according to a child’s gender and age, whether it is their father or mother who has died, as well as their subsequent household circumstances. For example, losing a mother in middle childhood (between ages 8 and 12) reduced the chances of school enrolment by 21%, and also affected children’s scores on a literacy test, with repercussions for these children’s later prospects compared with non-orphaned peers. Losing a father meant that families frequently faced financial hardship.

6: Children’s subjective well-being

All too often development debates have neglected to ask how poverty is actually understood and experienced by children, their families and communities, and what is the significance of these perceptions for experience of well-being and long-term outcomes (Camfield, Streuli & Woodhead, 2009). This neglected dimension is especially important in relation to inequality, which can trigger powerful individual and collective responses to perceived social injustice. Children’s experience of inequality shapes their personal and social identities, their peer relationships, self-esteem and self-efficacy. These are not just individual experiences. They are mediated by children’s membership of their family, peer group or community. Children are sensitive to their relative social position, their relative competence, and potential to access opportunities for personal, social and economic advancement (Boyden and Dercon, 2012).

*They may also spend time on other types of tasks.

Source: Orkin, 2011
As part of the Young Lives survey, data is collected on children’s feelings and perceptions. For example, children from better-off households positioned themselves higher on “a ladder of life” exercise (based on Cantril 1965) across all 4 countries. Using that measure, poor children were three times more likely than non-poor children to report a bad life; whilst non-poor children were 4 times more likely to report having a good life (Le et al 2011).

In the same way Figure 9 summarises evidence that children’s perceptions of shame, are linked to levels of household poverty.

Figure 9. Feelings of shame reported by 12 year olds, by household expenditure quintile

Source: Dornan and Ogando Portela, forthcoming 2014. Measure of “Feelings of shame” is based on eight questions, such as ‘I feel proud to show my friends or other visitors where I live’ or ‘I am ashamed of my clothes’. Each bar shows the confidence interval (at 95% level) in which the value is expected to lie – where these don’t overlap this shows results are significantly different.

As part of the surveys, individual participants were also asked to rate their health as better, worse, or the same as other children of the same age. Across the four countries those reporting worse health were also more likely to be stunted. In Vietnam and Andhra Pradesh children who reported their health as better than others were also more likely to be enrolled in school and have higher cognitive achievement scores (Pells, 2011a). The fact that children’s subjective well-being mirrors more objective indicators of their development underlines children’s acute awareness of their relative disadvantage in comparison to others, which in turn shapes their
feelings of agency (or self-efficacy) that can help them cope with and possibly improve their situation.

Evidence from qualitative research

Young Lives qualitative research has looked in depth at these issues, especially children’s beliefs about their well-being, the impact of poverty and inequalities, and their ability to improve their (and their families’) situation. For example, research in Ethiopia invited 12 year olds to draw pictures of children having a ‘good’ or a ‘bad life’, and used these as a starting point for exploring their understanding of well-being. Children often prioritised family and school, over good food, shelter and material security as essential to well-being (Camfield and Tafere, 2009).

A study in rural Andhra Pradesh highlighted the crucial significance of children’s social context, their family and their peer relationships. What children often found most distressing about the lack of material goods was the sense of shame that came with ‘not having’ or not ‘fitting in’. For example, 13-year-old Kareena and her sister were keenly aware of their household’s fragile economy, which Kareena attributed to her father’s illness. Her mother could no longer afford to provide nutritious food for the family, who subsisted mainly on diluted ‘dal’ (a lentil stew). Kareena and her sister described how they attempt to conceal their poverty from other children by sitting apart during school lunches or covering their lunch box with a book while they eat (Boyden and Crivello, 2012). This research also drew attention to different ways that 12 to 15 year olds understood inequality, reflecting their position in the social hierarchy and the social expectations they were managing (Crivello, Vennam and Komanduri and 2012).

Research with 12- to 13-year-old girls in rural Peru drew attention to the social dimensions of children experiences. Feeling valued within families and communities contributed to their feelings of well-being as much as material deficit. Failure to meet family expectations were at the forefront of their accounts of ill-being and risk, with work and schooling viewed as vital means through which they could become competent moral and social actors, able contribute to household poverty mitigation (Crivello and Boyden, 2012).

Young Lives qualitative research also draws attention to the rapidly changing dynamics of children’s relationship to poverty and inequality, across all the countries. Experiences of well-being change as children mature, as do the social and economic opportunities and risks that they face. At the same time, cohort comparisons underscore the growing tensions between rapid social change and traditional social structures, which in turn impact on how young people see their future ‘place’ within their household and wider society (Boyden and Crivello, 2012; Pells, 2012; Camfield and Tafere, 2011).

