



STRENGTH IN NUMBERS

How longitudinal research
can support child development

The UNICEF Office of Research–Innocenti works to improve international understanding of issues relating to children's rights and to help facilitate full implementation of the Convention on the Rights of the Child in developing, middle-income and industrialized countries. Publications produced by the Office are contributions to a global debate on children and child rights issues and include a wide range of opinions. For that reason, some publications may not necessarily reflect UNICEF policies or approaches on some topics. The views expressed are those of the authors and/or editors and are published in order to stimulate further dialogue on child rights.

Core funding is provided by the Government of Italy, while financial support for specific projects is also provided by governments, international institutions and private sources, including UNICEF National Committees and the UK's Department for International Development (DFID).

Dunn K., Banati P. (2015) *Strength in Numbers: How longitudinal research can support child development*. UNICEF Office of Research–Innocenti, Florence.

Design and layout: Janice McLean

ISBN: 978-88-6522-038-2

© 2015 United Nations Children's Fund (UNICEF)

UNICEF Office of Research–Innocenti

Piazza SS. Annunziata, 12

50122 Florence, Italy

Tel: (+39) 055 20 330

Fax: (+39) 055 2033 220

florence@unicef.org

This document was conceived by Prerna Banati and written by Kate Dunn and Prerna Banati. It reflects the work of a broad network of longitudinal researchers (the GLORI network) and benefited from the reviews of Virginia Morrow and Paul Dornan at Young Lives; Marie-Claude Martin at CIGI; Dominic Richardson, Dale Rutstein and Eve Leckey at UNICEF's Office of Research–Innocenti.

PHOTO CREDITS:

Cover: © UNICEF/NYHQ2015-0612/Rich

Page 4: © UNICEF/NYHQ2014-1283/Pflanz

Page 7: © UNICEF/BANA2014-01736/Kiron

Page 9: © UNICEF/NYHQ2010-0509/Khumalo

Page 10: © UNICEF/UKLA2014 - 1836/Alcock

Page 11: © UNICEF/INDA2011-00036/Crouch

Page 13: © UNICEF/NYHQ2006-1381/Pirozzi

Page 14: © UNICEF/BANA2014-01785/Paul

Page 17: © UNICEF/SLRA2013-0609/Asselin



CONTENTS

- 5 SUMMARY
STRENGTH IN NUMBERS
- 6 INTRODUCTION
THE PURPOSE AND CONTRIBUTIONS
OF LONGITUDINAL RESEARCH
- 8 BEYOND MEASURE
WHAT LONGITUDINAL STUDIES CAN DELIVER
- 10 ABSOLUTE ADVANTAGE
THE UNIQUE NATURE OF LONGITUDINAL STUDIES
- 12 MISSING LINKS
LONGITUDINAL RESEARCH AND POLICYMAKING
- 15 A DATA REVOLUTION
SUSTAINABLE DEVELOPMENT ACROSS THE LIFE COURSE
- 16 WORKING BETTER TOGETHER
THE GLORI NETWORK
- 18 LEARN MORE



STRENGTH IN NUMBERS

How longitudinal research can support child development

Longitudinal research has the power to reveal the dynamics of child well-being and interrelationships in the spheres of child and adolescent lives: their physical and mental health, their social status and material well-being, their education and their interactions with their communities and wider worlds. By offering a deeper, longer view, longitudinal studies can both inform and test policies and programmes intended to improve those lives. Longitudinal research is central to the promise of a 'data revolution' to achieve development goals and track their contributions to improving the lives of children.

This document argues that the global development and research community should recognise the absolute advantages of longitudinal research and exploit the existing treasure trove of longitudinal data. It describes the Global Longitudinal Research Initiative (GLORI), which aims to improve the practice and use of longitudinal methods and evidence. GLORI advocates for better designed, more efficient and coordinated research that can help improve the use of this unique type of evidence in policy and practice.

A wide audience of decision-makers, including development practitioners and policymakers, may find this document and its companion [backgrounders](#) helpful in providing overviews of the usefulness and limitations of longitudinal studies, where they can add value, and how they can be used to promote a holistic understanding of children's lives.

“Data not only measures progress –
it inspires it.”

The Clinton Foundation

INTRODUCTION

THE PURPOSE AND CONTRIBUTIONS OF LONGITUDINAL RESEARCH

Can early childhood stunting be reversed?

What impact does a pregnant woman’s obesity have on her child’s long-term health?

Does having good friends in adolescence improve a teen’s life into adulthood?

