

The Unique Value of Longitudinal Research: Insights from Young Lives

Longitudinal research involves observing the same individuals repeatedly over time to analyse trends and changes, identify causes and assess long-term effects. Birth cohort studies are a specific type of longitudinal study that follow a group of people who were born at a similar date or period of time. Unlike cross-sectional studies, which collect data at a specific point in time, longitudinal research can span months, years or even decades, offering deeper insights into changes over time across various fields.

This note uses examples from the Young Lives longitudinal cohort study to demonstrate the unique value of longitudinal research and its critical role in shaping national and international policy in low- and middle-income countries (LMICs), and in helping to meet global targets such as the Sustainable Development Goals (SDGs).

Seven key reasons why longitudinal research is important

- Longitudinal cohort research is vital for tracking human development and well-being across the life course, providing crucial insights for effective policy change.
- 2. Longitudinal cohort research reveals critical windows of opportunity for policy and programme interventions across the life course.
- 3. Mixed-methods longitudinal research ensures that lived experiences inform meaningful policy change.
- Multidisciplinary longitudinal research enables holistic understanding of human development, demonstrating the importance of cross-sectoral approaches for effective policies and programmes.
- 5. Longitudinal research is essential for understanding the impact of shocks and crises, including climate change, COVID-19 and conflict.
- 6. Longitudinal research builds trust and partnerships with local organisations, international agencies and national policymakers, which is key for transforming research into meaningful policy change.
- 7. Longitudinal research is an investment in the future it has predictive power, allowing policymakers to learn from past experiences to prepare for future shocks and crises.

About Young Lives

Young Lives is one of the largest and longest-running longitudinal mixed-methods studies of poverty and inequality ever conducted in the Global South. Since 2002, it has been following the lives of 12,000 individuals from infancy to adulthood in Ethiopia, India (in the states of Andhra Pradesh and Telangana), Peru and Vietnam. This includes two age cohorts: the Younger Cohort, born in 2001–02, has been followed since age 1, while the Older Cohort, born in 1994–95, has been followed since age 8.

Young Lives mission is to deliver ground-breaking, policy-relevant research on how poverty, gender and inequalities affect the lives of children and young people, particularly in the face of shocks and crises, such as climate change, conflict and COVID-19. Partnering locally and internationally, Young Lives provides unique data and evidence to shape meaningful research engagement and drive significant policy change. Amplifying the lived experiences of disadvantaged young people, the research to policy impact approach empowers young people to realise their full potential.

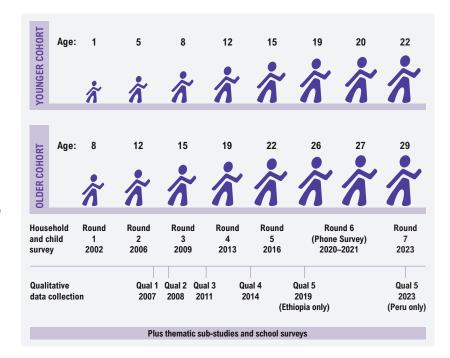
Seven key reasons why longitudinal research is important

1. Longitudinal cohort research is vital for tracking human development and well-being across the life course, providing crucial insights for achieving effective policy change

Collecting in-depth information about the same individuals from infancy into adulthood enables unique insights into how early-life circumstances have an impact on later life outcomes. Longitudinal cohort data is essential for understanding the cumulative effects of poverty and inequality, identifying vulnerable populations and measuring long-term trends, including intergenerational effects.

To date, Young Lives has collected seven rounds of quantitative data (with Round 7 completed in 2024), five rounds of qualitative data and two rounds of school survey data. Comparing findings between the two age cohorts, born seven years apart within the same communities, allows for investigation into how changing circumstances, including being exposed to shocks and crises, and the influence of national policies, affect their life trajectories.

The power of the Young Lives quantitative longitudinal data is further enhanced by



matching with external big datasets, such as climate data and administrative records. This approach enhances the ability to investigate a wide range of issues that are highly relevant to public policy.

