Good methodology in analysis of data on Indigenous health and wellbeing

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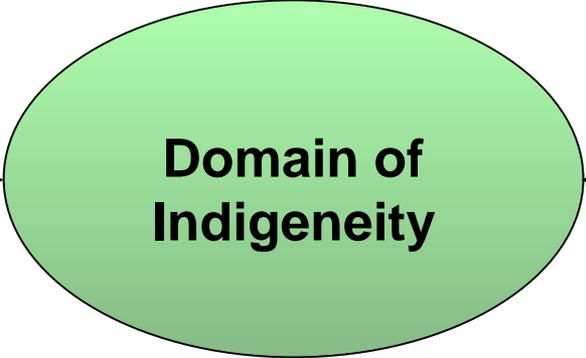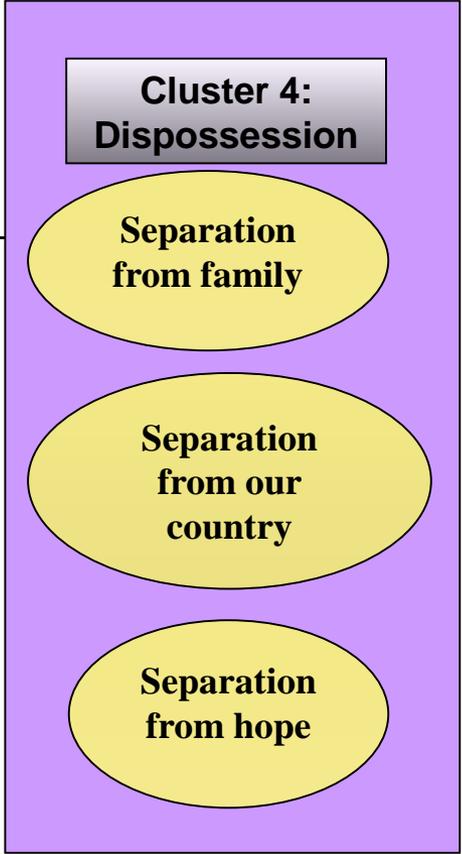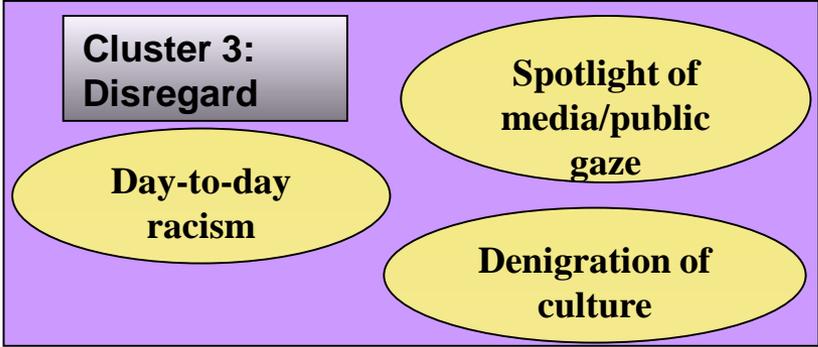
Whose Story Do the Data Tell?

Statistics are powerful persuaders - portray AND define

Most current statistical portrayals construct our reality in terms of 'about us'.

2 core premises of Indigenous quantitative methodology

- Cultural framework, data control and content selection shape the narrative of Indigenous statistics

- Methodologies, not methods, are the producers of Indigenous Statistics and their narrative

Indigenous data = all data about Indigenous peoples, culture, territories, conditions and ways of being etc

Cluster 1: Poverty

Exclusion from social privilege

Marginalised from social resources/ Opportunities

Inherited socio-economic deprivation

Cluster 2: Absences

Social separation

Spatial separation

Absence from nation's self concept

Absence from political realm

Domain of Indigeneity

Cluster 4: Dispossession

Separation from family

Separation from our country

Separation from hope

Cluster 3: Disregard

Day-to-day racism

Spotlight of media/public gaze

Denigration of culture

Statistics are Socio-Cultural Artefacts: Not neutral facts

Cultural Framework – **All data produced within socio-cultural contexts – Indigenous data produced within context of the coloniser**

Control – **who has the power to control data design and process also controls the results those data produce – We are not the controllers**

Content –**The statistics topics of interest i.e education levels and how they are understood will always reflect the priorities and interests of those who control the data process and their socio- cultural context – not our priorities or interests**