These questions illustrate the breadth and depth of issues in children’s lives that can be better understood through longitudinal research – surveys of groups of people repeated periodically over a number of years. Results from such studies reveal the dynamics at play over the course of children’s lives and have tremendous potential to better understand ways to help the world end childhood deprivation in all its dimensions.

The global community is looking for more and better longitudinal research to spotlight complex, enduring problems that prevent children from achieving their full potential. Longitudinal studies strengthen the evidence base needed for more effective development interventions. This evidence base consists of useful information on the pathways and trajectories of children and adolescents over their life course. Greater harmonization and comparability of data among longitudinal studies can further deepen understanding of the factors influencing children’s well-being. This, in turn, will make for more effective policies and programmes to improve children’s lives.

Longitudinal research can also point the way to solutions, including factors that make some children

more resilient to adversity than others over the course of their lives. Increasingly, low- and middle-income countries are pursuing longitudinal data as a way to test the longer-term impact of child policies and programmes.

This report draws on the input of 40 longitudinal study experts who attended the first International Symposium on Cohort and Longitudinal Studies in Low- and Middle-Income Countries, held in Florence in October 2014. The meeting was convened by UNICEF’s Office of Research (OoR)-Innocenti and Young Lives: An International Study of Childhood Poverty. More details of the Symposium can be found at: www.UNICEF-irc.org/knowledge-pages/Symposium-on-Cohorts-and-Longitudinal-Studies-2014/1088.

Leaders of major longitudinal studies around the world have responded to growing interest in their field by joining together as part of the Global Longitudinal Research Initiative (GLORI). Housed at the UNICEF OoR, GLORI works to strengthen the quality and impact of longitudinal studies, improve value for money, standardize the technologies and approaches used and enhance coordination among researchers and institutions.



A short primer on longitudinal studies

A longitudinal study starts with identification of questions to be examined in the lives of a given group of people. Respondents may be followed up every few months or every few years, or there may be decade-long gaps between questionnaires. Each survey round is called a 'wave' and frequency often depends on the availability of funding. A study's overall length may be a few years or several decades. Individuals may be studied from before birth (during their mothers' pregnancy) through adulthood, when their own babies may join the study. The longer a study endures, the greater its value in terms of the comparisons available through each wave of the survey. However, as years pass it becomes increasingly challenging to track original respondents and maintain participation. Attrition results mainly from death, migration or disinterest.

The list below offers some distinctions between different types of longitudinal studies; studies often display characteristics of more than one type.

- 1. A CENSUS** of a country's entire population.
- 2. PANEL SURVEYS** – Individuals or households agree to take part and are tracked over time to continue participating in subsequent survey waves.
- 3. IMPACT EVALUATIONS** include randomised control trials and quasi-experimental studies. These are designed to evaluate the impact of an intervention.
- 4. COHORT STUDIES** – Individuals who have something in common (e.g. age, a health condition) are followed to explore the ways they develop and factors affecting their development as they age.
- 5. RECORD-LINKAGE STUDIES** – Administrative or survey data are linked across time. For example, census and birth records may be linked to school and health records.

BEYOND MEASURE

WHAT LONGITUDINAL STUDIES CAN DELIVER

One impetus for greater use of longitudinal studies is the unfinished agenda of the United Nations Millennium Development Goals (MDGs). While there were achievements in many areas of human development during the MDG era, gaps in progress still exist, and inequalities need tackling.

In 2015, heads of state are to consider a set of Sustainable Development Goals (SDGs) to build on the former MDGs over the next 15 years. Longitudinal studies can provide a contribution to the measurement of such development goals.

Measures can be used to establish a baseline of child well-being and to track the evolution of children's lives. Longitudinal data can show the persistence of factors that impact children's lives

and – most importantly – can unpack the underlying obstacles to change. These surveys can monitor and compare life at key development stages, starting in the womb and continuing through infancy, childhood, adolescence and even into adulthood.

Longitudinal research can monitor the long-term impact on children of everyday living in their communities, of initiatives such as vaccination or childcare programmes, of shocks such as natural disasters or war, and of serendipitous events (e.g., economic booms; an end to war). Holistic studies can explore the web of social and structural determinants, including the biological, social, economic, environmental, health and educational factors that together define well-being.

Linking multiple influences on teen well-being

In 1994, as the new millennium approached, the US Congress wanted to understand how social environments were shaping adolescent health.

The result was the interdisciplinary *Add Health* study, which is ongoing. It combines longitudinal data on respondents' social, economic, psychological and physical well-being with contextual data on family, school, friendships and romantic relationships.

