

Child Development in a Changing World: Key Messages and Knowledge Gaps



YOUNG LIVES POLICY BRIEF 26

July 2015

Exposure to deprivation and distress in childhood can have profound and lasting consequences for children as they grow up, but the effects vary widely across individuals and contexts. How much do we understand about child development in these circumstances? It is often assumed that economic development will improve well-being, how have rapid socio-economic transformations impacted on children? And what kind of evidence do policymakers need in order to implement effective interventions that both harness economic growth and also deliver benefits for poor children?



Children feature significantly in discussions about the Sustainable Development Goals, as recognition increases that investing in children is not only the right thing to do for their survival and quality of life, but lays the foundation for the future of a country. There is also mounting consensus that while economic growth facilitates the realisation of human potential, it is not enough in itself: despite two decades of rapid economic expansion, many children continue to experience multiple threats to their well-being.

In this brief, we review current understandings of the risks children face and the enduring legacy those deprivations can have in a rapidly changing world. Using evidence from around the globe and insights from across academic disciplines, we highlight the links between different developmental processes; the possibility that exposure to some risks may be reversible; and the fact that the same economic shock can have a very different effect across households and, within them, across individuals.

Our review highlights a number of messages for the design of social policy to address children's development, as well as the potential of better data to help us understand what promotes and what impedes it. Without a strong evidence base, policies and interventions designed to deliver benefits for poor children will continue to be severely hampered by assumption, conjecture and knowledge gaps. Long-term cohort studies provide particular and crucial insights into the dynamics of child development and the effects of social and economic change.

To increase effectiveness, evidence suggests policies aimed at benefiting poor children should...

- Recognise that children are members of families and communities, not individuals in isolation, and help communities and households to provide a supportive environment for children. Treat children as social agents, rather than simply as beneficiaries.
- Take into account the context in which children live, and consider what works for them and their families, what motivates them to respond to policies and programmes, and what the full impacts are likely to be.
- Take into account the point at which policies are applied: evidence suggests investments in early childhood are particularly valuable, but other life-stages also offer windows for intervention.
- Recognise that social protection schemes are particularly promising as a means of reaching the poorest groups and reducing susceptibility to risk, and can promote the effectiveness of other social policies by doing so.
- Promote broader socio-economic development, such as improving infrastructure – including education and health services – so that social policy can be more effective at supporting the hardest to reach.
- Focus on all aspects of a child's welfare: failing to acknowledge the powerlessness and discrimination that undermine emotional and social well-being may reduce the impact of interventions. Address service quality and governance in public institutions. If poor people receive poor quality services, this reinforces disadvantage. Poor governance can undermine service quality through clientelism, corruption, and the poor motivation and quality of public-service workers.
- Aim to prevent illness, or to help reduce the catastrophic costs this can bring – both material, in terms of lost earnings that can result in the sale of assets and a household's fall into poverty, and in terms of children's well-being, as they worry for family members and their school attendance suffers.
- Be sustained if they are to work in the long term: to be sustained, they must receive general acceptance by the population so that political leaders are inclined to continue them.

What do we know about children's development?

Children's development is multidimensional

We know that child development is multidimensional, and that its many domains – neurological, emotional, social, physical and so on – are interconnected, and interact with each other over time. The operation of one affects performance in the others; for example, emotional well-being can impact physical growth.

Some of these links – in particular those between nutrition and learning – have long been recognised. More recently, attention has focused on how cognitive skills (such as learning and remembering) and non-cognitive skills (such as empathy and communication) interact throughout childhood and continue to shape job outcomes and academic achievement later in life.

Data from Young Lives, for example, shows that a child's feeling of being respected at the age of 8 is strongly predictive of higher test scores for mathematics and reading at the age of 12, highlighting how non-cognitive abilities or vulnerabilities at one point in time can influence cognitive development in later periods.