The social-cultural context of how Indigenous statistics are done has real life (mostly negative) consequences for Indigenous peoples.
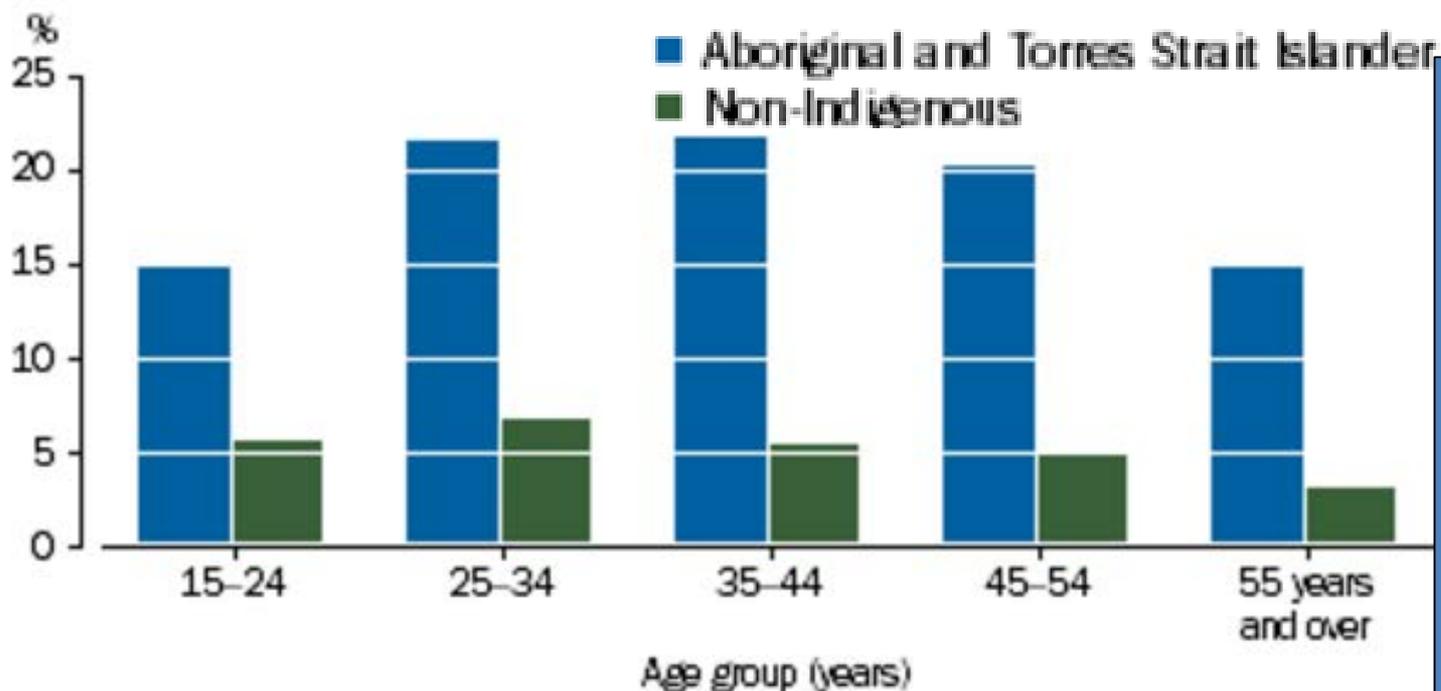
The 'B.A.D.R.' Sins of Indigenous Statistics

Most statistics about Indigenous people positions us as:

- **Blameworthy**

- **Aggregate**

- **Deficit**

- **Reduced**

Blameworthy

**Alcohol and drug-related problems, by Indigenous status and age**

Source: 2012–13 Australian Aboriginal and Torres Strait Islander Health Survey;
2011–12 Australian Health Survey

Data about us frequently portray us as complicit in our own unequal position.

Imply that our gross inequality is related to undeservingness

Aggregate

	Indigenous %	Non-Indigenous %
Proportion of the population	2.5	97.5
Aged 0–14 years	37	19
Aged 50 years +	11	31
School retention rate to Year 12	47	79
Aged 25-34 years and completed Year 12	30	73
Labor force participation	65	
Home owners or purchasers	32	
Live in overcrowded conditions	25	
Rate of diabetes (age standardized)	12	
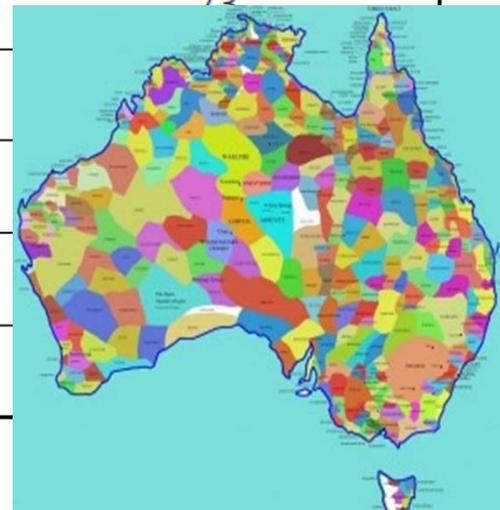
Source: Statistics drawn from AIHW (2011a)

