



# Following Aboriginal and Torres Strait Islander children across Australia

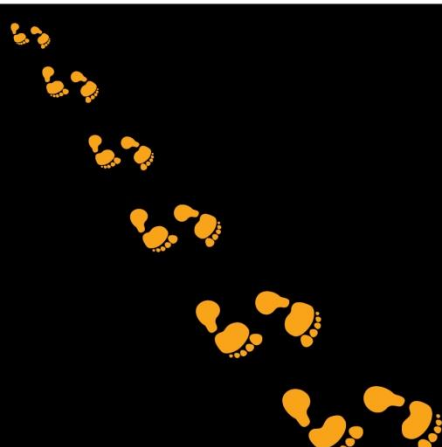
**NSW FaCS** 11 May 2017



## Footprints in Time

The Longitudinal Study of Indigenous Children

The opinions, comments and analysis expressed in this presentation are those of the author and do not necessarily represent the views of the Minister for Social Services and cannot be taken in any way as expressions of Government policy.



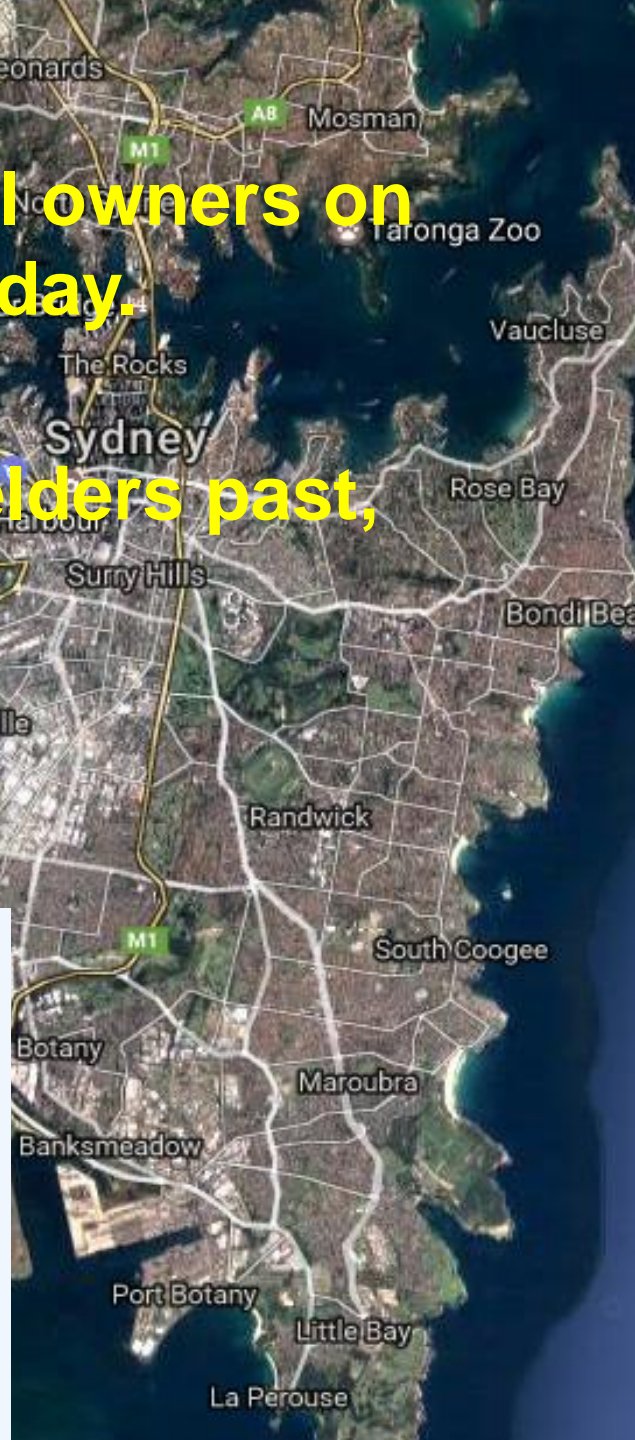


We acknowledge the traditional owners on whose land we meet today.

We pay our respects to their elders past, present and future.



*Southeast*



# Presentation outline



**What is it? Who is involved? Where?**

**Methodology**

**Selected findings**

**How you can apply for and use the data and get more information**



# LSIC: Overview

**What:** Australian Government longitudinal cohort study with ongoing funding.

**Why:** To explore **how early childhood affects later life outcomes** for Aboriginal and Torres Strait Islander children.

**When:** Consultation, trials and pilot 2004-2007. **Data collection from 2008.**

## Who's involved:

- Guided by a **Steering Committee** chaired by Professor Mick Dodson AM since 2003, - majority Indigenous members
- Managed by **LSIC Team** in the National Centre for Longitudinal Data in the Department of Social Services
- **Research Administration Officers (RAOs)** or interviewers are mainly DSS employed, full time Indigenous staff.



# Key research questions



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

**And:**

5. How can services and other types of support make a difference to the lives of Aboriginal and Torres Strait Islander children?
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# LSIC methodology

**Community engagement in each site**

**Positive focus**

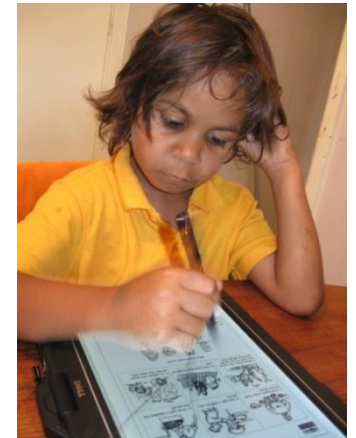
**Commitment to feedback**

**Publicly available data**



**Annual quantitative data collection includes:**

- Parent/carer own and their child's physical health, social and emotional wellbeing, learning and education, home environment and work.
- Study children are also interviewed and complete age appropriate vocabulary, reasoning, reading and maths assessments and are weighed and measured.
- Dad/Parent 2 interviews & online or hard copy teacher questionnaires.



