



**Global**  
**Longitudinal**  
**Research**  
**Initiative**

*GLORI is a global network of longitudinal researchers working with data on children in low, middle and high income countries. The network has a Secretariat based at UNICEF's Office of Research - Innocenti.*

# The Unique Value of a Longitudinal Approach

- Captures the dynamic nature of processes that shape child development, including trends and trajectories
- Can capture intergenerational transmission
- Understands drivers and determinants of outcomes
- Measurement and evaluation of impact
- Captures child wellbeing in holistic & integrated ways
- Can play role in building evidence for policy and programme

*'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.'*



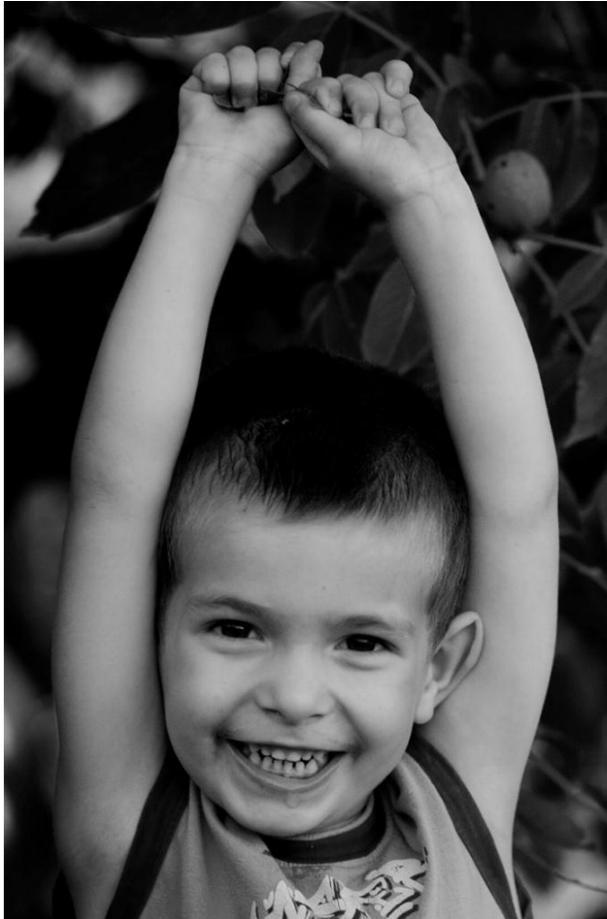
# A short primer on longitudinal studies

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.

# Why we need a coordinated approach



Consistency and comparability of data on children and adolescents can be improved

- SDG push for better data quality
- Data needs wider ownership, more analysis and use
- Data instruments and study protocols are frequently reinvented
- Research needs better links to policies and programmes
- Growing number of new studies
- Studies could benefit from sustainable approaches

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

# An Introduction to GLORI

GLORI is a global network of longitudinal researchers working with data on children in low, middle and high income countries.

Set up in 2014, the network has members working in over 30 countries.

The GLORI Secretariat is based at UNICEF's Office of Research - Innocenti.



This is a developing community of practice seeking to:

- Add to the evidence base through a coordinated approach
- Create an inventory of resources and harmonise tools in some areas
- Document and share best practice
- Develop mechanisms to strengthen institutional capacity and local ownership
- Explore contributions to the SDGs

# GLORI's Programme of Work

**A four year programme of work is under development**

## **Knowledge generation and coordination**

- Online repository
- Comparison of existing datasets to answer questions on child and adolescent wellbeing with life course perspective
- Coordination of measurement instruments and adaptability
- Articulate the value

## **Building capacity for technical excellence**

- Share best practice
- Learning and training also for young researchers
- Small grants
- Identify and promote mechanisms for research uptake
- Support new cohort studies guided by post 2015 framework

## **Extending the reach of current cohort studies**

- Improve cost effectiveness
- Share practices on new tools, innovations
- Explore extension to humanitarian or fragile contexts
- Explore a pooled set of core measures for an SDG cohort



# Recent events

## **International symposium on cohort and longitudinal studies in low and middle income countries**

October 2014, Florence Italy

This was the first network meeting.

### **Objectives**

To identify how cohort and longitudinal studies can uniquely contribute to current areas for policy and research, and to share latest findings emerging from different studies.

To share lessons on the practice of longitudinal studies, to explore what the next generation of knowledge from longitudinal studies might look like.

To explore determinants of local ownership and sustainability of cohort and longitudinal studies.