Through five rounds of the study since 1994, data have linked adolescent indicators of disease to illnesses emerging later in life, highlighted how social factors influence health and revealed interactions between genes and environment.

Source: Harris, Kathleen Mullan, "Innovations in Measurement from the U.S. Add Health Study," DD Health/Carolina Population Center, October 2014.

It is “critical that the well-being of children is systematically tracked by indicators that not only give an accurate picture of the life of a child today...but also provide a window into the future for all of us.”

Group of Friends
on Children and SDGs



THE UNIQUE NATURE OF LONGITUDINAL STUDIES

While both short- and long-term studies have their uses, longitudinal studies provide the evidence base for interventions to address the multi-faceted challenges of achieving sustainable development.

A cross-sectional survey is a type of widely-used, short-term study. It provides a snapshot of a group in one particular period of time, usually in relation to a single issue. An example is assessing the relationship between income variables and health outcomes.

Because longitudinal surveys can track people over periods and can illuminate many aspects and stages of their lives, including unexpected events, they provide more of a film strip than a single image, capturing evolution over time.

In particular, longitudinal evidence can illustrate where policy and programme priorities are skewed in terms of reality on the ground. According to UK Department for International Development Chief Economist Stefan Dercon, “If gaps in learning outcomes between boys and girls are substantially smaller than inequalities between rural and urban learning outcomes, are

we prioritizing the right way?” Longitudinal evidence can unpack the evolution of these gaps and assess the impact of interventions over time.

Adapted from Dercon, below are some advantages that longitudinal studies have over other kinds of studies in informing programmes and policy:

1. REVEAL HIDDEN PROBLEMS AND OPPORTUNITIES. For example, analysis of data from the British Cohort Study of children born in 1970 showed that by the time they entered school, higher-ability children from disadvantaged backgrounds were overtaken by less-able children from privileged backgrounds. The study had a big impact: the UK government introduced free pre-school provision in disadvantaged areas. Other studies that reveal childhood resilience in the face of adversity offer opportunities to explore further the factors helping some children get through tough times.

2. ILLUMINATE TRENDS, TRAJECTORIES AND MOVEMENTS IN CHILDREN’S LIVES. Examples



Do food subsidies make people healthier?



Many governments have initiated food programmes to alleviate hunger and build human health, without evidence on how to do this most effectively. Several longitudinal studies have examined the impact of low-cost or free cereals, cash-for-food transfers and other programmes. Studies in Bangladesh, Egypt and India show that large-scale government food programmes for cheap cereals did not provide improvements in health among most intended recipients. They promoted diets high in carbohydrates but low in nutrients and that, perversely, increased malnutrition and obesity. In Bangladesh, combining nutrition education with government cash for food improved diet and nutrition and reduced stunting by 6 to 9 per cent.

Sources: Desai, Sonalde and Reeve Vanneman, *Enhancing nutrition security via India's National Food Security Act: Using an axe instead of a scalpel?*, University of Maryland, October 2014; Smulders et al., *Food Security and Nutrition in the Southern and Eastern Rim of the Mediterranean Basin*, Food & Agriculture Organization, 2013; Akhter, Ahmed, John Hoddinott, Wahid Quabili, Shalini Roy and Esha Sraboni: *Can nutrition-sensitive social protection interventions affect children's nutritional status and development?* International Food Policy Research Institute, October 2014.

include studies revealing the impact that early childhood feeding programmes in deprived areas may have in adulthood, individuals' movements in and out of poverty, and the impact of education on people's lives over time. A core strength of longitudinal research is the ability to look beyond statistical means to reflect on how patterns evolve over time and along the life cycle.

3. IMPROVE TARGETING OF INTERVENTIONS.

While natural disasters or other shocks may hurt a community in the short term, longitudinal evidence may reveal the longer-term resilience of these communities. This could facilitate future planning and resource management. On the other hand, a cohort study might highlight where such shocks undermine well-being over the long-term and point to needed intervention. Studies can also demonstrate the effectiveness of interventions, such as feeding programmes or farm-input subsidies, in mitigating shocks and in addressing long-term poverty.

4. AID INTERPRETATION OF THE UNEXPECTED AND UNFORSEEN. Longitudinal data sets provide a platform for identifying and following the unexpected. Take, for example, longitudinal studies examining economic, health and/or social issues in Africa and Asia prior to the AIDS epidemic. Those that continued into the 1990s would have picked up ample evidence of the devastation wrought by HIV/AIDS in all aspects of well-being, across society and generations.