# Sample and retention

- Small widely spread population with **no definitive list** - 24% remote

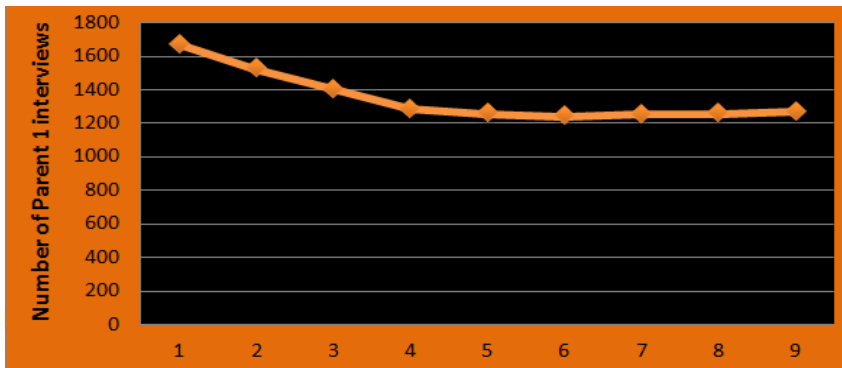
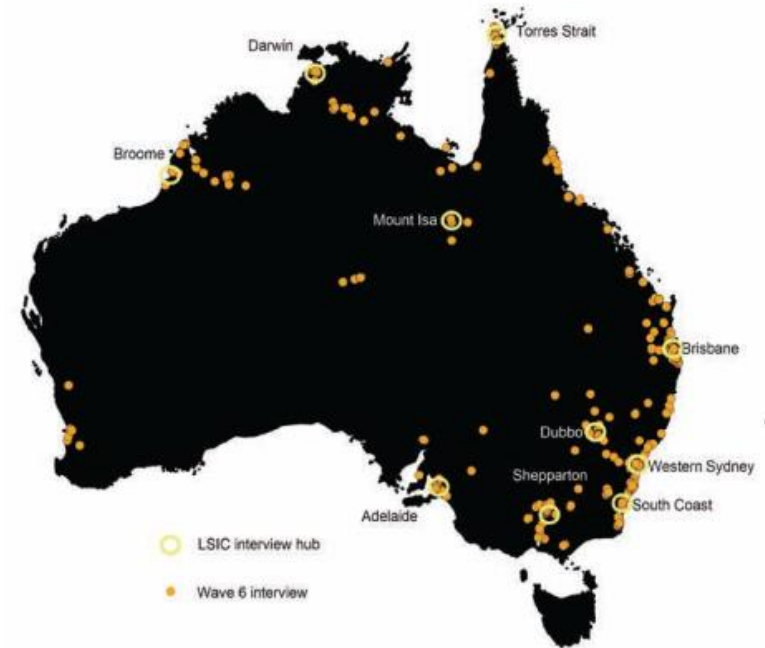


## LSIC solution:

- Site based sample – not representative
- Both Medicare and Centrelink lists & word of mouth to supplement
- More than **1670** parents or carers (usually Mum) of babies and four year olds in **2008**

## Excellent retention:

- More than 1230 interviews each year
- Still have 29.6% remote or very remote (ASGC) at wave 8 (2015)



Number of parent 1 interviews by wave

# Sample characteristics 2008, 2009

## Parent 1:

- **75% Aboriginal**, 4% Aboriginal & Torres Strait Islander, 7% Torres Strait Islander, 15% not Indigenous
- 41% in lowest decile for relative socio-economic **disadvantage**
- 27% of parent/carers **speak an Indigenous language**
- 15% had **post natal depression** (n=237), another 2% “probably”
- 93% of Parent 1 (main carer) mothers

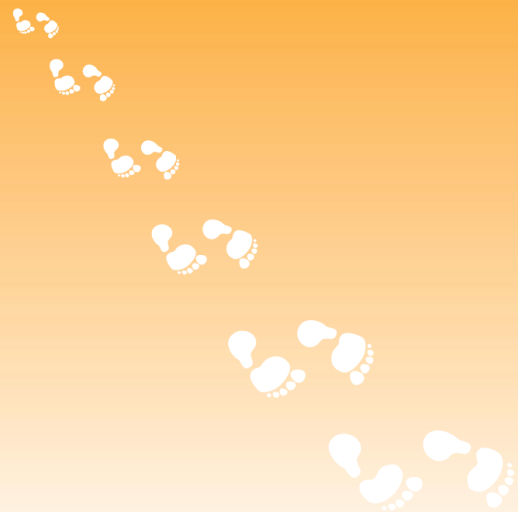


## LSIC children

- Children belong to more than 80 tribal / language groups or clans
- Over 300 children speak more than one language – many 2 or more
- 9.5% were born large for gestational age & 17% were born small for gestational age