Children's development is shaped by their circumstances

We know that children adapt to the social and cultural contexts in which they grow up, and that their social and emotional competencies are particularly susceptible to external influences. Their feelings about identity, self-worth and personal well-being are highly dependent on how they understand their relative social position, relative competence, and potential to access opportunities for personal, social and economic advancement.

We also know that there are periods during which children's responses to external factors are heightened; for example in early childhood, the most crucial life-phase in terms of their development. Deprivations and shocks during this period have profound and lasting effects across different domains, with poor early nutrition in particular acknowledged to have significant impacts on a child's later outcomes.

Until recently, it was commonly thought that after the first two years of life it wasn't possible to reverse the stunting caused by poor nutrition. However, a small body of research is now asserting that 'catch-up growth' may be possible. A recent study using panel data from Brazil, the Gambia, Guatemala, India, the Philippines and South Africa showed substantial catch-up in height between the age of 24 months and mid-childhood, and again between mid-childhood and adulthood.

The potential for catch-up has important implications for public policy. While tackling poor nutrition in early childhood remains the key priority and the most efficient form of intervention, there is growing evidence that nutritional deprivation at birth can be at least partially compensated for if circumstances in later childhood are improved; for example, through measures such as cash transfers, school feeding and health insurance.

Children interact with their environments and are vulnerable to household shocks

We know that children do not simply absorb and react to external forces; through their aspirations, actions and sense of self, they and their families are instrumental in shaping their environments and destinies, and there is considerable variation in their fortunes as a result. They may be supported – for example by their extended families or social protection programmes – or constrained, including as a result of their ethnicity, religion, caste or gender.

Research into the outcomes of children's interactions with their surroundings has enormous potential to inform policy. Not only does it yield important evidence concerning the factors most likely to compromise children's development, and the severity and persistence of their effects; it also enables the identification of processes and mechanisms that work at multiple levels to shield children from various forms of adversity.

The care environment, generally constituted by a child's activities and relationships within the family, is widely accepted to be the most salient external influence in children's lives, especially during the earliest years of life. This makes it vital to understand how household dynamics and conditions affect children, how children experience and negotiate these relationships, in so far as they have the agency to do so, and how households can be helped to provide a supportive environment for children.

Adverse events and economic shocks to the household can undermine care, which has been shown to have a significant impact on children's outcomes across several domains. For example, evidence shows that moderate falls in household income in India led to a rise in rural infant mortality. This is thought to be because rural Indian mothers are significantly less likely to give birth outside the home or seek antenatal care in a downturn, but are more likely to work outside the home. They are also far less likely to obtain immunisation or treatment for their children.

Some children are more vulnerable to risks than others

We know that when it comes to risk, some households are significantly more vulnerable than others, with the burden greatest for poor households, which in general are the ones least able to smooth income shocks. Poverty is a key indicator for multiple developmental risks in children, including, among others, malnutrition, environmental toxins, low maternal education level and family conflict.

High levels of risk exposure often reflect wider structural or systemic forces that operate against entire social groups; for example, institutionalised labour-market discrimination affecting people of a particular religion or ethnicity results in greater social exclusion.

Within poor households, children who are disadvantaged by gender, birth order or other characteristics are likely to suffer most, as limited resources are often distributed unevenly among household members. The impact of income shocks, for example, tends to be much greater on girls than on their brothers; in India, the effect of household income shocks on mortality seems to be evident for girls alone.

Children commonly share responsibility within the household, by undertaking domestic chores, unpaid work in a family enterprise, paid employment or caring for younger siblings or incapacitated adults. These tasks enable them to gradually learn life skills appropriate to their gendered adult roles and are an important source of identity, pride and self-efficacy. Nevertheless, these risk-coping mechanisms can be damaging to the young; for example, if they reduce children's attendance at school. Since some tasks – care or paid work – are gendered, different consequences may be seen for boys and girls.

How has social and economic change affected children's development?