5. HIGHLIGHT QUESTIONS THAT MAY NEED TO BE ADDRESSED IN FUTURE. A cohort study can be designed both to track people in their current context (for example, living on impoverished farms in remote rural settings) and to anticipate changes in their context (such as migration to earn more money and improve children's schooling; disaster; taking advantage of government programmes to improve their lives).

“We need the capacity
to translate longitudinal evidence
into a common good.”

Marie-Claude Martin
UNICEF-Innocenti
(now with the Centre for International Government Innovation)

MISSING LINKS

LONGITUDINAL RESEARCH AND POLICYMAKING

The case studies cited throughout this report show that many longitudinal studies have already had an important impact on policy and programmes for children. Yet all too often, longitudinal studies and policy initiatives are established in isolation from each other.

On the one hand, policies and programmes intended to improve child well-being are too often designed in response to public and/or political pressure, without an adequate understanding of the evidence across a child's life course.

On the other hand, one criticism of longitudinal studies is that they risk becoming academic exercises undertaken without a tie-in to societal priorities, decision-makers and the policymaking process.

Experts attending the Florence symposium noted many challenges in using longitudinal studies for policymaking. Three aspects of longitudinal research

requiring improvement to maximize the uptake of study findings are noted below:

1. LONG TIMELINES. Evidence emerging from longitudinal studies often arrives years after the data are generated – too late to inform relevant initiatives and to assist in evaluating them. Rather than developing new studies to answer current policy questions, policymakers and programme specialists may want to take a closer look at mining existing available data.

2. NARROW SCOPE. Most longitudinal studies have focused on specific problems and in country settings of interest to those who fund the studies. These include reproductive, sexual, maternal and newborn health; drug use; nutrition; HIV and smoking; and a focus on wealthy countries. “Research on

Slashing hypertension in pregnant Jamaicans

Decision-makers in Jamaica wanted a better understanding of maternal and newborn health problems. Longitudinal research linked premature and early deliveries to undiagnosed hypertension in pregnant mothers. In response, an information card added to expectant mothers' maternity record books advised them of the signs and risks of hypertension. This led to a 60 per cent decline in hypertension and related complications in pregnancies and deliveries.

Source: McCaw-Binns, Affette, Deanna E. Ashley, Maureen E. Samms-Vaughan, *Impact of the Jamaican birth cohort study on maternal, child and adolescent health policy and practice*, *Paediatric & Perinatal Epidemiology*, January 2010, pp. 3–11.



New lifestyles in Africa raise public health concerns

Longitudinal surveys tracking health outcomes in many parts of Africa have shown that communicable diseases (e.g., measles) are declining while non-communicable chronic diseases (particularly obesity, diabetes, cardio-vascular and metabolic conditions) are rising. They demonstrate that urbanization and related changes in lifestyle and diet are altering the public health portrait of many sub-Saharan African countries.

This evidence has sparked a recalibration of public health and research priorities. For example, studies are underway to examine how maternal diabetes and obesity in African women affects their children's long-term well-being.

Sources: African Partnership for Chronic Disease Research; INDEPTH Network; H3Africa; Birth to Twenty.

smoking, alcohol, drugs and unsafe sex has been done to death in rich countries, while other risk-related questions remain unexplored in low- and middle-income countries," said Virginia Morrow of the Young Lives longitudinal study. Further in this vein, many at the Florence symposium echoed Andy Dawes (University of Cape Town) in calling for more longitudinal studies to address wider and hidden childhood experiences in a holistic fashion. These might include:

- how factors in utero and in adolescence can impact health and employment in adulthood
- problems faced by children 'left out' of development, e.g., disability, rural and urban disadvantages, homelessness, children who leave school early and child brides after marriage
- the interplay among biology, society, community, environment and the economy in determining children's well-being.

3. LIMITED LINKS BETWEEN RESEARCH

EFFORTS. A survey by the Wellcome Trust found

77 cohort studies focusing on health issues in 32 low- and middle-income countries. "But every month I come across a handful more that I haven't heard of before," said Jimmy Whitworth of the Wellcome Trust.

Wellcome's survey-of-surveys found most are conducted in Africa and Asia, with central Asia and the Middle East getting scant attention. Few are urban, examine mental health or injuries, are linked to other studies, offer the possibility of data harmonization or provide open access to data.