# Selected findings



# Life events in LSAC and LSIC

## LSAC – In the last year

Pregnancy or birth of a baby to P1 or P2

Injury, illness or assault to P1 or P2

Injury, illness or assault to other close relative

Parent, partner or child died

Close family friend or another relative died

P1 or P2 lost their job

Had a major financial crisis

Moved house **in the last two years**

Someone in the household had a drug or alcohol problem

Something valuable was lost or stolen

P1 or P2 had problems with the police and a court appearance

Separated from a spouse or partner

## LSIC – In the last year

Pregnancy or birth of a baby to P1 or P2

P1 or P2 have been badly hurt or sick

Other close family member has been badly hurt or sick

Death of close family member or friend in the household

Death of close family member or friend not in the household

P1 or P2 lost their job

Family had serious money worries

Moved house

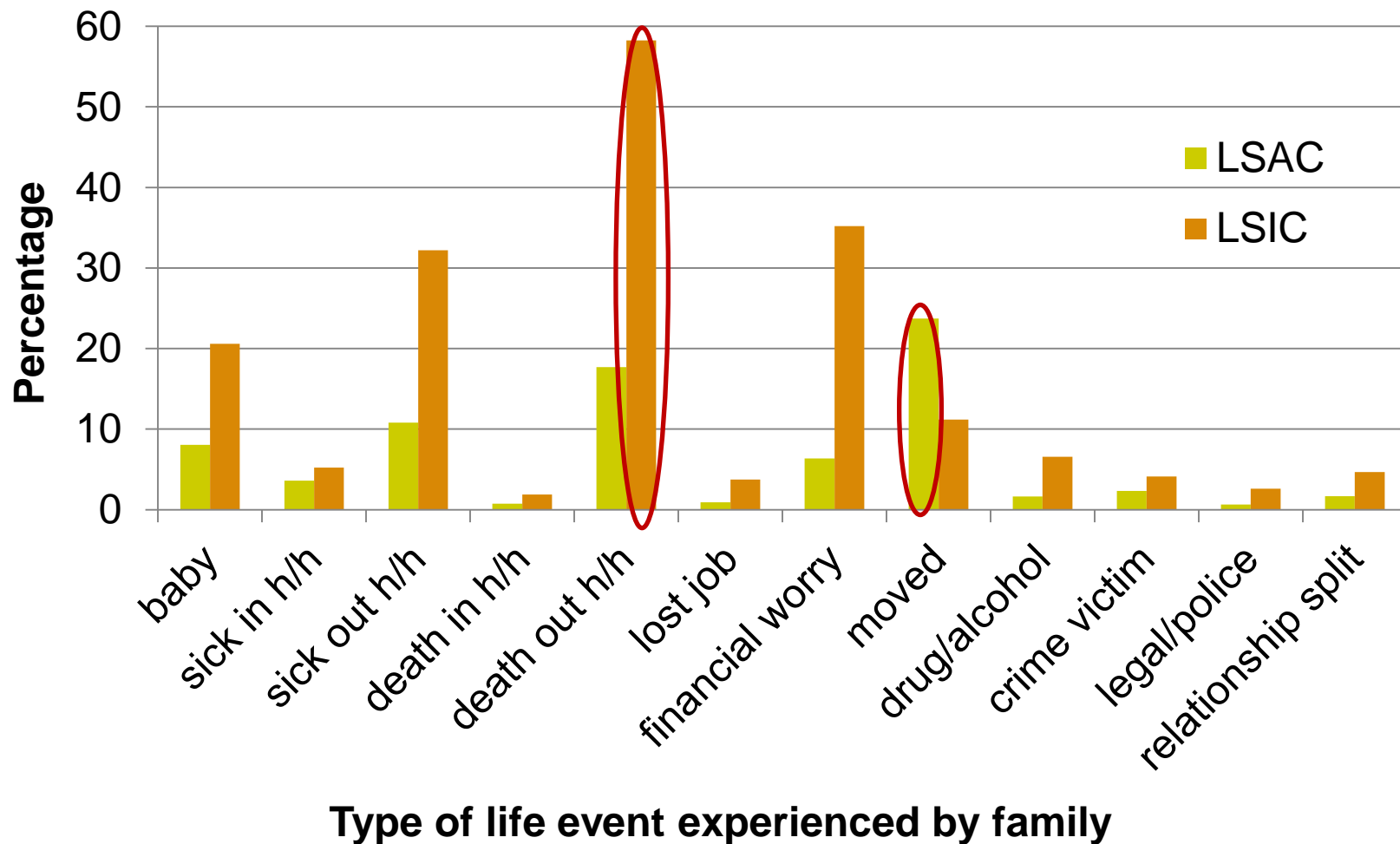
Someone in the household had a drug or alcohol problem

Someone in the household has been mugged, robbed or assaulted

P1 or P2 has been arrested, in jail or had problems with the police

Any of the child's carers left because of a family split

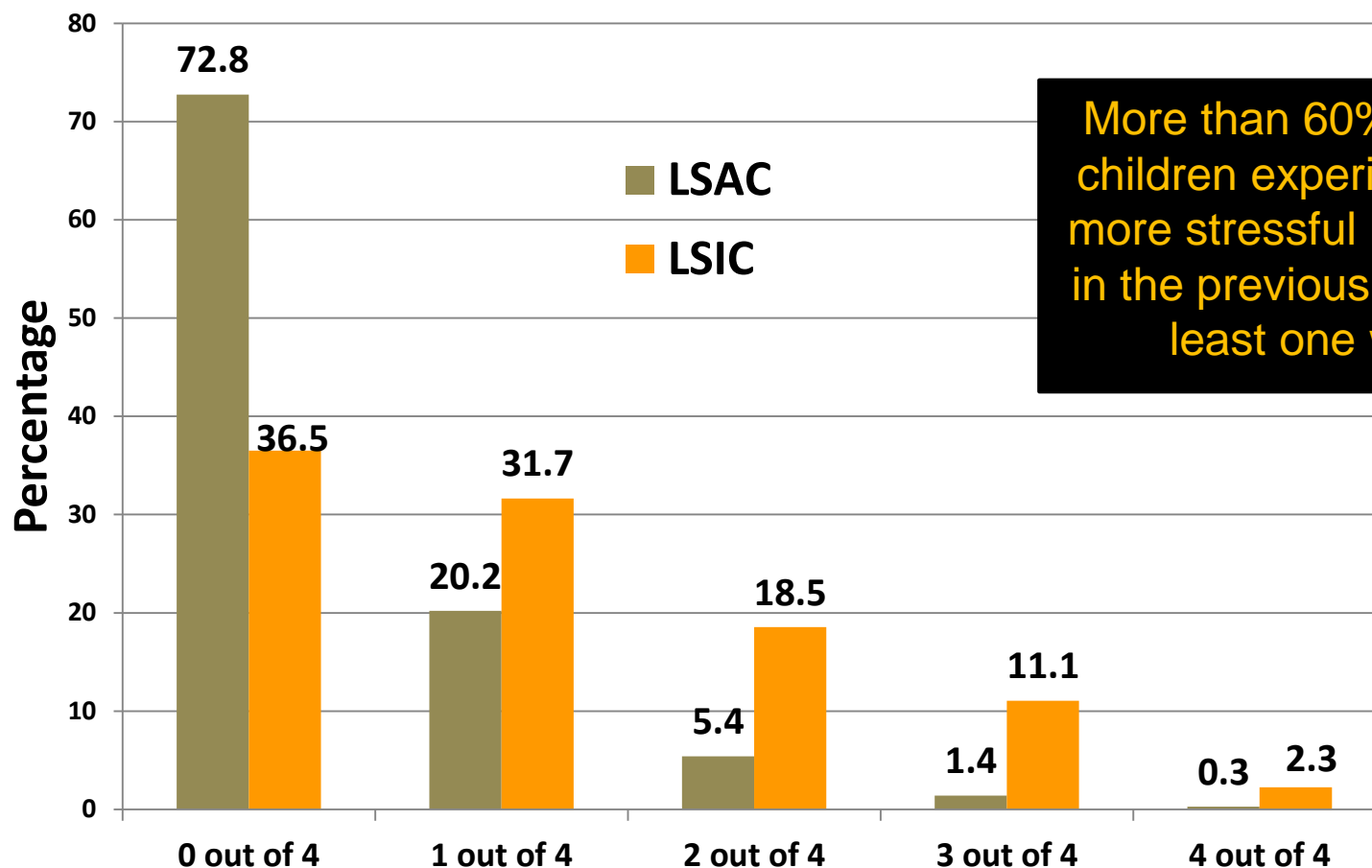
# Life events experienced at age 6 & 7 in LSAC and LSIC