7: The role of education in inequalities

It is widely accepted by policymakers that good quality schooling has potential to offer one of the main routes out of poverty. Young Lives also finds the same high expectations for schooling among parents and children across all four countries. In data from 2009, between 40% (Andhra Pradesh) and 74% (Ethiopia and Peru) ideally wanted to complete university. At the same point between 33% (Andhra Pradesh) and 78% (Ethiopia) of parents of 8 year olds also ideally wanted their children to complete university (Pells, 2011b). Qualitative evidence bears out how
education is highly valued. For example, Marta, a Peruvian young woman, growing up in a rural area observed: “We’re not going to suffer like this in the mud… it’s better that I go and study.” Or as a father observed for his son, again in Peru: “I walk in the fields in sandals. At least he will go with shoes if he gets a good head with his education” (Boyden, 2012). Young Lives analysis raises questions about whether education systems are delivering on these promises. Many individual lives are improved by education, but (with some exceptions reported below) inequities of access to pre-school and primary school, infrequent attendance, early school leaving etc., combine with inequities in the quality of teaching available to children in ways that may serve to amplify rather than reduce inequalities linked to household circumstances, parental education etc.

**Early inequities in access**
All too often, unequal school trajectories are set in motion even before a child starts school, even though the early years is recognised as the most cost-effective period for intervening to reduce inequalities. Young Lives evidence reinforces findings from global surveys that report early childhood programmes currently benefit a higher proportion of advantaged than disadvantaged children, thus perpetuating cycles of poverty (Engle et al. 2011). Inequalities in access to good-quality pre-school education in each of the four study countries, as well as discrepancies in the quality of services available, suggest that quality early childhood education is less likely to reach the poorest children who need it most (Woodhead et al. 2009). While many individual disadvantaged children benefited from innovative programmes the overall picture is of inequality in access.

In Peru, 95% of children in non-poor households participating in the Young Lives survey had spent some time at pre-school, but that figure fell to 64% for the poorest and between 76% and 54% for different ethnic minority groups. Virtually all children of mothers with more than ten years of education had attended pre-school in the Peru sample, but this dropped to 30% of children whose mothers had less than five years of education (Escobal et al. 2008). There is a similar picture in Vietnam where 91% of Kinh children (the ethnic majority) in the sample had experienced some form of pre-school but only 77% of ethnic minority children (Murray, 2010). In Ethiopia, where government priorities have until recently been to universalise primary school access, pre-school was accessed by only 5% of the poorest quintile versus 57% of the wealthiest quintile, most of whom were urban children attending private or church-run kindergartens (Woodhead et al. 2009; Orkin, Yadete and Woodhead, 2012). As a general summary, Young Lives evidence is that parents and children who require most support to give their children a head-start in school are doubly disadvantaged: by the poverty of their circumstances and by the difficulties accessing quality early childhood programmes. Minority groups are especially at risk because of language and cultural barriers as well as inaccessibility of services, with the consequence that they start to feel excluded from the schooling system even before they enter primary school (Ames, 2012). These data relates to Younger Cohort children’s experiences up to 2006, and more recent reforms (notably in Peru and Ethiopia) will hopefully be improving the situation.

**Impact of the private sector**
In Andhra Pradesh, rapid growth in ‘low-fee’ private schools (starting with kindergarten classes for children as young as 3 years old) adds an additional dimension to Young Lives evidence on early educational inequalities. Even some of the poorest urban families (and increasing numbers
of rural families) are ‘voting with their feet’ in favour of private schools, pointing to a crisis in the public-sector school system, which is failing to meet parental expectations on quality and accountability, despite teachers being better qualified and a great deal better paid than their private-school counterparts. While some argue that the low-fee private sector offers an important alternative for these families, and can contribute to Education For All goals (for example where poor children received subsidized places), there are major risks to equity, unless and until major government reforms are able to regulate private schools and/or public sector schools are reformed (Woodhead, Frost and James, 2013). Whilst evidence from Andhra Pradesh suggests private school pupils score higher in tests than government pupils, much of the performance differences are down to different pupil backgrounds, not the action of the school. Some ‘value-added’ effects were found, but results were inconsistent across subject areas and comparatively small suggesting without significant quality improvements that expansion of an unregulated low fee sector is unlikely to substantively increase standards (Singh, 2013).