## **Using Longitudinal Data to Support the Sustainable Development Goals: Expert Round Table**

July 2015, Oxford UK

This meeting sought to determine how longitudinal research could be better leveraged to inform the SDGs

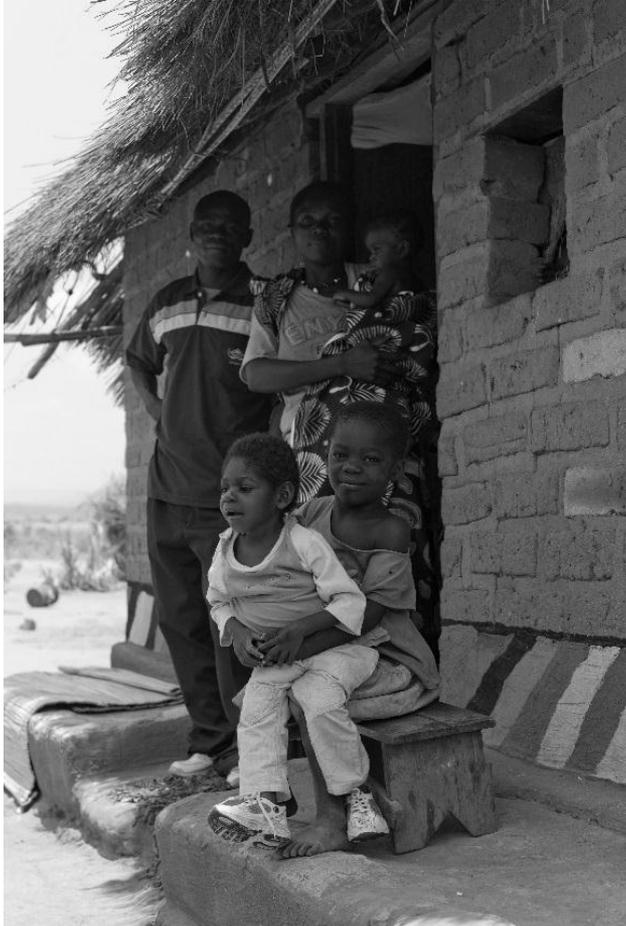
### **Objectives**

Identify methodologic and thematic areas can longitudinal research contribute to the SDGs

Define topics for a research agenda

Identify links and who needs to be involved

More information at: <http://www.unicef-irc.org/knowledge-pages/Global%20Longitudinal%20Research%20Initiative%20-%20GLORI%20/>



# Recent publications



## INTERNATIONAL SYMPOSIUM COHORT AND LONGITUDINAL IN LOW AND MIDDLE INCOME

Florence, Italy  
13-15 October 2014  
Meeting Report



## STRENGTH IN NUMBERS

How longitudinal research  
can support child development

BACKGROUND

## A GLOBAL AGENDA

### SUSTAINABLE DEVELOPMENT GOALS AND LONGITUDINAL RESEARCH

In September 2015, government leaders from around the world took together to approve plans for the Sustainable Development Goals (SDGs). These 17 goals are a blueprint for people to live better, healthier lives while improving their communities and protecting the planet.

The SDGs of indicators will help countries measure progress on poverty, health, education, gender equality, economic growth, clean energy, climate action, and sustainable cities and communities.

## OPEN UP

### SHARING DATA, PROMOTING INNOVATION

Innovation combined with greater data sharing has the power to revolutionize longitudinal research, making it cheaper and faster to conduct and more effective in informing policies and programmes. Some innovations are already being implemented. Many depend on and promote the use of open data.

One non-technological innovation is the move to greater sharing of not just data, but also study ethics policies and the questionnaires used in them. "Each study doesn't have to originate everything from scratch," said Gero Carletto of the International Center for Diarrhoeal Disease Research, Bangladesh. "This kind of sharing is a particularly important part of building capacity for longitudinal research in low- and middle-income countries."

The biggest technological advances in longitudinal studies are expected to come through the use of computing, telecommunications and biomarkers (blood pressure, heart rate, body mass and blood sugar).

#### The data revolution

While proposals abound for the launch of new longitudinal studies, existing data from completed studies is a treasure trove of untapped information on factors affecting child development. The reality is that a significant proportion of data already available have never been analysed to inform policy. Often, research findings draw only from a subset of questions and measures in a survey – the full dataset remains underutilised. Addressing this waste of resources is a main concern for GLORI. Our findings prove the harmonization and accessibility of data is increasing its repurposing for wider use than it has been for some time.