# Percentage of LSAC and LSIC children experiencing three or more life events over four waves



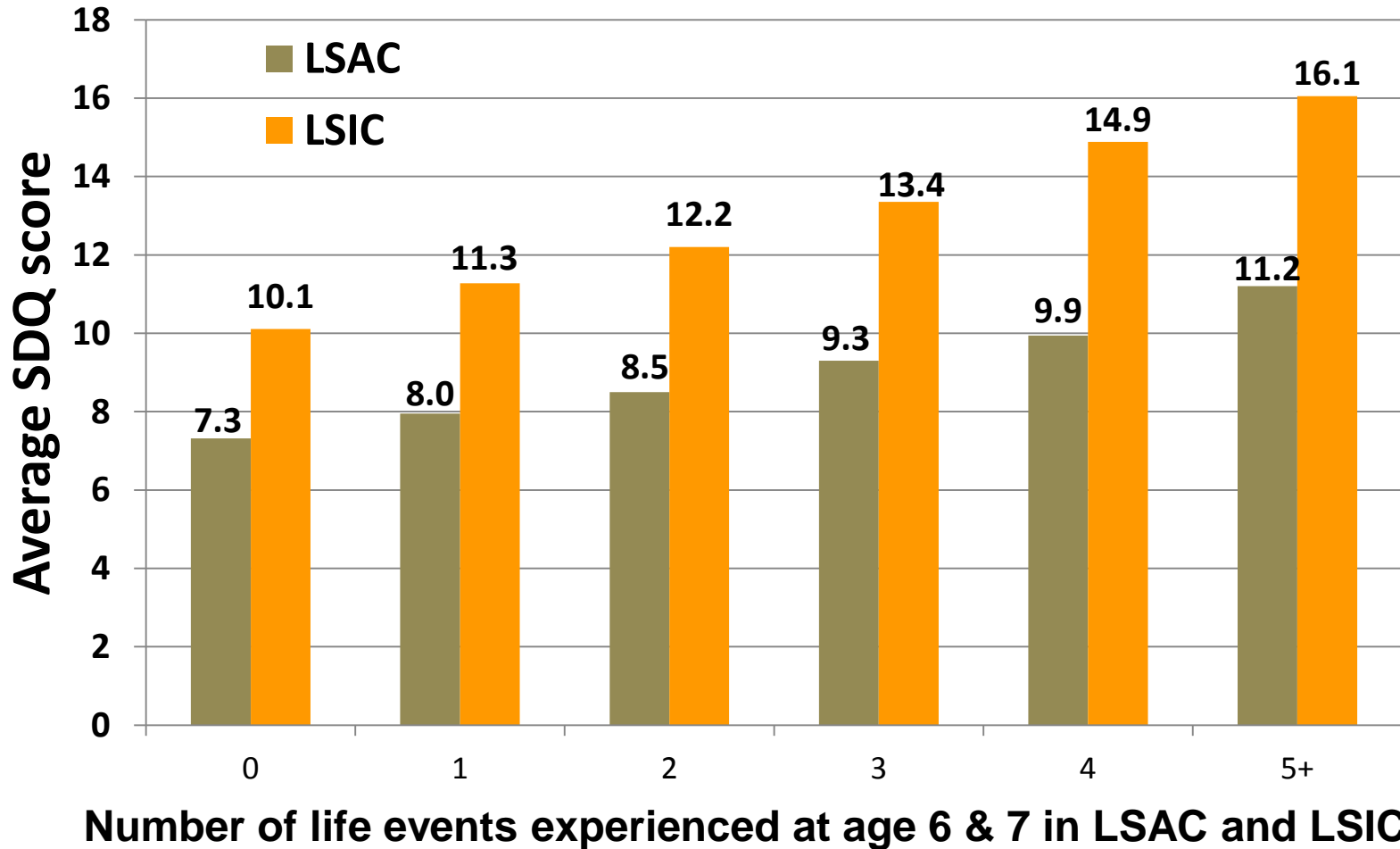
The Longitudinal Study of Indigenous Children



More than 60% of LSIC children experience 3 or more stressful life events in the previous year in at least one wave

Number of times 3+ life events experienced by family over 4 waves

# Children's social, emotional & behavioural difficulties scores (SDQ), by number of life events



**Risk of developing clinically significant problems:**  
Low=0-13  
Moderate=14-16  
High=17-40  
*Zubrick et al 2005*

# Multivariate regression model of the relationship between disadvantage and children's social and emotional difficulties