Deficit: 5 D Data

[American Indian School Dropouts](#)

American Indian & Alaska **Native** students

have a **dropout rate** twice the national average;

Graduation rates among males (%)

	Male Overall	Male AI/AN	Gap
Alaska	61.8	42.0	-19.8
Arizona	69.8	47.2	-22.6
California	65.7	45.0	-20.7
Idaho	74.4	44.9	-29.5
Montana	73.2	46.0	-27.2
New Mexico	49.1	39.2	-9.9
North Dakota	76.3	36.8	-39.5
Oklahoma	70.0	61.0	-11.0
Oregon	69.8	34.2	-35.6
S. Dakota	71.4	28.2	-43.2
Washington	64.8 3	5.7	-29.1

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Positioned pejoratively as

- Deficit

- Different

- Disparity

- Disadvantaged

- Dysfunctional

Reduced– We are not a predictor variable

Quantitative analysis can and does **reduce** Indigeneity

Indigeneity is a concept – not a predictor variable

Indigeneity = what it means to be an Indigenous person in this society at this time in this place – inclusive of our diversity, our life chances, our histories, our political, economic and cultural marginalization, our traditions, our cultural realities, our community strengths etc etc.

Intersectionality

- Health and wellbeing exist across several dimensions of social inequality
    - E.g. Socioeconomic status, gender, and race/ethnicity
    - In Australia commonly operationalised as Indigenous status
- Multiple social identities are experienced simultaneously-analysis to reflect this needed
- Each social dimension (e.g. income) is experienced differently for each group and has different meaning

Heart Disease Death Rates, Age-Standardized, Aged 25–64, 2001
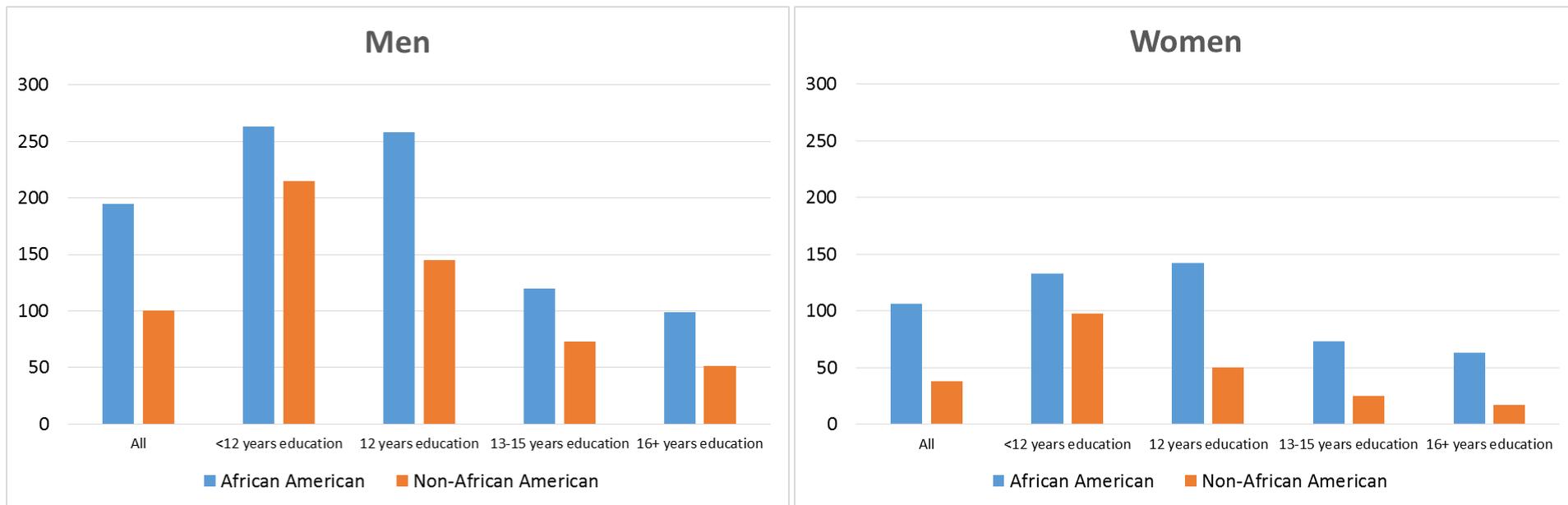
Reproduced from: Williams, D. Priest, N and Anderson, N (2016), *Understanding Associations Among Race, Socioeconomic Status, and Health: Patterns and Prospects.* Health Psychology Vol. 35, No. 4, 407–411