Much of the developing world has witnessed a steady decline in absolute poverty over recent decades, as measured by the '\$1.25/day' measure intended to show the ability to meet the cost of very 'basic needs'. However, the decline has been more modest in Sub-Saharan Africa than in Asia, and gains have been unequal within countries.

Given that extreme poverty is a significant risk factor for children, this decline is clearly good news. However, while much of the developing world may be deemed to have escaped poverty, many people are only just the right side of the \$1.25/day line and remain highly vulnerable to income shocks, which can have long-term consequences for children's outcomes. In addition, poor households are increasingly found in middle-income countries, which have got richer at a faster rate than their populations, highlighting the importance of measures that address within-country inequalities and cater to children in particularly disadvantaged groups.

Another force for change has been the expansion of public infrastructure and services, particularly those services that are aimed at the young, such as education and immunisation. This expansion is significant in several respects: first, it affects the absolute level of survival and child well-being; second, it can change the level of inequality in the distribution of child outcomes; and third, it changes the focus of interventions and of policy debates around public services.

Following the push for Education for All and the Millennium Development Goals, primary school enrolment has risen sharply across the developing world, and 'ever-enrolment' – the proportion of children of primary-school age ever enrolled in a school at any level at any time – is now near universal in most places. This expansion of education has seen a rise in children's aspirations; findings from Young Lives show that children and young people across the four study countries have high hopes for their lives, and expect that education will enable them to escape from poverty and disadvantage – aspirations which many find hard to achieve.

Education quality remains poor and unequal in many low- and middle-income countries, and a large number of children complete primary school without being able to perform basic tasks such as reading a simple sentence. Recently there has been a marked rise in private schooling, reflecting, at least in part, the actual or perceived poor quality of education in government schools.

Inequalities, and differential opportunities presented to different children, are also affected by broader economic trends. Household incentives for investing in particular children are shaped by changes in labour markets resulting from economic growth, and in turn shape trends in inequality.

An experimental research design in India found that expanding labour market opportunities for women in randomly selected villages resulted in shifting aspirations and increased investments in girls and young women in those villages. 15- to 21-year-old women were more likely to enrol in a computer or English-language course, and even younger girls showed increased school enrolment and greater body mass index, reflecting better nutrition and/or health investments.

In many countries, economic growth and the expansion of infrastructure and social policy has taken place alongside the spread of information and communications technology and the media, all of which can have dramatic and lasting effects on material conditions, norms, values and practices. The rapid, low-cost roll-out of mobile phones has provided considerable benefits, including for the delivery of social protection schemes and in enabling people to access markets and other opportunities. In Brazil fertility choices were found to shift significantly between 1970 and 1991 in response to the introduction of television, specifically soap operas, as women exposed to the programmes chose to stop child-bearing earlier.

In such ways, social as well as economic change can lead to important changes in individual and community outcomes, and the implications for children's development are likely to be significant. These changes need to be studied explicitly if we want to understand trends in child well-being in the fast-changing contexts of many developing countries. Capitalising on technological change, and extending this to the poorest communities, will be a key policy challenge over the coming decades.

Cohort studies are urgently needed to provide evidence for effective policy

It is clear that while much is known, we still have much to learn about children's development and how individual characteristics and biological forces work together with family dynamics and broader historical, socio-cultural and environmental factors to influence children's growth and adaptation. In particular, we need a better understanding of the interdependence between and complementarities across different domains of children's development, specifically as they are shaped in the socio-economic contexts of developing countries, to see how policy can best intervene to support child development.

We need to recognise that children are social agents, not simply beneficiaries, and that they are members of families and communities, not isolated individuals. We need to understand their aspirations and perspectives, and what leads them to make what are often difficult choices. In particular, we need to understand which are the critical periods for different domains of child development; whether deprivations suffered in these periods may be reversible; what are the relative costs of reversing them; and how this may best be achieved.

It is clear too that we need a great deal more evidence on how rapid social and economic change is impacting in different ways on children in specific contexts. We need to expand the evidence base concerning the factors that promote and impede children's development across domains, functions, contexts and age groups, to gain clarity on why the outcomes for so many children have not improved as a result of economic growth and increased prosperity.

