



## Longitudinal Studies and the National Centre for Longitudinal Data (NCLD)



This overview of longitudinal studies aims to demonstrate the value of longitudinal data, particularly how it can support decision makers to address critical questions.

**Longitudinal data** is data collected from the same individuals (or households, businesses or other entities) repeatedly over time. The data is able to show how actions and events can affect outcomes later in life.

Longitudinal data differs from **cross-sectional data** that most people are familiar with, such as Australia's Census of Population and Housing. A cross-sectional survey provides a snapshot of data at a single point in time. A series of repeated cross-sections, or time-series, can show broad population trends over time, but unlike longitudinal data, cannot show persistence or changes within individuals.

Longitudinal data can be collected from **surveys** which follow and collect data from the same subjects over time (for example, by participants being interviewed in person or over the phone), or can be constructed using **administrative data**<sup>1</sup> available from a number of sources, such as health, education or taxation.

Both types of longitudinal data provide an evidence base for research and inform the development of public policy. And by linking survey and administrative data together, even richer and more detailed longitudinal data sets can be created.

<sup>1</sup> Administrative data refers to information collected primarily for administrative (not research) purposes. This type of data is typically collected by government departments and other organisations for the purposes of registration, transaction and record keeping, usually during the delivery of a service.

### How does longitudinal data support good decision making?

Analysing cross-sectional data is an important first step in identifying and describing policy problems. For example, the Census provides the best estimates of the numbers of people in the population with particular characteristics such as level of education or housing status.

Longitudinal data allows decision makers to go beyond describing the extent of a policy problem to understanding how and why problems occur. It also enables identification of the consequences of problems. Because longitudinal data tracks individual pathways, it can show how different people respond to opportunities and setbacks, and how their responses and outcomes change in the short and long term.

This provides researchers and policy makers a breadth and depth of perspective – showing how circumstances and policy levers affect outcomes over time.

### Understand persistence and change in people's circumstances

Experiencing disadvantage such as poor health or poverty can be a temporary set-back for some, but for others these problems can be entrenched. In each case a very different policy response is required. To measure persistence, cross-sectional surveys could in theory ask people to recall their earlier circumstances.

However, research shows that these recall measures tend to be biased and unreliable, particularly over longer time periods.

Only longitudinal data can reliably show whether circumstances are:

- temporary,
- persistent (and if so, for how long), or
- recurrent / relapsing (and if so, how often relapse occurs).

Longitudinal data allows researchers to determine what factors influence transition and persistence. For example, what supports the long term unemployed to get and keep a job, what factors influence the course of recurrent mental health problems, or how people change their asset portfolios before, during and after retirement and in response to government policies.

## Know what makes a difference to people's outcomes

Effective policy necessarily targets the causes of problems. However, for many complex policy problems it is not easy to quantify the size and direction of the different causal influences that really matter.

While randomised control trials, such as the 'pill-placebo' studies used in medical research, are the 'gold standard' for demonstrating causal relationships (determining the factors that influence or cause an outcome), it is often impractical or unethical to run such studies to assess policy questions. For example, you can't randomise experiences of racism on a sample group.

Longitudinal data often provides the next best available evidence for quantifying the relative strength of different causal influences on an outcome. Longitudinal data can show the temporal sequence of possible causes and effects and so provide evidence that is consistent with a causal relationship.

Statistical methods such as 'fixed effects' regression models can be employed to examine the effects of various factors on life outcomes such as earnings, unemployment and life satisfaction. These models can control for the effects of stable characteristics of individuals that are typically not observed, such as innate ability and motivation, that may otherwise bias estimates of effects when using cross-sectional data.

Without knowing and quantifying these causal processes, it is not possible to know whether, and to what extent, a policy designed to achieve an outcome (e.g. better mental health of children) by improving some situation (parenting) is likely to work.

## Explain how experiences interact over time and across different life domains

Many longitudinal studies collect information across a breadth of domains such as early childhood, parenting, education, employment, physical and mental health, finances, housing, social relationships, and family. In addition, longitudinal data can show how these domains interact across the life span – from as early as before an individual is born right through to subsequent generations.

By exploiting this breadth and depth of data, longitudinal studies are particularly powerful tools for identifying sensitive windows of development when the return on investment from policy intervention can be very high. The benefits of early intervention and prevention can also spread across portfolio outcomes. For example, longitudinal data has underpinned the understanding of how social and economic investment in early childhood benefits subsequent educational, mental health and employment outcomes.

By informing early intervention strategies, longitudinal data is uniquely placed to help address problems that are much harder and more expensive to change later in life.