Pre-school provision available under the long-established government programme (the Integrated Child Development Services, ICDS) was still being used by the majority of rural and especially poor rural families in Andhra Pradesh (when surveyed in 2006). But the majority of families in urban areas were already opting to pay for a private pre-school (including a 34% of the very poorest quintile) (Streuli, Vennam and Woodhead, 2011; Woodhead and Streuli, 2013). These early public–private divisions are the foundation of children’s diverging educational trajectories through primary schooling and beyond. When these Younger Cohort children were followed up during the early stages of primary school in 2009, 44% of Young Lives sample of 7 to 8 year olds were reported to be attending a private school (a jump from 24% private school attendance among the Older Cohort when they were the same age, seven years earlier in 2002). Not surprisingly, capacity to access private schooling was closely linked to household wealth, ethnicity/caste, urban or rural location, and parental education levels. Young Lives research has also identified the impact of intra-household choices about type of school, in increasing gender-linked inequalities. Figure 10 shows that for the Older Cohort the gender gap in choice of private over government school only opened up around the end of primary school. But for the Younger Cohort, a 9% gender gap was already evident by age 8 for the poorest rural sample. Figure 10 also shows the ways this gender divide in school use could widen during later childhood, if current trends were to continue.
These findings are linked to other evidence from parents in Andhra Pradesh who report choosing to invest more in boys’ education (Himaz, 2009a). Equivalent trends are found for health, with families opting for private healthcare due to perceived poor quality of public provision of healthcare in AP India (Pells, 2011a; Pells, 2011b). But private healthcare (like private schooling) can create large household debts, in the absence of government subsidies, thus fuelling inequalities, as well as further impoverishing already poor households.

**Inequalities in school access**

While primary school enrolment has been relatively high in all four of the study countries, children growing up in rural areas are still less likely to be enrolled in school than children in urban areas in Ethiopia, Andhra Pradesh and Vietnam. Ethnicity is a further predictor of enrolment gaps, particularly in Vietnam. In Andhra Pradesh, household wealth is a key factor in school enrolment. Figure 11 plots the school histories for individual children, comparing those in the bottom (poorest) and top (least poor) quintile in the sample. Each line represents a child, with the chart demonstrating the marked wealth-linked inequalities in access to education with the poorest children less likely to access pre-school and more likely to leave school earlier than less poor children.
Perhaps even more significant are the inequalities in children’s progression through school. Although 90% of 15 year olds in Ethiopia reported still being enrolled in school, only 18% of had completed primary school by that age (Murray, 2012). In Peru, 61% of Older Cohort children in the poorest quintile had repeated a grade by 2009, compared to 38% of children in the wealthiest quintile (Pells, 2011a).

Late enrolment, infrequent attendance, slow progression through school (age-for-grade), including grade repetition, as well as early drop-out from school are all more common among disadvantaged groups. Frost and Rolleston (2013) identified close links between late enrolment, slow progression and early school exit. Establishing children’s correct age-grade is especially tricky in Ethiopia, in the absence of universal birth registration. Since children’s age may be unknown (or contested), teachers commonly employ a crude maturational indicator of school readiness: they rely on the changing ratio of head size to limb length, and admit children only when they are able to stretch their left arm over their head and touch their right ear, thereby excluding children whose physical maturation is delayed (Woodhead et al. 2009).

Evidence for school effectiveness
With three rounds of data, Young Lives researchers have analysed how inequalities in school achievement have evolved over time. As noted earlier, large gaps open up by the early years of schooling, but these appear to ‘plateau’ in middle childhood when most children are in school, and widen again during later years of schooling. Gaps in education outcomes relate to household wealth in all four countries, but disparities at the age of 12 were generally predicted by previous test scores at age 8 (with no additional negative effect of wealth at that point) (Rolleston and James, 2011). This suggests some compensatory or levelling effect of schooling during middle childhood, but the same study found that the inequalities in education outcomes widened again during the later years of schooling, when pressures to drop out rise, especially because of rising costs (including opportunity costs of labour).