Longitudinal research vs randomised control trials (RCTs)

Longitudinal studies provide valuable insights into policy issues over time. By comparison, RCTs offer precise answers to specific questions, such as evaluating the impact of a particular government programme. Experimental approaches like RCTs make a valuable contribution to evidence-based policy, but are limited to the questions they are designed to address. Longitudinal data, on the other hand, allows for causal analysis of the impact of external 'exogenous' events, or 'natural experiments', that households have no control over –such as the weather, economic shocks or social policies, over both short- and long-term periods. The key to effective evidence-based policy is not to see these different approaches as rival methodologies, but to maximise impact by triangulating findings from diverse and complementary datasets.

Providing crucial insights for achieving the SDGs

Originally set up to follow the children of the Millennium Development Goals (MDGs), Young Lives evidence played an active part in helping to get child poverty specifically recognised in the SDGs, working closely with UNICEF, Save the Children and the Global Coalition to End Child Poverty.

Young Lives evidence collected during the COVID-19 pandemic showed widening inequalities that threaten the achievement of the SDGs, particularly among those from poor households, rural areas and marginalised groups. With five years remaining to achieve the SDGs by 2030, the latest Round 7 data reveals how multiple crises, including COVID-19, the increasing frequency and intensity of



environmental shocks due to climate change, and armed conflict in Ethiopia, continue to have an impact on the lives of vulnerable young people. These insights are important to help policymakers refine interventions and target support to where it is most needed to ensure that no one is left behind.

2. Longitudinal cohort research reveals critical windows of opportunity for policy and programme interventions across the life course

By collecting information on the same individuals over time, longitudinal cohort studies go beyond simply identifying and counting who is disadvantaged, to enable a better understanding of root causes, why some people are able to move out of poverty while others face persistent deprivation, and when (e.g. at what age) policy interventions might be more effective.

By following two age cohorts over two decades, Young Lives longitudinal data provides information on all the key stages of development from infancy to early adulthood. Young Lives has also collected information on participants' parents and caregivers. particularly in the early surveys, and more recently on their own children as they become parents themselves. This life-course approach, now spanning three generations, helps identify critical periods for effective interventions, ensuring that policies and programmes are strategically timed and sequenced to optimise their impact.



Shifting the global debate on tackling undernutrition

Young Lives longitudinal evidence has been pivotal in demonstrating that early childhood stunting can be reversed well beyond the first 1,000 days, even up to age 15, and that physical recovery is associated with catching up in cognitive tests and education. While reinforcing the importance of the early years, Young Lives research challenges the idea that all is lost after early childhood by demonstrating clear windows of opportunity for recovery and catch-up in later childhood and adolescence.

This ground-breaking discovery is important for reshaping global nutrition initiatives, including promoting the extension of school feeding and social protection programmes to support a generation of children and young people at risk of malnutrition.

3. Mixed-methods longitudinal research provides deeper insights into long-term trends, ensuring that lived experiences inform analysis to enable meaningful policy change

Combining quantitative and qualitative datasets allows for detailed exploration of how poverty and intersecting inequalities affect children's daily lives and the underlying mechanisms shaping later life outcomes in adolescence and adulthood. Collecting qualitative information alongside quantitative data allows research to 'get under the skin' of trends and statistics, offering a more comprehensive understanding of these issues.