## Test ideas and evaluate policy

Longitudinal data can help decision makers test and cost policy ideas and evaluate smaller scale interventions.

Comprehensive longitudinal data can help quantify the cumulative costs of policy action (or inaction). A number of longitudinal studies include linkages with administrative data (such as Medicare) that allow policy-makers to establish the costs and potential cost-effectiveness of different policy options. Many longitudinal datasets also include indicators that are frequently used to monitor or compare policies – for example, the National Assessment Program – Literacy and Numeracy (NAPLAN) data in education has been linked to the Longitudinal Study of Australian Children (LSAC).

### Duration of poverty

Poverty experienced even for a short period of time is undesirable, but more so is long-term or entrenched poverty.

The Household, Income and Labour Dynamics in Australia (HILDA) Survey can track the duration of poverty spells. Generally, 40% of adults who enter poverty one year are still in poverty the next year. By the third year, levels are at 23%. Furthermore, whilst in the minority, approximately 2% of spells will last 13 years.

Poverty spells commenced by single non-elderly males and couples with dependent children are relatively more likely to last only one year, and less likely to last six or more years. However, elderly people are more likely to experience a spell of poverty for at least six years.

Significantly, despite having high poverty rates in each year, lone parents are more likely to have shorter poverty spells. This could reflect the temporary nature of this family situation, since lone parents can partner or children cease being dependent.

Without longitudinal data it would not be possible to identify these trends or key demographics. Moreover, it emphasises the need for policy to prioritise those in entrenched poverty.

**Further information:** Wilkins, R. (2016). "The Household, Income and Labour Dynamics in Australia Survey: Selected Findings from Wave 1 to 14, the 11th Annual Statistical Report on the HILDA Survey". The Melbourne Institute of Applied Economics and Social Research, Melbourne University.

Longitudinal studies can also serve as a benchmark for evaluating smaller scale, trial interventions.

By matching individuals within a small scale intervention trial with individuals sharing similar observed characteristics from a longitudinal study (who have not experienced the intervention) it is possible to estimate how effective the intervention is compared to the status quo.

## Types of longitudinal studies

Although all longitudinal studies share the distinguishing feature of linking individual data records taken at different points in time, there are a wide range of longitudinal study designs, with different areas of focus.

- Household panel surveys such as the Household, Income, and Labour Dynamics in Australia (HILDA) Survey typically focus on the dynamics of economic and subjective wellbeing, employment and families.
- Birth cohort studies (e.g. LSAC – B cohort) collect data from the families of children in their first year of life (or before) and follow them over time to investigate how early life experiences (childcare, early health, schooling etc.) influence educational, health and employment outcomes in later life.
- Age cohorts are similar to birth cohort studies, but respondents are older when data is first collected. For example, the LSAC – K cohort were aged 4-5 years in the first wave of data collection, and Longitudinal Surveys of Australian Youth (LSAY) cohorts are aged 15 years at Wave 1.
- Special population studies such as Building a New Life in Australia (BNLA) or the Longitudinal Study of Indigenous Children (LSIC) focus on the experience of individuals with a particular background, such as recently arrived migrants to Australia or Indigenous people.
- Area studies involve the experiences of individuals from a particular location and are commonly used to investigate physical health or to investigate the experience of local institutions or services.
- Other specialised longitudinal studies can track other groups for analysis – for example the Business Longitudinal Survey follows a cohort of small to medium enterprises over time.

## Factors leading to incomplete immunisation in children

To examine the factors leading to incomplete child vaccination, the Longitudinal Study of Australian Children (LSAC) data from 2004 to 2008 was linked to the Australian Childhood Immunisation Register (ACIR). Of all fully immunised children, 99% of parents correctly said that their child was up to date. However, 44% of parents (representing 6,160 study children aged 7 to 10 months) of partially immunised children also said their child was up to date. Of children not immunised, 18% of parents (about 730 of the study children) said their child was up to date.

The attributable factors for non-immunisation at the child's age at 12, 24, and 60 months were analysed. Across the whole sample, at 12 and 24 months, around 50% of non-immunisation was attributable to parent disagreement with childhood immunisation, and at 60 months around 62% of non-immunisation was attributable to parent disagreement.

This was the first nationally representative study to show that parental attitude to immunisation is a stronger correlate for incomplete immunisation, as compared to other factors such as lack of time or lower financial resources.

From 1 January 2016, the vaccine conscientious objection was no longer considered an exemption category for immunisation, and incomplete immunisation would result in penalties.