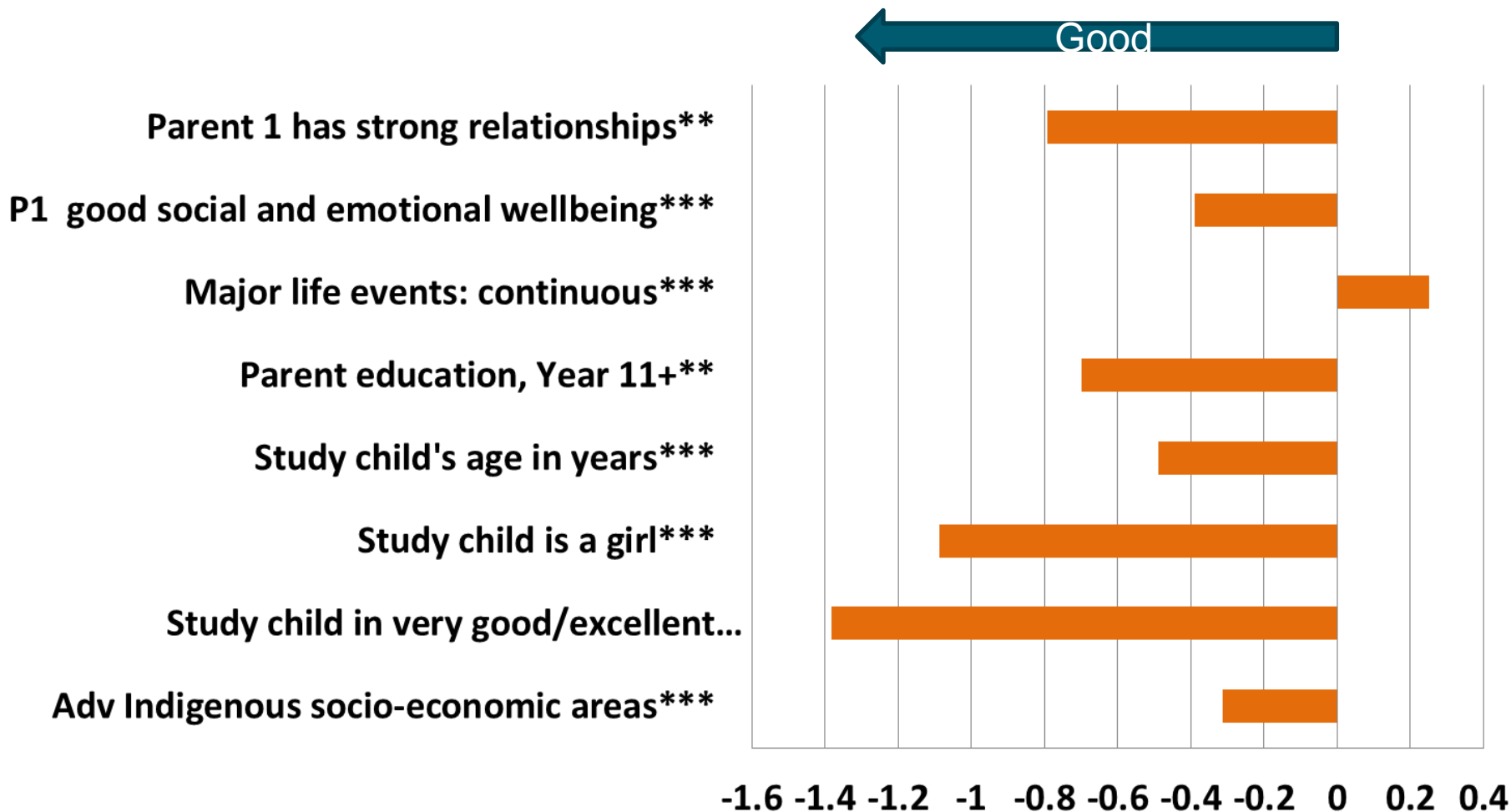


Measure of Disadvantage	LSAC	LSIC
SEIFA advantage & disadvantage (bottom 5 deciles)	0.80***	1.17
Jobless household	1.34***	0.26
Financial stress	1.52***	1.74***
Single parent primary carer	1.26***	-0.26
Low educational attainment primary carer	0.94***	0.43
Poor health of primary carer	1.68***	2.55***
Low income (<\$600 pw)	-0.17	0.48
Number	3799	437 <sup>III</sup>