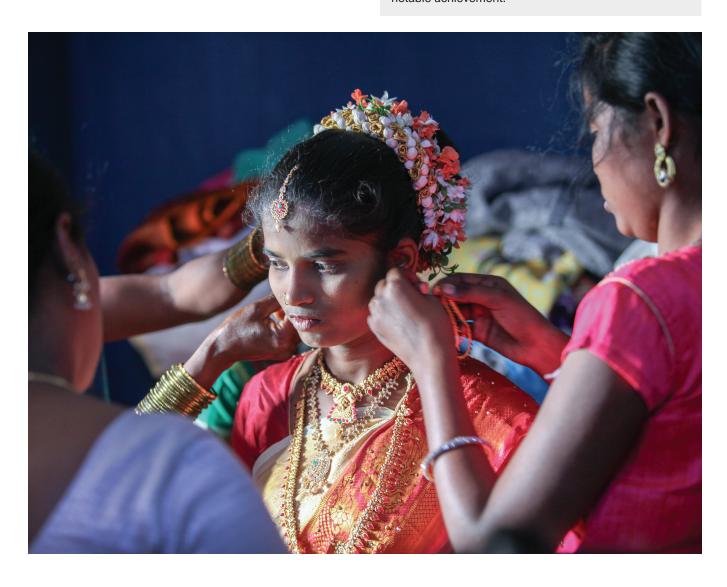
Young Lives maximises this approach by integrating comprehensive quantitative survey data with a variety of qualitative methods, including in-depth interviews, focus group discussions and creative tools like drawing and photography. The unique design maintains consistency across survey rounds while allowing for a focused exploration of specific challenges faced by specific groups in the four study countries. This has allowed Young Lives to identify and investigate several important issues that were not anticipated in the original survey design, such as the high level of violence experienced by children in their homes, communities and schools. More recently, the mixed-methods longitudinal approach enabled exploration into health and well-being in times of crises in Ethiopia, and the impact of COVID-19 on mental health in Peru.

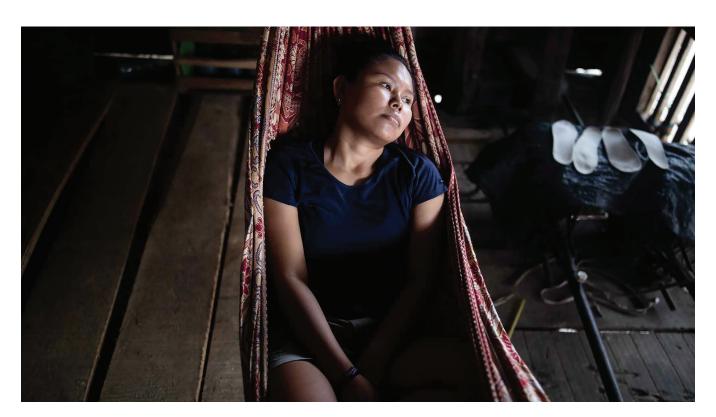
Informing legislative change on early marriage in India and prohibiting child marriage in Peru

Young Lives mixed-methods longitudinal research is driving legislative change to eliminate early marriage in India, while in Peru its evidence was directly cited in new legislation to prohibit child marriage, protecting the next generation of girls from this harmful practice and its life-altering consequences.

In Peru, Young Lives evidence was directly cited in a Congressional Bill enacted on 25 November 2023, following extensive policy engagement targeting key government ministries and wider public engagement. This law will protect thousands of vulnerable girls, particularly from poor and Indigenous communities, who are most at risk. 'Young Lives longitudinal evidence ... has been pivotal for driving this important legislative change ... by giving voice to the lived experiences of girls and young women.' Congresswoman Flor Pablo, December 2023.

Young Lives was selected as a winner of the University of Oxford Social Sciences Impact Awards 2025 for this notable achievement.



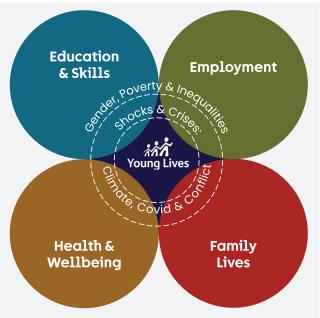


4. Multidisciplinary longitudinal research enables a holistic understanding of human development, demonstrating the importance of cross-sectoral approaches for effective policies and programmes

Collecting multidisciplinary information across a wide range of areas, such as health, education, employment and family lives, enables a more nuanced understanding of how different aspects of human development interact over time. This includes understanding how the impacts of various economic, sociocultural and environmental factors interact and shape long-term individual and societal outcomes, and how policy investments in one area, such as nutrition, can support development in other areas, such as cognitive skills development.