**Further information:** Edwards, B, Homel, J. (2015). "Demographic, attitudinal and psychosocial factors associated with childhood immunisation". *LSAC Annual Statistical Report 2015*. pp. 71-98

## Comparing different types of data

	Longitudinal data	Cross-sectional data	Randomized control trials	Qualitative research – e.g. focus groups
Demonstrate Causal Processes	✓✓	✓	✓✓✓	—
Evaluate diverse outcomes over time	✓✓✓	✓	✓	✓
Quantify persistence and transition	✓✓✓	✓	—	—
Quantify prevalence	✓✓	✓✓✓	—	—
Qualitatively describe individual stories	—	—	—	✓✓✓

✓✓✓ Best available standard of evidence, where practically and ethically feasible.

✓✓ Good scope for conducting this analysis – but some limitations.

✓ Limited scope to conduct this analysis.

— Rarely or never used or designed for this purpose.

## The role of the National Centre for Longitudinal Data (NCLD)

The National Centre for Longitudinal Data (NCLD) was established to advance a longitudinal evidence base able to inform policies to improve the wellbeing of Australians throughout their lives.

The NCLD is:

- Guiding future government investment in longitudinal surveys and data, having just completed a national Review of Australia's Longitudinal Data Architecture
- Actively promoting the use of longitudinal data by researchers and policy makers
- Managing four nationally significant longitudinal data sets
- Supporting increased collaboration between the developers of longitudinal surveys, researchers and policy makers
- Exploring new ways of linking longitudinal data sets to gain a deeper understanding of Australian society.

## Our studies

### The Household, Income and Labour Dynamics in Australia (HILDA) Survey

Collected annually since 2001, HILDA provides insights into Australians' economic and subjective wellbeing, the labour market, and family dynamics.

### Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)

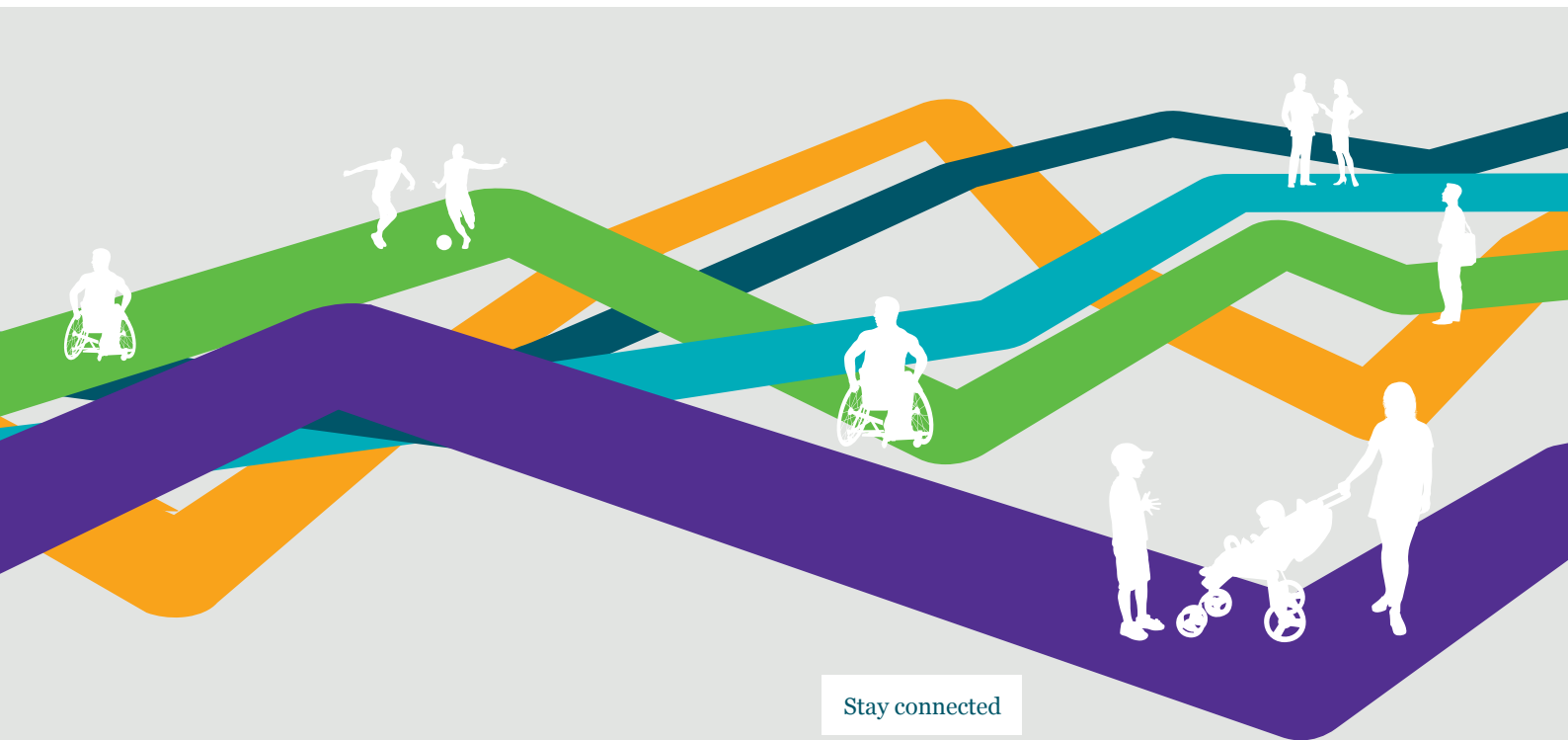
LSAC commenced in 2004 with over 10,000 families participating in the first wave. LSAC explores the contribution of children's families, social, economic and cultural environments to their development, adjustment and wellbeing.