\* p<0.05 \*\*p<0.01

Children aged 6 and 7

# What reduces LSIC children's social, emotional and behavioural difficulties?



Adjusted R<sup>2</sup> = 0.15

n=1201

P<0.1\*

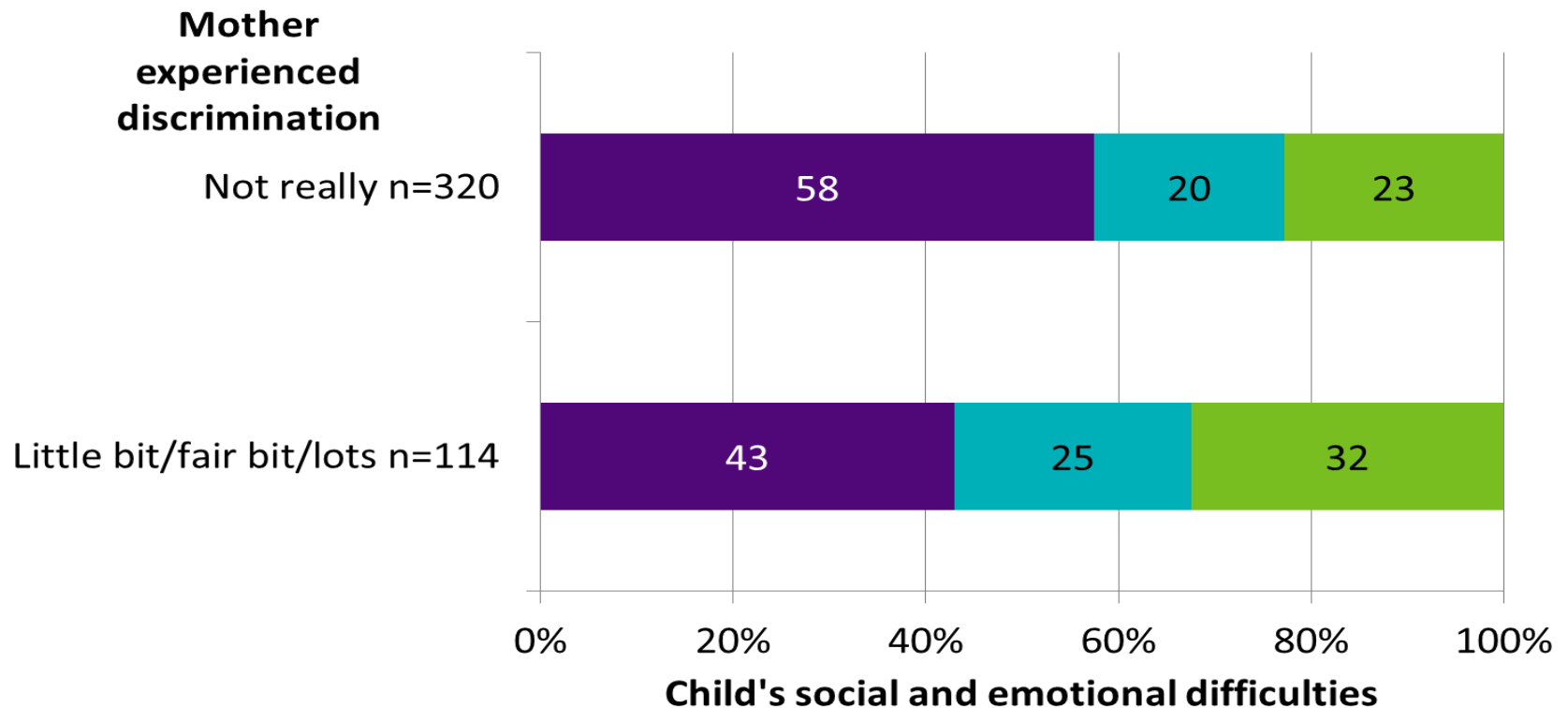
P<0.05\*\*

P<0.01\*\*\*

Wave 3 data

# Relationship between mother's experience of discrimination and child's difficulties scores at 6-7 years of age

■ Close to average   ■ Slightly raised difficulties   ■ High/v.high difficulties





# Katie Thurber, ANU



The Longitudinal Study of Indigenous Children

- **Cohort Profile:** Footprints in Time, the Australian Longitudinal Study of Indigenous Children; Thurber, K. Banks, E. & Banwell, C. on behalf of the LSIC Team. International Journal of Epidemiology, 2014
- **Early Life Predictors of Increased Body Mass Index among Indigenous Australian Children:** Thurber, K., Dobbins, T., Kirk, M., Dance, P., & Banwell, C. Plos One, 2015



- “...higher birthweight indicates an increased risk of obesity in childhood and therefore an increased risk of adult onset chronic disease...”
- “Further, this study identifies smoking during pregnancy as an independent risk factor for increased BMI in this sample.”

RESEARCH ARTICLE

## Early Life Predictors of Increased Body Mass Index among Indigenous Australian Children

Katherine A. Thurber<sup>1\*</sup>, Timothy Dobbins<sup>1</sup>, Martyn Kirk<sup>1,2</sup>, Phyll Dance<sup>2,3\*</sup>, Cathy Banwell<sup>1\*</sup>

1 National Centre for Epidemiology and Population Health, Research School of Population Health, The Australian National University, Canberra, Australia, 2 ANU Medical School, The Australian National University, Canberra, Australia, 3 National Centre for Indigenous Studies, The Australian National University, Canberra, Australia

- Available from: [https://www.researchgate.net/Katherine\\_Thurber](https://www.researchgate.net/Katherine_Thurber)

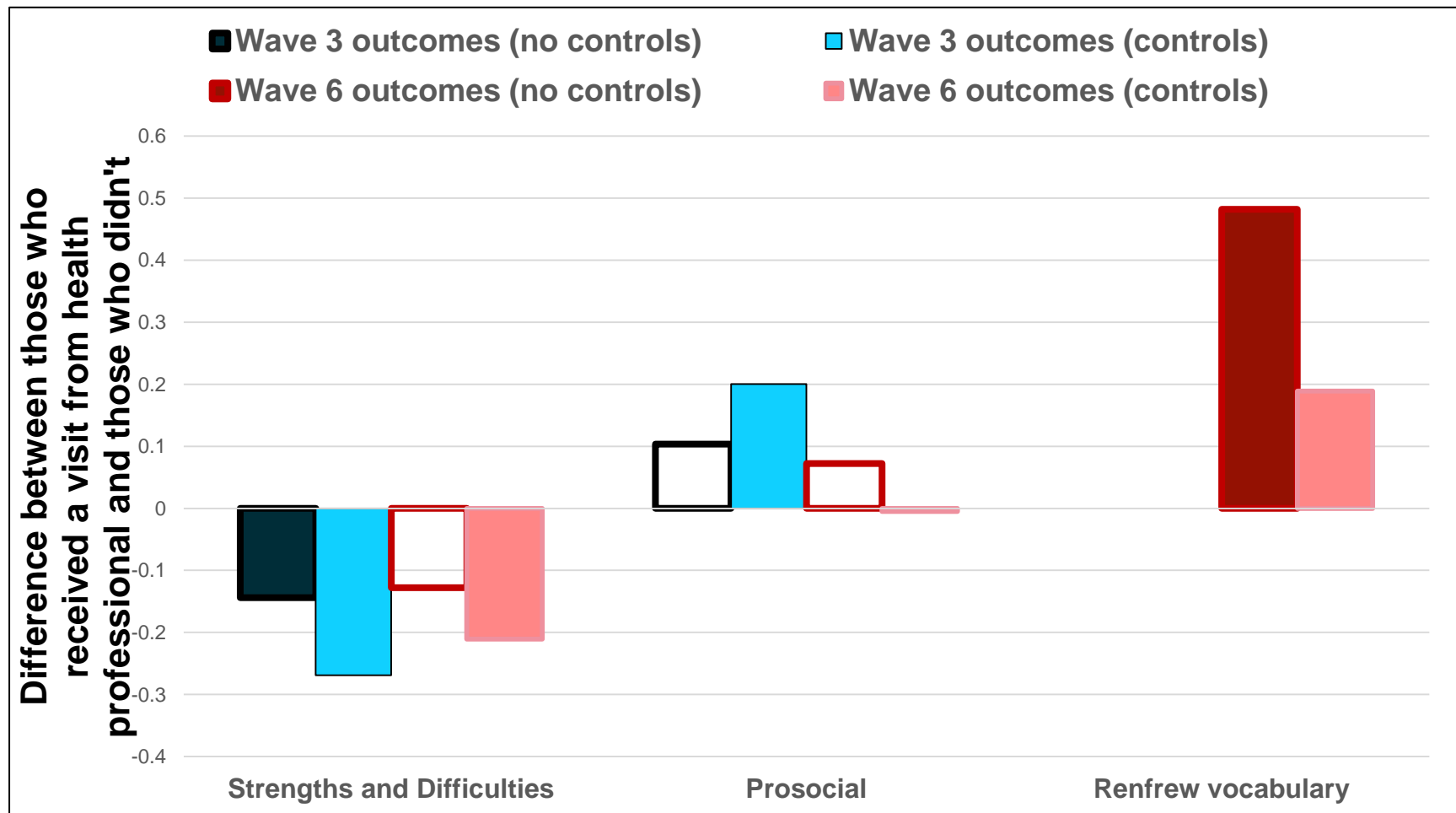
**Body Mass Index trajectories of Indigenous Australian children, and relation to screen-time, diet, and demographic factors;**  
Thurber, K., Dobbins, T., Neeman, T., Banwell, C. & Banks, E., Obesity, 2017