Building on over two decades of mixed-methods longitudinal data, Young Lives holistic approach investigates various interconnected aspects of young people's lives at home, school, work and in their communities (Figure 1). As participants begin their adult lives, the study is discovering how their childhood nutrition, physical and mental health, learning and cognition, and family lives are influencing their opportunities and choices: whether they complete higher education or training, their ability to find decent work, their social and emotional well-being, when they marry or become parents, whether they migrate away from their communities, and whether they remain in situations of poverty and inequality.

Figure 1. Young Lives cross-cutting research themes



Protecting young people's mental health in global crises

Young Lives longitudinal research shows that <u>COVID-19</u>, <u>conflict and climate change are further exacerbating mental</u> health issues, triggering high levels of anxiety and depression among young people at a critical period in their lives when resilience to mental health issues is typically built.

During the pandemic, research showed that persistent food insecurity and job losses were major factors contributing to poor mental health, while young women's mental health was disproportionately affected by interrupted education and increased domestic work. Research in Ethiopia is also uncovering the profound impact of conflict on young people's mental health and well-being, highlighting the need for urgent support.

5. Longitudinal research is essential for understanding the impact of shocks and crises, including climate change, COVID-19 and conflict

With established cohorts and consistent data-collection methods already in place, longitudinal studies are well positioned to capture the effects of unexpected shocks and crises, such as extreme weather events, conflicts, health emergencies or significant policy changes. Longitudinal data enables analysis of these exogenous events and are crucial for studying phenomena that cannot be randomised. They provide valuable insights into resilience and adaptation, helping researchers and policymakers to understand and address the consequences of unexpected events.

Growing up in poverty, the Young Lives cohorts have experienced numerous shocks. As they enter adulthood, they face unprecedented challenges, including the COVID-19 pandemic, climate change and conflict. Despite the urgency of these issues, there is a significant lack of population-based evidence on the long-term and intergenerational impacts of poverty, inequalities and intersecting global crises, particularly in LMICs. Young Lives is uniquely positioned to fill these critical evidence gaps, conducting new research that highlights both the long-term impacts and the policy strategies needed to protect and empower young people to realise their full potential in times of crises.

Demonstrating the long-term impacts of early exposure to climate shocks

Young Lives longitudinal research has shown that <u>early</u> <u>exposure to climate shocks</u> has a profound and unequal impact on children's long-term development, affecting their nutritional health, physical growth, learning progress and access to education – with the poorest children most affected. It has even shown that these impacts can extend to the next generation: droughts, flooding or cyclones experienced by a pregnant mother can have adverse effects on her child's vocabulary by age 5, with longer-term effects on basic maths and social and emotional skills in adolescence.

But these impacts are neither irreversible nor inevitable. Young Lives evidence also shows that public policies such as social protection programmes can mitigate the negative effects of climate shocks and poverty, supporting young people on the frontline of climate change.



6. Longitudinal research builds trust and partnerships

To be effective, longitudinal research needs to be grounded in strong community relationships. This is essential for ensuring that participants stay in the study over the long term and for gaining a deep, context-specific understanding of people's day-to-day challenges. In addition, being on the ground for many years enables longitudinal studies to build partnerships of trust with local organisations, international agencies and national policymakers, which are key for transforming research into meaningful policy change.

Young Lives has been working in close collaboration with long-term national partners in each study country for over two decades. Its dedicated country teams play a pivotal role in study design, data collection, research analysis and policy engagement. Fieldworkers, embedded in local environments, maintain strong relationships with study participants, keeping track of cohorts, despite conflict, political upheaval and increasing internal migration. As a result, the Young Lives study has an exceptionally low attrition rate, averaging less than 1% annually over more than 20 years.