### Footprints in Time: The Longitudinal Study of Indigenous Children (LSIC)

LSIC is one of the largest studies worldwide following Indigenous children and their carers over time. Almost 1,700 families from remote, regional and urban Australia participated in the first LSIC survey in 2008.

### Building a New Life in Australia (BNLA): The Longitudinal Study of Humanitarian Migrants

BNLA aims to identify the factors which help or hinder the successful settlement of humanitarian migrants in Australia. BNLA began in 2013 with a cohort of 2,400 people who had been granted a permanent humanitarian visa in the three to six months prior.



Stay connected

[NCLD@dss.gov.au](mailto:NCLD@dss.gov.au)

[www.dss.gov.au/NCLD](http://www.dss.gov.au/NCLD)

<http://thesource.dss.gov.au>



## Building a New Life in Australia (BNLA): The Longitudinal Study of Humanitarian Migrants



### Overview

Building a New Life in Australia (BNLA) is the first comprehensive study of its kind in more than a decade, studying how humanitarian migrants settle into a new life in Australia.

This longitudinal study is being conducted over at least five years, with annual data collections spanning participants' early months in Australia, through to their eligibility for citizenship. Data collection commenced in 2013.

### Purpose of the study

- To identify factors that either help or hinder the successful settlement of humanitarian migrants.
- To generate a valuable longitudinal evidence-base which will assist Government to design new policies and improve programmes for future humanitarian migrants.

### Study participants

The study cohort comprises more than 1,500 migrating units<sup>1</sup>, approximately 2,400 individuals, who were granted a permanent humanitarian visa in the three to six months prior to commencement. Study participants live in large and small communities around Australia, across most states and territories, with most living in Melbourne and Sydney.

These humanitarian migrants have diverse backgrounds and experiences, coming from 35 different countries and varied cultural backgrounds. Close to 50 different languages are spoken by the participants, and at commencement, their ages ranged from 15 to 83 years. Almost all had arrived in Australia in 2013 to start a new life, escaping trauma and persecution before their arrival.

### Data collection

Information is collected annually via alternating waves of home visits (waves 1, 3 and 5) and telephone interviews in (waves 2 and 4). Data is collected annually between October and March.

In wave 1, the survey and participant materials were translated from English into 14 different languages, with around 90% of participants completing the survey in a language other than English in the first wave. The most common languages were Arabic and Persian.

### More information on the survey is available at

<http://www3.aifs.gov.au/bnla/> or at [www.dss.gov.au/nclld](http://www.dss.gov.au/nclld)

Stay connected

[NCLD@dss.gov.au](mailto:NCLD@dss.gov.au)

[www.dss.gov.au/NCLD](http://www.dss.gov.au/NCLD)

<http://thesource.dss.gov.au>

<sup>1</sup> A migrating unit is the grantee of a humanitarian visa plus others — typically immediate family members — accompanying the visa holder to Australia.

# Study Content Overview

---

## Housing and neighbourhood

- Assistance in finding housing
- Number of times moved home
- Tenure type
- Quality of housing
- Number of bedrooms
- Neighbourhood characteristics

## English language proficiency

- Languages spoken at home
- English language proficiency
- Whether attending English language classes
- Use and helpfulness of interpreting services

## Employment and income

- Current employment status
- Employment characteristics
- Prior occupation and work experience before coming to Australia
- Experience of unemployment in Australia
- Income and government benefits received
- Financial strain

## Health

- Physical and mental health
- Life stressors and coping

## Self-sufficiency

- Experiences and ease of accessing services
- Information and transport
- Barriers to service use

## Community support

- Levels of support from national, religious and other community group
- Involvement in community activities
- Ease of making friends
- Sense of belonging in Australia
- Social networks available upon arrival

## Child-specific elements

- Use of English and language of family
- School enrolment and year level
- School absenteeism
- Delinquent behaviour
- Awards/recognition/academic achievement
- Parental warmth and discipline.