As Gero Carletto of the World Bank notes,



Qualitative approaches also help us understand children's lives in more detail than quantitative data can allow.

The most common method involves interviews with individuals in the home. This is collected through group discussions with participants, as well as in 1:1 interviews with participants' larger circle of family and friends.



Longitudinal researchers are learning to build and maintain contact and influence with stakeholders. But it's not easy, given that studies run for 10, 15, 40 or more years. Many funding agencies don't want to invest in stakeholder engagement, and many researchers continue to be focused on academic priorities (journal publications) rather than public priorities.

"We're not taught to be marketers," said Maureen Sammis-Vaughan, a medical doctor and professor leading the Jamaica Birth Cohort longitudinal study. "We are social scientists, economists, medical people, nutritionists... But marketing is what we have to do if we want to keep participants engaged in our studies and if we want our results to

BACKGROUND

## ETHICS FIRST

### PRIVACY, CONSENT AND DIGITAL DATA

Ethical questions and concerns have emerged with the evolution of the digitisation and growing use and archiving of biomarkers. Privacy and consent are key issues. Research practitioners can accommodate these issues at various design stages:

BACKGROUND

Are controls on accessing data sufficient to protect privacy, releasing it to non-identified individuals? If access is to study leaders put in place? This could range from simple passwords, to requiring a committee.

California, a researcher working with the Mauritius Joint Health Project. And what about people who unwittingly joined a survey in infancy, with their parents giving researchers permission to study their child? What happens when, as adults, such participants withdraw permission and all their data from the study? Finally, how can biomarkers be preserved indefinitely, for future study, particularly in low-income settings with few resources available for archiving? Can individuals really provide consent today for unknown uses of their samples in the distant future?

The Global Longitudinal Research Initiative (GLORI) aims to support the adoption of standards for dealing with digital data while promoting the fullest possible use of data in all aspects of conducting research.

BACKGROUND

## STATISTICS AND STORIES

### QUALITATIVE RESEARCH FILLS IN THE BLANKS

Qualitative researchers explore the social and behavioural circumstances underpinning the statistics.

Investigate the why and how of the what, where, and when research is integrated with quantitative data. The two together can help improve child well-being.

For example, a quantitative survey of the trend for girls to marry in Ethiopia, but not why and under what circumstances. These questions can, as researchers, who treat the active participants in the decision-making process. Doing so helps researchers gain insights into family dynamics, cultural contexts, as well as how the options available to them.

- to maintain participation by individuals included in the studies.
- to network more effectively with relevant stakeholders, including other longitudinal study practitioners, NGOs, academics, donors and government officials who can support the study
- to encourage evidence-informed policy by building connections with politicians, senior bureaucrats, media and others who influence public discourse and policies on which the research may have impact.
- to provide plain-language results from longitudinal studies to those who have invested in them: citizens, governments, donors and survey practitioners.

### PROMOTING ENGAGEMENT AND IMPACT

Organizing and conducting a scientifically rigorous longitudinal study is a complex, expensive undertaking. Increasingly, donors also expect researchers to add stakeholder engagement activities to their plans and budgets.

The goals of such engagement activities are:

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## WHO COUNTS, WHO CARES?

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# The Sustainable Development Challenge

- **Overarching question:** how can longitudinal research be better leveraged to track the development and wellbeing from childhood through adolescence and to better understand the trajectories of children globally, in a way that helps inform the SDGs?
- **Concretely, can GLORI contribute to discussions:**
  - In which methodologic and thematic areas can longitudinal research contribute to the SDGs?
  - What could a research agenda look like?
  - What links need to be made and who needs to be involved?