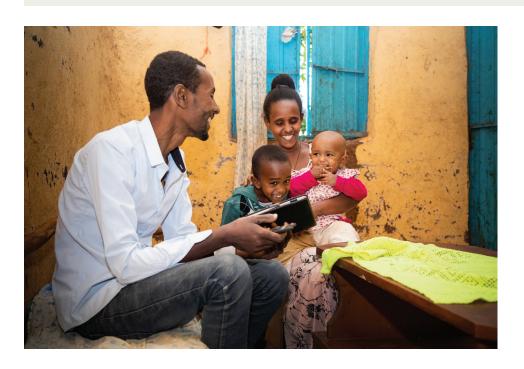
Led by the University of Oxford, Young Lives is a diverse international team with significant institutional and intellectual expertise, particularly through experienced country directors and country principal investigators. Its in-country leadership enables flexibility and agility in seizing policy-influencing opportunities as they arise and driving meaningful policy change to improve young people's lives.



Expanding and strengthening pre-primary education in Ethiopia

Young Lives longitudinal research has directly informed the rollout and strengthening of pre-primary education in Ethiopia, through the large-scale expansion of the O-class before Grade 1. This was achieved through long-term engagement with the Ethiopian Ministry of Education over the past decade, providing evidence and advice on strengthening the training of early childhood development teachers and age-appropriate curriculum.

Enrolment in O-class pre-primary education has increased from a virtually non-existent baseline in 2015 to almost 1.5 million 6-year-olds in 2021/22, representing 54% of children that age. With a further 1.2 million children attending O-classes in 2021/22, predominantly over the age of 6, there is considerable scope for increasing both the number and proportion of children attending at the appropriate age.



7. Longitudinal research is an investment in the future

Longitudinal research gives a powerful sense of what really matters in people's lives and can even have predictive power, allowing policymakers to learn from past experiences to prepare for future shocks and mitigate negative consequences. The value of longitudinal data increases over time and with each round of research.

The future of Young Lives: harnessing the power of longitudinal research

Young Lives has set out an ambitious vision to 2030. Extending its mixed-methods longitudinal research to 2030 will enable it to deliver state-of-the-art research from 'birth-to-thirty', providing unique evidence to protect the lives of millions of young people from the long-term and intergenerational effects of global crises. This will provide vital evidence in the run-up to the 2030 SDGs and to support the Paris Agreement on climate change.

The goals of this vision include:

- Expanding the recently launched Research Hub on Climate Change and Environmental Shocks: The Hub will generate policy-relevant evidence on the long-term and intergenerational effects of extreme weather events, increasing temperatures and worsening air pollution across the life course, and across two generations of children and young adults. This new area of research has the potential to reframe global debates and help decision makers develop targeted climate adaptation and resilience policies with the power to improve lives and help meet the SDGs.
- Safeguarding young people's mental health in times of crises: Young Lives will pioneer new research to uncover the profound impact of crises on mental health, including in relation to conflict in Ethiopia, and shaping policies to deliver vital support for young people affected by trauma. This will include research on anxiety, depression and post-traumatic stress disorder (PTSD), alongside an innovative analysis of cortisol stress levels in hair samples an approach never before undertaken in the Global South.
- Delivering a new nationally representative longitudinal cohort study in the Global South: Building on the existing Young Lives study, the SDG Generation study will collect new data on the children of Young Lives participants and their peers including expanding into new countries where possible. This cohort study will generate ground-breaking evidence on the life trajectories of a new generation born into a time of unprecedented crises enabling in-depth intergenerational analysis.



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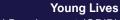


All photos © Young Lives. Young Lives images are of young people living in circumstances and communities similar to those in our study sample.

Contact

Dr Marta Favara, Director of Young Lives Email: marta.favara@qeh.ox.ac.uk

Kath Ford, Deputy Director of Young Lives Email: katherine.ford@qeh.ox.ac.uk



Oxford Department of International Development (ODID)

University of Oxford
3 Mansfield Road, Oxford OX1 3TB, UK

www.younglives.org.uk