## Personal resources and life satisfaction

- Satisfaction with current life and situation
- Self-concept
- Self-efficacy
- Levels of trust in different community groups and organisations
- Experience of discrimination

## Family composition and demographics

- Age
- Gender of family members
- Country of birth
- Marital status

## Education and training

- Highest level of education achieved
- Current education and training undertaken
- Educational aspirations
- Previous qualifications gained prior to arrival in Australia
- Whether previous qualifications have been recognised

## Life before Australia

- Life before settling in Australia including countries resided in prior to arrival
- The experience of deprivation or trauma
- Time spent and type of services accessed in refugee camps, Australian detention centres or community detention
- Reasons for migrating to Australia
- Immigration experience

## Life in Australia

- Expectations of life in Australia before arrival
- Factors promoting or hindering settlement
- Ease of settling in Australia



## Household, Income and Labour Dynamics in Australia (HILDA) Survey



### Overview

The Household, Income and Labour Dynamics in Australia (HILDA) Survey is a nationally representative longitudinal study of Australian households which commenced in 2001. Funded by the Australian Government Department of Social Services (DSS), the Survey is managed by the Melbourne Institute of Applied Economic and Social Research at the University of Melbourne.

HILDA is a panel survey of Australian households and, as such, HILDA surveys all working age members (over 15 years) of the selected households and then re-interviews the same people in subsequent years.

### Purpose of the study

HILDA provides longitudinal data on the lives of Australian residents. Its primary objective is to support research questions falling within three broad and inter-related areas of income, labour market and family dynamics.

### Key features

The HILDA Survey has the following key features:

- By the nature of its design, the study can be extended to continue indefinitely, following not only the initial sample members for the remainder of their lives, but also the lives of descendants.
- Special questionnaire modules are included as part of each wave, focusing on particular topics in detail. Modules are included in the survey on a rotating basis.
- The Wave 1 panel consisted of 19,914 individuals in 7,682 households, a reference population for Australia. In Wave 11 this was topped up with an additional 5,477 individuals in 2,153 households.

### Data collection

Fieldwork for each wave is conducted from July each year.

Each wave of HILDA includes at least one major topic of focus, which is repeated every four years. These topics include: household wealth, family formation and fertility, retirement from the workforce, health and education, skills and abilities.

In addition, there are a number of shorter questions included on a rotating basis, including: job related discrimination (Waves 8 and 10); intention and plans regarding mobility, education and work (Waves 5, 8, and 11), and non-coresidential family relationships (Waves 8 and 12).

HILDA does not survey diplomatic personnel of overseas governments, overseas residents in Australia, people living in remote areas, or members of non-Australian defence forces

**More information on the survey is available at**

<https://www.melbourneinstitute.com/hilda/>

Stay connected

[NCLD@dss.gov.au](mailto:NCLD@dss.gov.au)

[www.dss.gov.au/NCLD](http://www.dss.gov.au/NCLD)

<http://thesource.dss.gov.au>

# Study Content Overview

---

## Demographics

- Sex and date of birth
- Time spent living at address
- English language ability
- Family formation
- Number of children
- Disabilities of household members
- Marital status of household members
- Movers – reasons for, and date of, entering or leaving household
- Non-resident children characteristics
- Non co-residential relationships

## Parenting and children

- Parenting stress
- Intent for additional children
- Partner/self currently pregnant
- Time stopped/started work pre/post birth of baby
- Use of birth control
- Grandchildren

## Person and family background

- Country of birth & language
- Year of arrival
- English as first language
- Aboriginality
- Australian citizenship
- Permanent residence
- Visa category [recent arrivals only]
- Parents' education
- Parents ever separated / divorce
- Age at time of separation
- Age left home
- Siblings
- Father's / mother's country of birth

## Education

- Study status
- Type and location of education institutions
- Qualifications studied/completed
- Field of study of highest post-school qualification
- Persons still at school: truancy, suspension and bullying
- Years since left full time education

## Children's education

- Type of school
- Fees paid
- Perceptions of school outcomes and experiences
- Likelihood of attending university

## Household / living situation satisfaction

- Satisfaction with household division of labour
- Responsibility for household tasks

## Assets / liabilities

- Value of various assets
- Value of business debt
- Overdue household bills
- Value of housing debt
- Number of motor vehicles