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Methodologies Not Methods Produce Indigenous Statistics

- Statistics per se, are not the problem

- Statistical data have 'power' not available from qualitative data alone

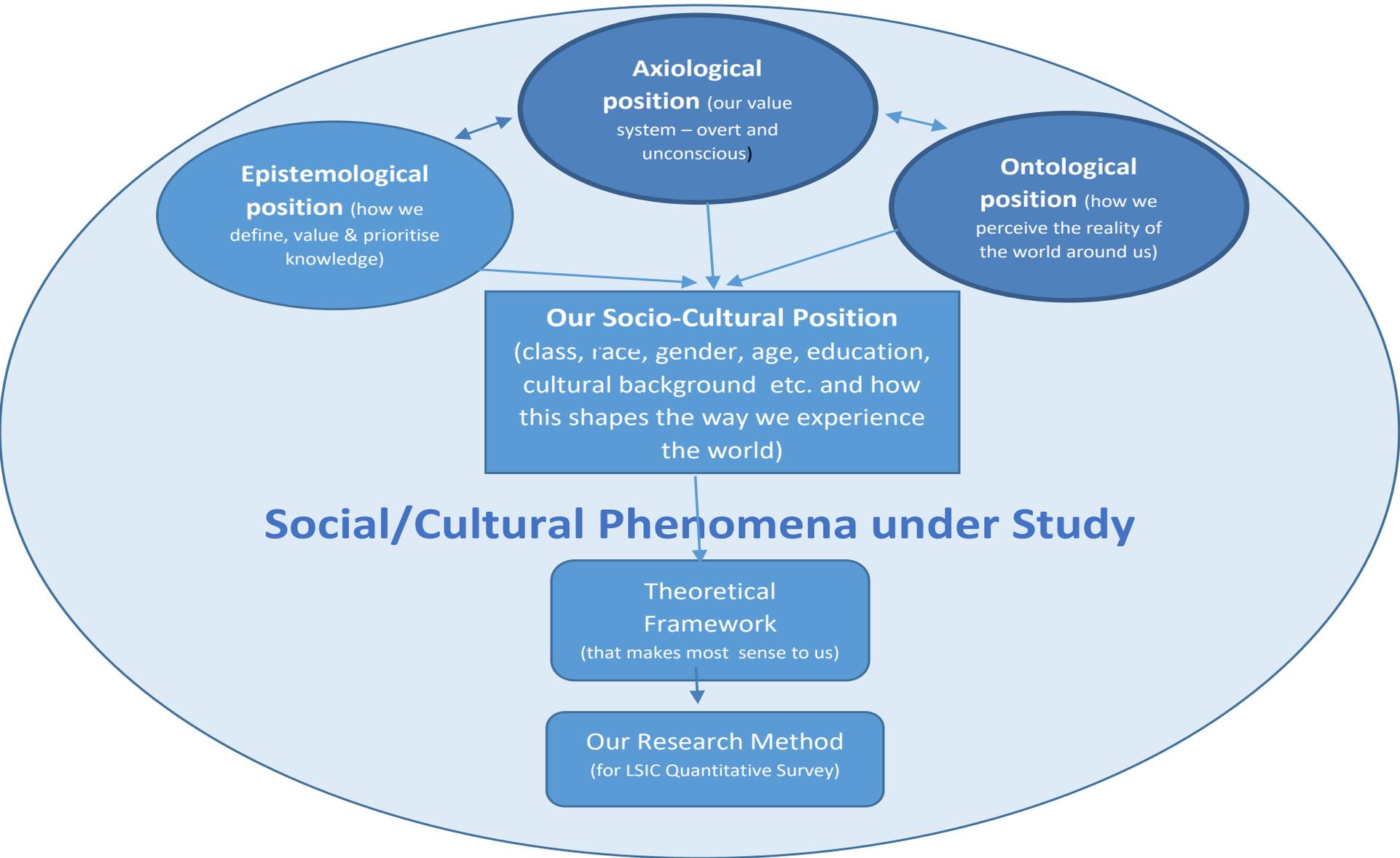- Indigenous statistical capacity key

Axiological position (our value system – overt and unconscious)

Epistemological position (how we define, value & prioritise knowledge)

Ontological position (how we perceive the reality of the world around us)