# Longitudinal research in the SDGs



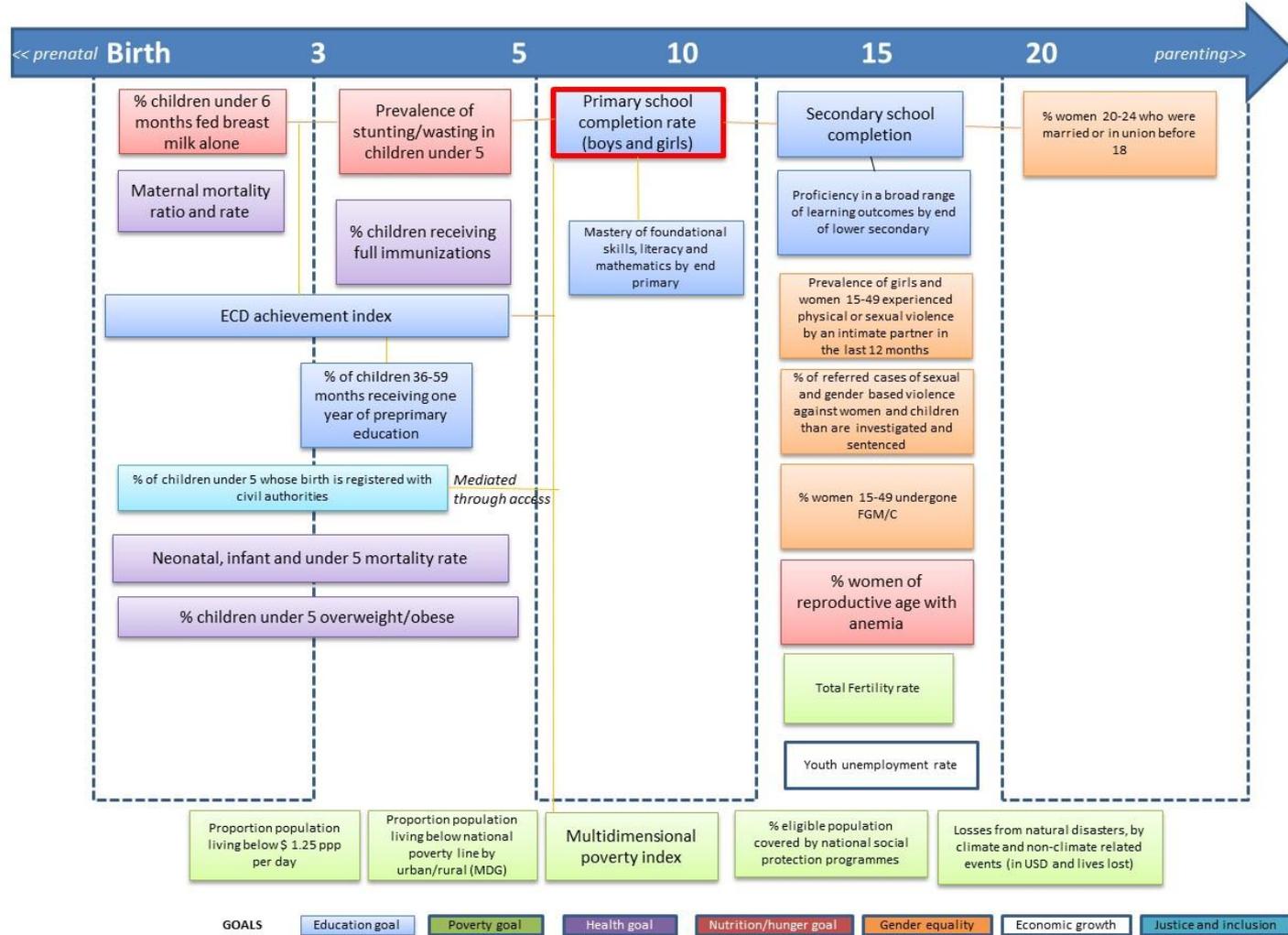
Longitudinal data can inform development goals, and help the SDG framework

- Current SDG framework has limited ability to understand the connections across development domains
- Cross-sectional indicators restrict our ability to see the evolution of a child/adult over his or her life course, including intergenerational transmission of key determinants of wellbeing
- Improving quality - Using longitudinal data to cross-check cross-sectional data
- Some key areas are undertreated (e.g. prenatal, adolescents)

# A Lifecourse representation of the SDGs

Diagram describes non-exhaustive set of relationships between SDG indicators that are relevant for children and bear on primary school completion rates as an illustration.

The positions of the indicators are suggestive of the expected time of the outcome measured.



Note: The diagram presents a non-exhaustive set of (causal) relationships between SDG indicators that bear on primary school completion rates as an illustration. The SDG indicators presented here a subset, focused on those with direct relevance for children and excludes complementary indicators. The positions of the indicators are suggestive of the expected time of the outcome measured.

# Next steps

- Meeting later on in the year – October, November
- The goal is to develop a joint work plan for a response to SDGs
- Support indicator development
- Cross study analysis
- Completion of a sequencing study
- Policy evaluation / natural policy experiments
- Capacity building / appropriate use of these studies



Questions?

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