## Care of children

- Child Care – cost, difficulties
- Receipt of Child Care Benefit
- Receipt of Family Tax Benefit
- Child Health
- Weight of child at birth
- Visits to medical practitioners
- Hospital visits

## Social capital

- Social support
- Contact with siblings
- Membership of clubs etc.
- Internet access
- Social interaction with friends etc.
- Community participation
- Preferences to live in area
- Attitudes about your neighbourhood

## Unemployment

- Job search activity
- Desired hours of work
- Expected probability of finding a job
- Reason for ceasing last job
- Characteristics of a previous job
- Job-related discrimination
- Years out of labour force
- Main activity when not in labour force

## Housing

- Size and type of dwelling
- Ownership status
- Landlord type
- Rent payments
- Boarders
- Notional rent (if live rent free)
- Home loan details
- Whether used a mortgage broker

## Income

- Current wage and salary income
- Government benefits
- Salary sacrifice and non-cash benefits

## Health / disability

- Disability / health condition
- Year of onset
- Impact of disability on work
- Difficulties as a result of disability
- Need for help / supervision
- Home modifications
- Employment difficulties
- Education difficulties
- Serious Illness conditions
- Childhood health
- Medical practitioner visits
- Hospital visits in past 12 months
- Diet / Dieting
- Smoking history
- Sleep quantity
- Psychological distress
- Exercise
- Alcohol consumption
- Food consumption
- Time stress
- Height / weight
- Waist Measurement

## Household finances

- Weekly expenditure on food
- Adequacy of household income
- Housing loans repayments / rent
- Self-assessed prosperity
- Stressful financial events
- Response to financial emergency
- Savings habits and reasons
- Savings time horizon
- Risk preference
- Attitudes to borrowing
- Credit card use and payment strategy
- Bank accounts
- Credit card and other debts
- Superannuation

## Employment

- Current / past employment
- Days / Hours of work
- Multiple job holding
- Job tenure
- Working from home
- Trade union membership
- Leave taking
- Family friendly workplace
- Employment contract type
- Expected quit / dismissal probability
- Probability of finding another job
- Work-related training
- Attitudes about work and gender roles
- Job satisfaction
- Reason for ceasing last job

## Retirement

- Intended age of retirement
- Year / age retired

## Parent living elsewhere

- Financial support from other parent
- Amount of contact other parent has with youngest child
- Employment status of other parent

## Caring for others

- Carer in household
- Carer outside household

## Life abilities / satisfaction

- Self-assessed literacy and numeracy
- Languages spoken and read
- Computer use and proficiency
- Whether holds driver's licence
- Education required to carry out job
- Achievement motivation
- Cognitive ability
- Life satisfaction
- Religion
- Sexual identity
- Marital relationship quality
- Satisfaction with family life
- Life events in past 12 months
- Importance of life domains
- Attitudes to life in Australia
- Satisfaction with own weight
- English language speaking





## *Growing Up in Australia: The Longitudinal Study of Australian Children (LSAC)*



### Overview

The Longitudinal Study of Australian Children (LSAC) tracks children's development and life course trajectories in today's economic, social and political environment.

Content covers multiple aspects of individual, family, community and society characteristics for each individual. It has a broad multi-disciplinary base, and examines policy-relevant questions about development and lifetime wellbeing.

By tracking study participants over time, researchers will be able to determine the factors associated with consistency and change in life course pathways.

### Purpose of the study

A major aim of the study is to identify policy opportunities for improving support for children and their families, and identifying opportunities for early intervention.

### Study participants

LSAC commenced in 2004 with two cohorts of around 5,000 children each, aged 4 - 5 and 0 - 1 years. Participants are a representative sample of children of these ages across Australia at that time, except for remote or very remote locations. Data is collected every two years. Study participants include the child (when of an appropriate age) and parents (both resident and non-resident), carers, teachers, and the interviewer's own observations.

### Data linkage

LSAC data is linked to the National Assessment Program – Literacy and Numeracy (NAPLAN), the Australian Early Development Census (AEDC), and sources of administrative data including the Medicare Benefits Schedule (MBS), and the Pharmaceutical Benefits Schedule (PBS).

### Governance

LSAC is conducted through a partnership between the Department of Social Services (DSS), the Australian Institute of Family Studies (AIFS), and the Australian Bureau of Statistics (ABS). A group of leading researchers from universities around Australia provide content and methodology advice.

### Physical health

In 2014-15, a special one-off physical health assessment of the younger cohort was undertaken. This assessment provides rich information about the health of young people as they grow from children to teenagers, through tests of vital organ functions, bone health, fitness, strength, vision, hearing, diet, activity and more.