- More than 10% of children in the study were overweight/obese at age 3.
- Rapid onset of obesity between 3 and 9 years - of the children with normal baseline BMI at wave 3 - 31.9% had overweight/obesity 3 years later
- Barriers to a healthy diet include: cost, availability, poor quality of fresh produce & easy availability of unhealthy options (including soft drink)

**To promote healthy weight, Thurber et al suggest:**

- a) improve the social determinants of health, such as financial security, housing, and community wellbeing;
  - b) improve the food environment so that families can make healthy choices.
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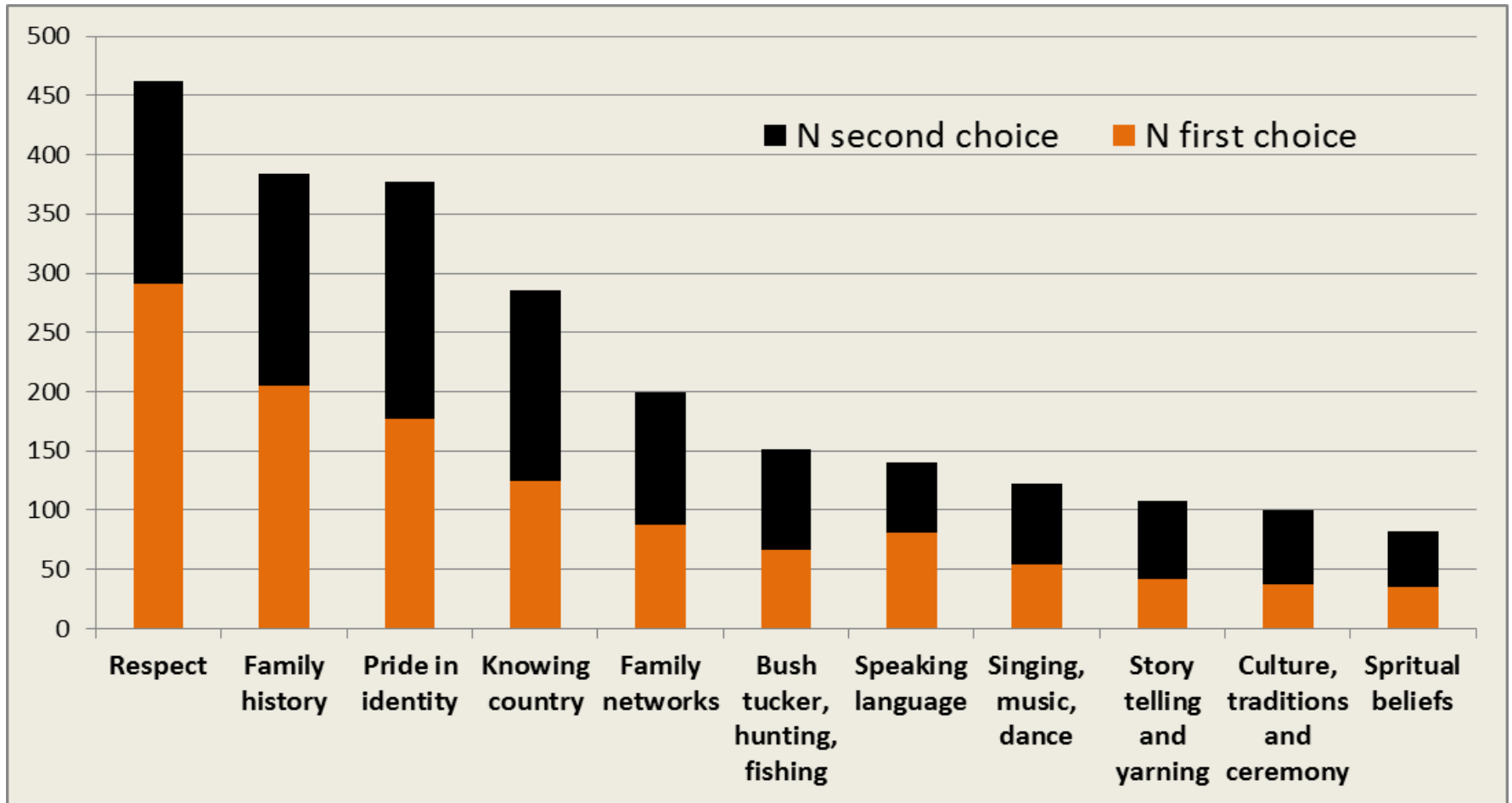
# The relationship between nurse home visits and Indigenous child outcomes; Biddle, N. Holzinger, L.A., Montaigne, M. & Crawford, H. National Centre for Longitudinal Data Conference, 2016, Canberra\*