While much Young Lives evidence draws attention to the risk that inequitable school systems amplify inequalities, much depends on the governance systems that ensure access to quality teaching for disadvantaged children. Initial analysis from Young Lives school-effectiveness research in Vietnam gives some evidence on the ability of a school system to bring children from disadvantaged backgrounds up to the level expected by its curricula. Children who did less well on a maths test at around 10 years old (disproportionately those from less advantaged backgrounds) made most progress (Figure 12) (Rolleston, 2012; see also Rolleston et al 2013). One interpretation of these results links to the observation that Vietnamese teaching was focused on the class (as a whole) achieving to an acceptable level, rather than increasing the stretch of the most able individuals. Further the Vietnamese curricula appeared well suited to appropriately develop children’s ability, rather than being over-ambitious. It is also apparent that the qualification levels of teachers in poorer areas tend to be quite similar to those teaching in more advantaged areas, which is probably due to centralised teacher training system.
Figure 12. Progress in maths test scores over school year (2011-12) (Vietnam, Younger Cohort, age 10 in 2011)

Note: The sample has been divided into quintiles on a ‘home background index’, with the ‘poorest’ showing the biggest gains in maths score. This index is based on indicators known to be associated with educational disadvantage, notably minority group membership, parents’ language and literacy in Vietnamese, as well as household environment (including number of meals per day, books in the home, telephone, internet etc).

8: The potential of Social Protection programmes

Social protection has had much recent attention, including the new ILO labour standard on national floors of social protection (ILO, 2012). Others, including UNICEF, have sought to evaluate the consequences of social protection for children (Sanfilippo, de Neubourg, and Martorano, 2012). There is therefore considerable consensus about the potential of social protection in supporting more equitable development, although current systems are often weak and with low coverage (For example European Commission, 2010; World Bank, 2012; UNICEF, 2012). The experience of the South African Child Support Grant suggests the potential gains for children can be considerable (DSA, SASSA and UNICEF, 2012). The impact of policy innovation in Ethiopia, AP India and Peru since 2000 has been monitored by tracking experiences of Young Lives households and children.

Overall, our data show the potential for social protection in helping to mitigate broader inequalities, and in improving the success of other social policies (Porter with Dornan, 2010). For example, analysis of receipt of Midday Meal Scheme in AP (provided in government-run primary schools) found protective effects on the nutrition of 5 year olds. Positive impacts were particularly large when households were in drought-affected areas (Singh, Park, and Dercon,
2009 data relating to the Mahatma Gandhi National Rural Employment Guarantee Act scheme (MGNREGA) shows its rural focus makes it relatively effective at reaching those affected by environmental shocks (about 6 in 7 households which reported being affected by an environmental shock also reported access to MGNREGA) (Dornan, 2010). Analysis of 2006 data also found suggestive evidence that MGNREGA was having insurance effects, with households with agricultural livelihoods both more likely to register but less likely to use the scheme (Uppal, 2009). Qualitative evidence also suggests that having the option of MGNREGA work had enabled some labourers (including women) to turn down very low paid work (Camfield and Vennam, 2012).

**Evaluating the effects of social protection**

However, Young Lives evidence highlights some policy concerns that need to be borne in mind in improving the impact of social protection schemes for children. A key point is that the level of transfers matter in supporting poor families. Studies of the Ethiopian Productive Safety Net Programme (a public works scheme) have argued that despite protecting children from hunger, evidence of positive impacts on children was hard to find and transfer payments had been undermined by wider inflation (Tafere and Woldehanna, 2012). Qualitative analysis of differences in the implementation of MGNREGA between several communities showing that perceptions of mismanagement undermined trust, highlighting the importance of effective governance in maintaining public support for social protection programmes (Camfield and Vennam, 2012). Additionally researchers report lack of information or awareness about social protection in the Juntos scheme (Streuli, 2012). This lack of awareness both limits people’s capacity to benefit from schemes and to challenge poor implementation. Evidence from AP India (Uppal, 2009) suggests that households that reported having influential social networks or contacts were more likely to benefit, which may suggest nepotism (or possibly corruption), and certainly highlights a challenge in extending information and access to socially marginalised groups.

Evidence shows that social protection schemes can also alter how children use their time in practice. Increased household income may reduce the chances of children needing to work (and so increase time studying or on other activities). However, if social protection schemes increase parent’s work (for example through public works), this may result in children having to do more work or substitute for parents’ work. Research on the Ethiopia Productive Safety Net programme argues that this substitution effect exists but might be reduced by greater use of direct payments (not conditional on parents’ work) (Tafere and Woldehanna, 2012). Finally, although policymakers often see narrow targeting as an efficient use of resources, evidence from Ethiopia in 2006 found it hard to identify clear differences in poor communities between beneficiaries and non-beneficiaries (Porter with Dornan, 2010). Targeting families may also be counter-cultural in communities where sharing across households is common. Qualitative evidence on perceptions of the Juntos cash conditional transfer programme (which has an area-based as well as household targeting element) suggested those in non-entitled communities viewed themselves as equally poor as beneficiaries (Streuli, 2012) and so narrow entitlement ‘cliff edges’ can create inter-community tensions. Additionally poverty-based targeting is also likely to identify groups who may experience other stigma or discrimination (such as minority groups) which may reinforce existing stigma.
Conclusions