This information helps to inform how a child's first decade determines their health, as they approach teenage years. A subset of measures was also conducted on parents to enable intergenerational health analysis.

### More information

<http://growingupinaustralia.gov.au/>  
[www.dss.gov.au/nclcd/](http://www.dss.gov.au/nclcd/)

LSAC data has been used in over 200 academic research publications and over 400 conference presentations. Analyses using LSAC data have made major contributions to policy development, including:

- modelling the impacts of paid parental leave
- informing family law reforms
- the development of the Australian Early Development Census (AEDC)
- Australian Human Rights Commission Children's Rights report
- research into childhood obesity
- various reports by the Productivity Commission, Australian Communications and Media Authority, Australian Institute of Health and Welfare, and the Australian Institute of Family Studies.

Stay connected

[NCLD@dss.gov.au](mailto:NCLD@dss.gov.au)

[www.dss.gov.au/NCLD](http://www.dss.gov.au/NCLD)

<http://thesource.dss.gov.au>

# Study Content Overview

---

## Family demographics

- Sex
- Age
- Relationships within family
- Relationship history
- Ethnicity
- Arrival in Australia
- Country of birth
- Indigenous status
- Type of family
- Children living elsewhere
- Non-resident children
- Parental education
- Socioeconomic position
- Religion

## Child's general development

- Global physical health
- Physical measurement
- Behaviour

## Child's social and emotional outcomes

- Behaviour
- Emotional development
- Social development
- Temperament

## Child's learning and cognition outcomes

- Language development
- Matrix reasoning
- Executive functioning
- School readiness
- Reading
- Writing
- Numeracy

## Finances

- Financial stress
- Financial literacy
- Government benefits
- Income

## Paid work

- Combining work and family
- Labour force status
- Job duties and responsibilities
- Leave entitlements
- Job search
- Working conditions

## Housing

- Key indicator
- Current housing
- Previous housing
- Home environment
- Neighbourhood liveability/facilities

## Social capital

- Attachment to family/friends
- Contact with family/friends
- Neighbourhood belonging
- Neighbourhood safety
- Social support
- Service use and unmet needs
- Volunteering
- Civic activities/social participation

## Health behaviour

- Alcohol consumption
- Diet and nutrition
- Physical activity
- Sun exposure
- Smoking
- Substance use
- Help seeking behaviours
- Attitudes towards risk behaviours
- Sexual behaviours and pregnancy
- Self-harming and suicidal behaviours

## Health status

- Global health
- Life satisfaction
- Disability
- Medical conditions
- Mental health
- Medical history
- Oral health
- Injuries
- Ongoing medical conditions
- Hospital stays
- Sleeping problems
- Carer activities

## Parenting

- Consistent parenting
- Hostile parenting
- Parental warmth
- Inductive reasoning
- Parental monitoring
- Parental involvement
- Parental self- efficiency
- Demandingness
- Responsiveness
- Autonomy granting

## Program characteristics

- Formal/informal care
- Holiday care
- Carer-child affection
- Education/care choices
- Payment for child care
- School/care enjoyment
- Time in care
- Carer qualification

## Education

- Interest in subjects
- School environment
- Motivation to learn
- School belonging
- Education choice
- School type
- School facilities
- School liking and satisfaction
- Absenteeism
- Teacher qualification

## Parent living elsewhere (PLE)

- Child support
- Contact with child
- PLE characteristics
- PLE household info
- Quality of relationship with child and other parent
- Type of family
- Parental involvement

## Relationships

- Couple relationships
- Family cohesion
- Family violence indicators
- Gender role attitudes

## Child's home environment

- Activities at home
- Activities outside the home
- Activities with family
- Expectations about education
- Parental involvement
- Extra-curricular activities
- Internet use
- TV, computer and electronic games use

## Intergenerational data

- Educational qualification
- Alcohol and drug use
- Mental and physical health
- Breadwinner
- Financial difficulties
- Parental educational interest
- Puberty

## Future topics

- Gambling
- Driving
- Various risk behaviours
- Education-work transition
- Higher education
- Study child's offspring



## *Footprints in Time:* The Longitudinal Study of Indigenous Children (LSIC)



### Overview

The Longitudinal Study of Indigenous Children (LSIC) follows the development of around 1,700 Indigenous children and their families across urban, regional and remote Australia.

The study provides a data resource that can be drawn on by government, researchers, service providers, parents and communities.

It is one of the largest longitudinal studies of Indigenous people worldwide.