Much of the time, data from related studies can't 'talk' to each other due to technological hindrances, privacy and security issues, refusal to share data, and other issues. In a May 2014 report, the UK's Expert Advisory Group on Data Access found that the research culture and environment is not perceived to be providing sufficient support or reward for data sharing. Addressing these questions would mean that researchers could mine each other's data and create important new linkages rather than initiating new, similar studies.



Breaking new ground: Evidence that stunting can be reversed

One of the most exciting trends in longitudinal studies is the search for what makes some children more resilient than others in surviving difficulties. Jo Boyden of the Oxford-based Young Lives longitudinal study has said that too many studies focus on what is going wrong rather than what is going right in children's lives. "While it's far preferable to prevent stunting than to try to reverse it," she said, "this denies the possibility of remediation."

Powerful new evidence on stunting shows how some children's resilience, combined with appropriate interventions, can reverse what has been considered irreversible.

Young Lives, which studies children in Ethiopia, India (state of Andhra Pradesh), Peru and Vietnam, has found evidence that stunting has been reversed, particularly through school feeding programmes. "Those who caught up did not seem to have cognitive impairment," said Abhijeet Singh of Young Lives.

About 65 per cent of Filipino children are stunted by age two, but the Longitudinal Health and Nutrition Survey in Cebu found that 22 per cent of them were healthy as adults.

When stunted children in Guatemala were given fortified food for a period in the 1960s, researchers were initially unable to find evidence of any improvement in their cognition compared to children in a control group. Four decades later, another group of researchers found that those childhood participants, now adults, did indeed show evidence of cognitive improvement and greater 'human capital formation'. Those from the feeding programme had gained at least one more year of schooling and the males earned 34–46 per cent more than those in the control group.

"This faltering is often thought to be irreversible," said Boyden. "But perhaps stunting is not as hopeless as believed."

Sources: Boyden, Jo and Abhijeet Singh, *Risk and resilience in childhood*, Young Lives, University of Oxford, October 2014; Adair, Linda, *Relating early childhood to adult outcomes: Evidence from the Cebu Longitudinal Health and Nutrition Survey*, Carolina Population Center, October 2014; Stein, Aryeh D., *When children become adults: Lessons from the INCAP longitudinal study on migration and attrition*, Rollins School of Public Health, Emory University, Atlanta GA, USA, and INCAP (Instituto de Nutrición de Centro América y Panamá), October 2014.

“Data and metrics were a mere afterthought to the establishment of the MDGs.”

Leadership Council of the
Sustainable Development Solutions Network

A DATA REVOLUTION

SUSTAINABLE DEVELOPMENT ACROSS THE LIFE COURSE

In advocating a new set of integrated Sustainable Development Goals (SDGs) to replace the MDGs, the Leadership Council of the Sustainable Development Solutions Network is calling for a ‘data revolution’ to support achievement of the SDGs.

There is potential for longitudinal research to contribute in a significant way to the measurement of the SDGs over the next 15 years, and to support the sustainability of development results across the life course.

There is a wealth of information from existing cohort studies currently underway. Through the GLORI network, leaders of these studies are well positioned to advance global knowledge in some critical thematic areas on important topics for child well-being.

The SDG process could be complemented by longitudinal research by:

- 1. PROVIDING** an understanding of the drivers underpinning SDG indicators and a deeper analysis of the background variables required to optimize interventions for child development;
- 2. PROVIDING** an assessment of the timing of development windows, and related interventions to maximize the impact of interventions across development outcomes;
- 3. PROVIDING** an opportunity to determine relationships between development domains, and therefore SDG indicators, and to contribute to informed policy discussions on the potential sequencing of interventions;
- 4. REFLECTING** on measures beyond the SDG indicators that may have critical bearing on their success.

This data revolution is expected to have impact far beyond the SDGs. It is an opportunity for those engaged in longitudinal studies to maximise resources, knowledge, know-how and impact at the local, national, regional and international levels. It will support capacity building, particularly in national statistical agencies in low- and middle-income countries.

The Leadership Council’s concept of a data revolution to support the SDGs fits well with the vision of many longitudinal researchers who want to improve the delivery, sharing and public relevance of longitudinal results. The new push is for better-quality data and for deeper understanding as to what the data points to, in terms of trends, problems, solutions and emerging issues, such as resilience.

“The value of evaluation and research must ultimately be judged by its usefulness in helping to improve outcomes for target beneficiaries.”