Our Socio-Cultural Position (class, race, gender, age, education, cultural background etc. and how this shapes the way we experience the world)

Social/Cultural Phenomena under Study

Theoretical Framework (that makes most sense to us)

Our Research Method (for LSIC Quantitative Survey)

Figure 2. 2: Elements of a Research Methodology

Source: Adapted from Walter 2013

To change the methodology we need to change:

- The cultural context in which data are produced to reflect our cultural, social and political realities

- Who controls the process - we must have real power in how statistics about us are done -where, when and how

- The content that is collected. We need to set the data priorities

Evolution of Indigenous Statistics

Data about us → Data for Us → Data by Us

Source; Kukatai and Walter presentation 2016
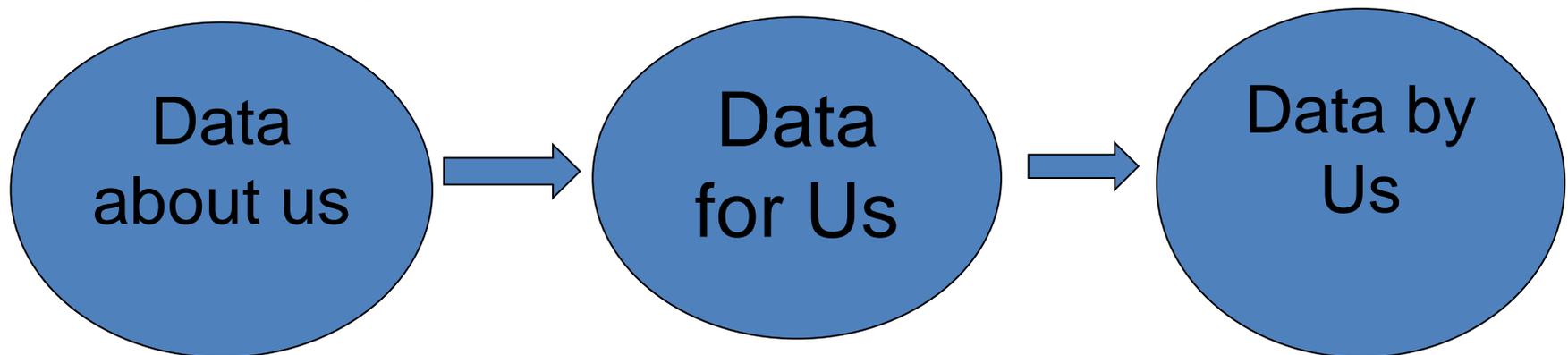
An example of B.A.D.R. vs. good statistics using data from the Longitudinal Study of Indigenous Children (LSIC)

Version 1. Blameworthy, Aggregate, Deficit, Reduced

23% of Aboriginal and Torres Strait Islander children in LSIC are at **high risk** of emotional/behavioural difficulties (poor mental health)
- According to the *Strengths and Difficulties Questionnaire* (SDQ)
- Compared to only 15% of the total NSW population

Among children in LSIC:
- 60% had a **health problem** in the past year
- 60% of primary carers **not employed**
- 27% of families had **worries about money** in the past year

Significantly associated with **higher prevalence** of poor mental health among children

Version 2. Identifying protective, rather than risk, factors

23% of Aboriginal and Torres Strait Islander children in LSIC are at **high risk** of emotional/behavioural difficulties (poor mental health)

Among children in LSIC:
- 76% of caregivers **often/always show affection**
- 48% have a **warm relationship with teacher**
- 54% **have not been bullied**
- 65% **have at least one friend**
- 45% **spend time weekly w/ Indigenous family** who live elsewhere
- 9% **attend cultural events very often**

Significantly associated with **lower prevalence** of poor mental health among children

Version 3. Focusing on a positive, vs. negative, outcome

77% of Aboriginal and Torres Strait Islander children in LSIC are at **low risk** of emotional/behavioural difficulties: ***resilience***
- According to the *Strengths and Difficulties Questionnaire* (SDQ)

Among children in LSIC:
- 76% of caregivers **often/always show affection**
- 48% have a **warm relationship with teacher**
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- 9% **attend cultural events very often**

Significantly associated with **resilience**

Source: R Lovett. In Press.

Same data, different methodologies

Good methodologies:
- Focus on factors that are meaningful
- Focus on protective factors
- Focus on factors associated with positive outcomes

→ do not alter statistical rigour.

Conclusions

- Who is telling the story and from what perspective?
- BADR concept in analysis
- Intersectionality important to contextualise multiple marginalization and multiple advantage
- Look to examples of good practice
- No impact on statistical rigor, but large impact on people and perceptions.