### Purpose of the study

LSIC aims to improve the understanding of, and policy response to the diverse circumstances faced by Aboriginal and Torres Strait Islander children, their families and communities.

### Key research questions

The key research questions, formulated under the guidance of the LSIC Steering Committee, chaired by Professor Mick Dodson AM, are:

- *What do Aboriginal and Torres Strait Islander children need to have the best start in life to grow up strong?*
- *What helps Aboriginal and Torres Strait Islander children stay on track or become healthier, more positive and strong?*
- *How are Aboriginal and Torres Strait Islander children raised?*
- *What is the importance of family, extended family and community in the early years of life and when growing up?*

### Survey methodology

Planning for the study started in 2004, and annual data collection started in 2008, building on two years of consultation with Indigenous communities and two years of trials and pilots.

Information is collected annually by Indigenous interviewers from parents and carers, the study children themselves and their school teachers.

LSIC follows two groups of Aboriginal and/or Torres Strait Islander children who were aged 6 to 18 months (B cohort) and 3½ - 5 years (K cohort) when the study began.

Qualitative responses are collected about a range of aspects of the child's life including study children's aspirations, role models and cultural strengths.

Data is linked with the National Assessment Program – Literacy and Numeracy (NAPLAN).

### Footprints in Time locations

The LSIC sample is not nationally representative. However, it does broadly reflect the distribution of Aboriginal and Torres Strait Islander children aged between 0 and 5 years (at the study's commencement in 2008) among urban, regional and remote areas.

**More information on the survey is available at**  
<https://www.dss.gov.au/lxic>

Stay connected

[NCLD@dss.gov.au](mailto:NCLD@dss.gov.au)

[www.dss.gov.au/NCLD](http://www.dss.gov.au/NCLD)

<http://thesource.dss.gov.au>

# Study Content Overview

---

## Household

- Dwelling type and street traffic
- Household demographics: sex, age, Indigenous status, relationship to parent, relationship to Study Child

## Child's general development

- Global physical health
- Height, weight, BMI

## Housing

- Relocating
- Number of bedrooms
- Housing quality

## Child's learning and cognition outcomes

- Language development
- Matrix reasoning
- School readiness
- Reading
- Writing
- Numeracy

## Child's social and emotional outcomes

- Behaviour
- Emotional development
- Social development
- Temperament

## Child health status

- Global health
- Disability
- Medical conditions
- Oral health
- Injuries
- Hospital stays & health visits
- Sleeping problems
- Nutrition

## Parental Health

- Ongoing health conditions
- Personal social and cultural resilience
- Social and emotional wellbeing
- Smoking habits and child exposure
- Alcohol habits

## Parenting

- Parental warmth, monitoring, discipline
- Parental involvement
- Parental self- efficacy

## Parent living elsewhere

- Child support
- Contact with child
- Quality of relationship with other parent

## Relationships

- Couple relationships
- Family cohesion
- Family violence indicators

## Major life events for close family & friends

- Including: pregnancy, illness, funerals, money worries, humbergging, housing issues, alcohol or drug problems, robbed or assaulted, child upset or scared, family split up

## Language, culture

- Parent, child & household languages & proficiency
- Household Aboriginal English use
- Indigenous cultural events, practices, arts
- Connection to country
- Connection to tribe, language group or clan
- Racism, discrimination, prejudice

## Parent & partner education & employment

- Highest school year & qualification
- Labour force status
- Hours & conditions of work
- Job duties and responsibilities
- Leave entitlements

## Education

- School type
- School liking & avoidance
- School belonging
- Education choice
- Absenteeism
- Teacher relationship
- Parent engagement
- Cultural safety at school

## Finances

- Financial stress
- Government benefits
- Income management
- Money management

## Infant health and development

- Maternal health and care, alcohol; tobacco and substance use in pregnancy; birth, birth weight post natal depression
- Early diet and feeding

## Community

- Community/neighbourhood liveability/ facilities
- Neighbourhood safety

## Early education & care

- Formal/informal care
- Time in care
- Playgroup

## Child's home environment

- Activities at home & away
- Activities with family
- Education expectations
- Internet use
- TV, computer and electronic games use

## Education (asked of teacher)

- Child characteristics
- Class characteristics
- Teacher characteristics: including Indigenous status, Indigenous education, training & experience
- School characteristics: including Indigenous cultural approach

## Other

- Life satisfaction
- Caring responsibilities
- Gambling
- Stolen generations

## Free text questions

- What is it about being Indigenous that helps your child grow up strong?
- How do/will you teach study child how to deal with racism?

## Future topics

- Family history & connection to country
- Living away from home for school