Young Lives research is unique in tracking children’s development in diverse contexts during the early decades of the twenty-first century, during a crucial period for progressing the implementation of the UN Convention on the Rights of the Child, 1989 as well as moving towards achievement of the Millennium Development Goals. The specific focus of this paper is on the ways inequalities are shaping children’s lives in Ethiopia, India (in the state of Andhra Pradesh), Peru and Vietnam. While Young Lives is not comprehensive of the many ways inequalities impact on children, our research does provide powerful comparative insight from four countries that are contrasting in political and economic context, geography, traditions and culture. For in-depth analysis of the themes in this paper, we refer readers to the original research papers referred to throughout. It is also important to note that the research reported in this paper is part of an ongoing programme, and the following summary conclusions may be refined through future analysis, including of later rounds of cohort data:

1. Inequalities in the circumstances facing different groups of children feed through into systematic inequalities in children’s outcomes. Differences in children’s outcomes in turn undermine later equality of opportunity. Since inequality of opportunity wastes talent, so this is a loss of potential for national development.

2. Children’s circumstances strongly predict their opportunities to learn during the early years. Children who score well on early tests and who are from poorer families quickly fall behind compared to their more advantaged peers. There is some evidence that these processes plateau during middle childhood, possibly due to universal schooling. Background characteristics again become important during later childhood, showing that policy which addresses circumstances outside (as well as inside) the school gates is important to longer-term human capital development.

3. During early childhood, socio-economic and household characteristics are much stronger determinants of children’s development than gender. Gender differences become more marked during middle and later childhood. They take different forms within and between countries, and do not always favour boys. They are often shaped by parents’ (and increasingly children’s) expectations of how choices or investments will pay off in later life. Policy aimed at reducing gender-based differences needs to engage with the context that influences parents’ and children’s choices as well as discrimination per se.

4. The damaging impact of early malnutrition on later child development is well established. Since more marginalised groups experience worse early life conditions, under-nutrition is common in these groups. The principle that ‘Prevention is better than cure’ applies here, so improving life conditions at the very earliest age is a core priority for pro-equity policy. But for children who experience stunting in the early years, initial findings do suggest some hope that policy (for example by subsequent investments in nutrition or care, targeted especially to the most vulnerable) might at least partially mitigate the negative effects of early life deprivation.

5. Inequalities also open up during middle and later childhood. Gender differences grow over this period, shaped by diverging expectations for girls and boys, which are in turn framed by the socio-economic circumstances of the household. Pressure to work is
increasingly felt by older children from poor families, competing with schooling. The flexibility of schooling to meet the needs of children combining work and school will help retain those who may otherwise leave early. Family Illness and death impact strongly on children’s responsibilities for caring, as well as on poverty levels, reducing children’s ability to engage with schooling.

6. The ways children actually experience poverty and inequality tends to be neglected in research, policy and programmes. Subjective well-being is an important indicator of inequality. The social distance that inequalities can create affects how children feel about themselves, and their opportunities later in life. If children who feel ashamed about their circumstances withdraw from schooling, this subjective experience both reflects ‘objective’ circumstances and is a route through which future inequalities are perpetuated.

7. Parents and children have high hopes of schooling as transformative for their future life chances. Most often there is a mismatch between expectations of education, availability of quality schooling and realistic employment prospects. The extent to which school realises its potential to reduce inequalities is very variable. In Andhra Pradesh, growth of low-fee private schooling risks widening some inequalities (notably an increasing number of boys, over girls, accessing private schools), but school effectiveness research in Vietnam shows lower ability and more disadvantaged children ‘catching up’. Both examples draw attention to the importance of governance of school systems, including the private sector, and as well the teacher quality and well-planned curricula.

8. Social protection has considerable potential to help support access to health and education policies. Coverage, good design and ensuring systems are accessible are important policy challenges. Building sustainable systems of social protection, however, need also to account how policy is perceived by beneficiaries and non-beneficiaries alike.

In short, since the nature, and consequences of inequality are multidimensional, so too must be the response. Growth policies, equitable education and health, underpinned by effective social protection all have a role to play. Policies focused on the earliest years of life are crucial in reducing inequality, but Young Lives longitudinal research also draws attention to other key policy opportunities during middle and later childhood.

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