Nalini Tarakeshwar, Children’s Investment Fund Foundation

WORKING BETTER TOGETHER

THE GLORI NETWORK

The Global Longitudinal Research Initiative (GLORI), born out of the Florence Symposium, is the hub of a collective effort to achieve the aims laid out in this report. Its Secretariat is based at UNICEF’s Office of Research-Innocenti. The network will guide a reorientation towards a ‘valued-added’ discussion of longitudinal research.

GLORI will contribute to the creation of globally comparable metrics to track progress in multiple dimensions of well-being. This has the potential to provide timely contributions to the development of comparable core global measures as baselines for the SDGs. By aggregating national studies, GLORI will help advance global knowledge on important child-related topics. It also has the potential to contribute to cross-national/regional monitoring and evaluation initiatives.

At the national level, GLORI will help create more cost-effective study instruments that build on existing efforts and allow comparative analysis. It will increase awareness and evidence-based advocacy for longitudinal research and support linkages between research findings and policy uptake.

Using a collaborating-centres approach and working with a range of partners from the research and policy communities, GLORI will help build the capacity of its partners and collaborators to design and conduct research to inform policies and public debates on children’s issues. Through the UNICEF infrastructure, it will also support governments to encourage more effective use of longitudinal data.

Research findings will be accessible through online platforms, and evidence-informed discussions will be facilitated through online and face-to-face forums.

By addressing the nine areas below, GLORI will help longitudinal research to reach its full potential.

1. GREATER COMPARABILITY: Promoting data instruments and measures that are consistent and comparable across sectors and geographies (e.g., health data structured so it can be linked with education and economic data; household data linked to facility level data).

2. IMPROVED TIMELINESS: Generating more and better data sets in a timely manner, including in real time using cell phone and GPS technology; consolidating and validating longitudinal findings; promoting linkages between data sets and their widespread use; mining existing data sets where useful and appropriate.

3. INCREASED RELEVANCE: Tying longitudinal studies into societal priorities; engaging with decision-makers so that longitudinal results inform policies and programmes; relaying evidence back to stakeholders, including the general public. Proposed outcomes include a reorientation towards a ‘valued-added’ discussion of longitudinal research, potentially contributing to lowering the relative cost of longitudinal cohort research by creating economies of scale.



4. RESEARCH EXCELLENCE: Coordinating methodologies and sharing practical approaches and know-how across studies.

5. BETTER TECHNOLOGY: Fully exploiting digital technologies and practices to maximize the acquisition, management and usefulness of data. These technologies include cell phones, GPS systems, open-source data, information management, biometric tracking, Big Data to elicit trends, and blood-sample banking.

6. HOLISTIC APPROACHES: Taking a holistic view of the multiplicity of factors affecting children, and, where appropriate, assessing and addressing factors that determine child well-being across children's life course into adulthood.

7. MIXING METHODS: Including qualitative research that elicits children's views and descriptions of their everyday experiences, in the form of longitudinal biographical research, as well as qualitative research conducted with children's caregivers and others in their communities.

8. FOSTERING GOOD PRACTICE: Longitudinal researchers working better together to increase capacity to conduct and analyse longitudinal research and improve practices in studies.

9. 'DEMOCRATIZING' DATA: Facilitating better global access to data will boost knowledge and is a public good in and of itself.



LEARN MORE

We hope this document helps engender greater awareness of the absolute advantages of longitudinal research, with recognition of the existing treasure trove of longitudinal data available for understanding children's current and future lives.

For more information about longitudinal research in support of child and adolescent development, read the backgrounders prepared to complement this overview report:

- **BEST PRACTICE**

Data drives policies, programmes: JA Kids

Sharing data, promoting innovation: YOUNG LIVES

Capacity building boosts sustainability: INDEPTH NETWORK

Communications maintain participation: ALSPAC

Innovative research on social transfers: TRANSFER PROJECT

- **OPEN UP:** Sharing data, promoting innovation
- **WHO COUNTS, WHO CARES:** Promoting engagement and impact
- **ETHICS FIRST:** Privacy, consent and digital data
- **STATISTICS AND STORIES:** Qualitative research fills in the blanks
- **A GLOBAL AGENDA:** Sustainable Development Goals and longitudinal research

You can also read presentations and the summary report from the International Symposium on Cohort and Longitudinal Studies in Low- and Middle-Income Countries, held in Florence in October 2014: www.UNICEF-irc.org/knowledge-pages/Symposium-on-Cohorts-and-Longitudinal-Studies-2014/1088.

“Describing patterns, not measuring the mean or making causal analysis, is the core strength of longitudinal studies.”

Stefan Dercon
UK Department for International Development

Longitudinal studies in the GLORI network