With the development of the Sustainable Development Goals has come a call for a data revolution. Part of that revolution must be delivered by more and better data, able to shine a light on the scale of social problems and monitor progress towards social goals. But the second part of that revolution should be a greater evidence base for policy: studies that help policymakers evaluate the options and choices facing them in fast-changing societies.

Specifically, there is a strong case to increase the number of cohort studies being conducted. While it requires a greater investment in time and resources to collect, longitudinal panel data has provided many of the crucial insights into children's development; for example, on resilience and recovery. Failures in the policies these cohort studies are set up to inform cost individuals and societies far more than the studies themselves.

Cohort studies make several distinct contributions. First, they provide a clearer understanding of the dynamics of child development, both across and within domains, as we saw with the example given earlier of how a child's feeling of being respected at the age of 8 is strongly predictive of higher test scores in school at the age of 12. Child development is a sequential process involving dynamic complementarities; the

long-term consequences of external influences at different stages of childhood and adolescence can only be convincingly studied if data are available for the same individuals over time.

Second, cohort studies further motivate the development of interventions which can be tested experimentally, including through Randomised Control Trials. An example is the research design in India described above, in which job opportunities were expanded for women in selected villages, and panel data collected over a three-year period to assess the effects on the aspirations of and investments in girls and young women. Using cohorts to inspire and focus experiments improves the chances that they will show useful results.

Finally, cohort studies are often the best – sometimes the only – way of evaluating major changes that happen unplanned. The rapid transformation in the socio-economic contexts of developing countries has ambiguous effects on the welfare of children and their long-term prospects. Significant changes may occur even in a very short period of time and may not be foreseen; the outcomes for children may be unknown unless longitudinal surveys are in place to capture them.

The insights provided by cohort studies are critical for designing timely and effective policy responses to changing circumstances in order to safeguard children's well-being. Interventions aimed at supporting households can have a significant, positive impact on children when they are based on evidence of the challenges children face, their needs and the effects such interventions have upon them. In contrast, policies that are not designed on the basis of such evidence will be at best inefficient, and at worst, detrimental to the very children they seek to protect.

REFERENCES AND FURTHER READING

Jo Boyden, Stefan Dercon and Abhijeet Singh (2015) 'Child Development in a Changing World: Risks and Opportunities', *World Bank Research Observer* 30.2: 193-219, doi: 10.1093/wbro/lku009.

Jo Boyden and Stefan Dercon (2012) *Child Development and Economic Development: Lessons and Future Challenges*, Policy Paper, Oxford: Young Lives.

Jo Boyden and Abhijeet Singh (2015) 'What do we know and why should we care about child development?', *Let's Talk Development* blog, World Bank, 8 Jan 2015.

Stefan Dercon (2002) 'Income Risk, Coping Strategies, and Safety Nets', *World Bank Research Observer* 17.2: 141-66.

Stefan Dercon and Abhijeet Singh (2013) 'From Nutrition to Aspirations and Self-efficacy: Gender Bias over Time among Children in Four Countries', *World Development*, Volume 45 (May): 31-50.

ACKNOWLEDGEMENTS AND CREDITS

This brief was written by Emma Feeny based on a paper by Jo Boyden, Stefan Dercon and Abhijeet Singh: 'Child Development in a Changing World: Risks and Opportunities', published in the *World Bank Research Observer* (2015), and an earlier paper by Jo Boyden and Stefan Dercon, *Child Development and Economic Development: Lessons and Future Challenges* (2012).

Young Lives is funded by UK aid from the Department for International Development (DFID) and co-funded by Irish Aid. The views expressed are those of the author(s). They are not necessarily those of, or endorsed by, Young Lives, the University of Oxford, DFID or other funders.

www.younglives.org.uk

Funded by



© Young Lives July 2015