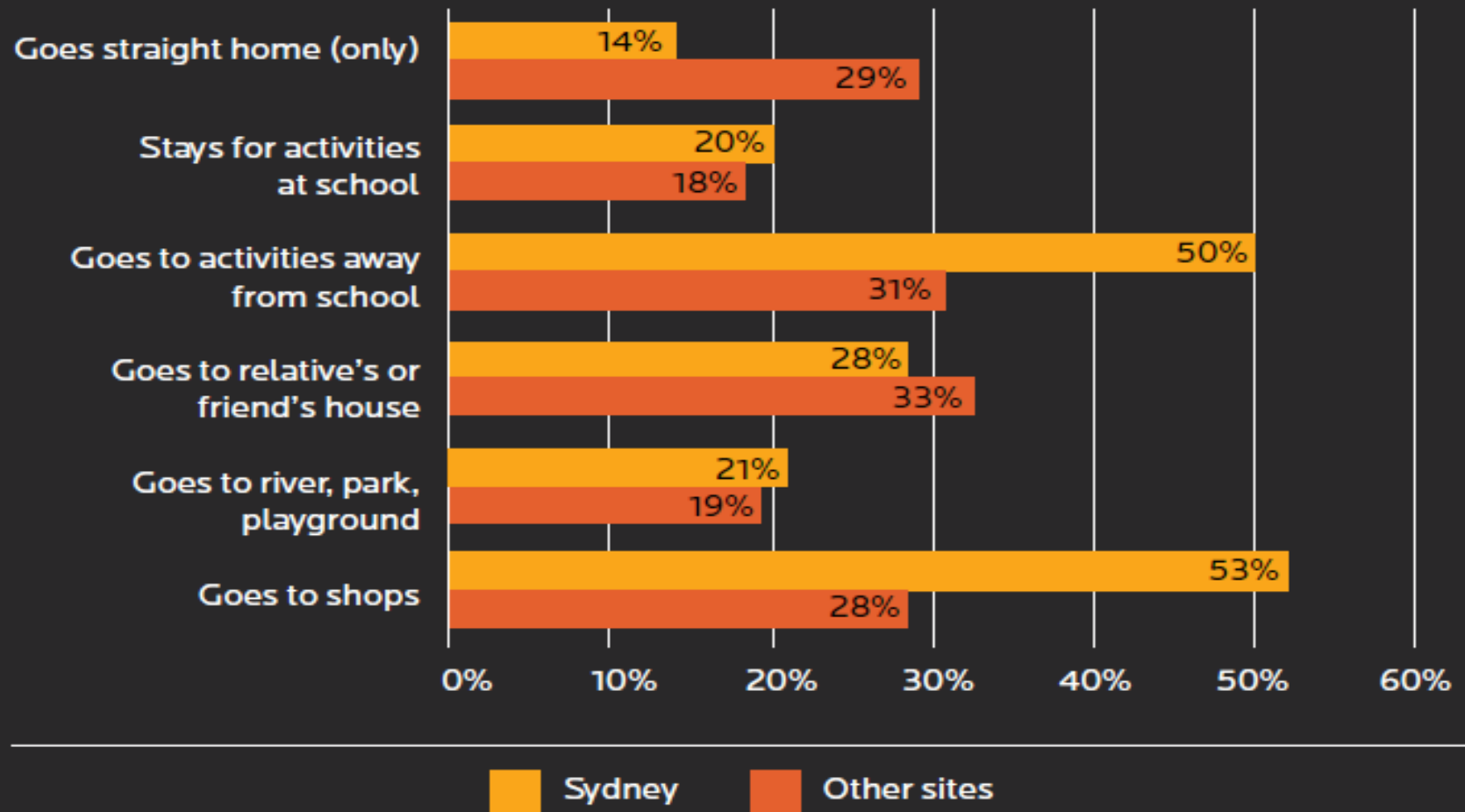
## Relationship between home visits and later outcome measures

\*Coloured in bars are significant effects

# What is it about <Aboriginal or Torres Strait Islander> culture that you would like to pass on to <study child> at this age?



# Extract from Community Feedback 2015



What does study child do after school?

**Sydney** compared to **other LSIC sites**

# LSIC Challenges

**Engagement:** culturally and linguistically diverse, many Indigenous people felt over-researched & sceptical of any research benefits.

## Solutions:

- Listen & respect the advice from: elders community consultations, Steering Committee, interviewers
- Build relationships in the community
- Employ Indigenous interviewers where they will be interviewing
- Stress the interview is voluntary
- Provide *Don't know* and *refused* options for each question or *not appropriate to answer to skip section*

## Why do you stay in the study? (wave 6, 2013)

“...give policy makers a better idea of what's going on with Aboriginal families.”

“...(show) diversity within Aboriginal culture.”

“The questions allow me to reflect on what we do at home and how (child) develops.”

# Find out more about LSIC

Look at the website: [www.dss.gov.au/lisic](http://www.dss.gov.au/lisic)

Sign up to The Source: [thesource.dss.gov.au/](http://thesource.dss.gov.au/) for news about LSIC and other longitudinal studies

Look for the book: **Indigenous Children Growing Up Strong: A Longitudinal Study of Aboriginal and Torres Strait Islander Families**

Editors: Maggie Walter, Karen L. Martin, Gawaian Bodkin-Andrews.



## Access the data

Application forms and licences can be found via [www.dss.gov.au/NCLD](http://www.dss.gov.au/NCLD)

Questions about accessing the data email [longitudinalsurveys@dss.gov.au](mailto:longitudinalsurveys@dss.gov.au)

Questions about using the data email [LSICdata@dss.gov.au](mailto:LSICdata@dss.gov.au)

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Questions?

