

# Household Food Security in Indigenous Australian families

**Leisa McCarthy**  
**PhD candidate**

- Families with children aged 6 months to 4 years in Darwin and Palmerston
- 3 Stages:
  - Stages 1 and 2 – Indigenous Australian families
  - Stage 3 – families with children attending child care centres.
- Presentation focus Stages 1 and 2

# What is food security?

*“Access by all people, at all times to sufficient food for an active and healthy life. Includes at a minimum:*

- The ready availability of nutritionally adequate and safe foods; and*
- Assured ability to acquire acceptable foods in socially acceptable ways”*

*(American Dietetic Association 1998)*

# Why do this study?

- Public Health Nutritionist
- Known link between poor nutrition and health problems
- Know little of food insecurity experiences and coping strategies used
- Known are a few household food security measures

1. Explore urban Indigenous Australian families' experiences of food security.
2. Determine the performance of the US 18-item household food security module within Indigenous Australian families.

# Why use the US HHFSM?

## 1. Current two questions:

- *In the past 12 months were there any time when you ran out of food and couldn't afford to buy more?*
- *When this happened, did you go without food?*

## 2. US 18-item household food security module (12 months):

- Assessing food security status
- Severity of food insecurity and hunger– adults and/ or children going without food (skipping meals/ whole day)

Pre-study consultation with:

- Danila Dilba Health Service staff and supported by Governing Board
- Bagot Community Health Clinic staff and Bagot Community Council

Focus tested US 18-item household food security module with Danila Dilba Aboriginal staff:

- Clarify terms used
- Question response option
- Change items from statements to questions

# Inclusion criteria

- Primary carer of Indigenous Australian child aged 6 months to 4 years
- Have lived in Darwin and Palmerston for  $\geq 1$  year
- Child does not have a medical condition requiring food or nutritional supplements



## Recruitment sites:

- Danila Dilba Health Service child health clinic
- Bagot community (ARO)
- NT Dept of Health child health clinics
- Community (ARO)

Mixed methods approach

**Stage 1** used 3 questionnaires:

- Modified US 18-item household food security module (mUS 18-item HHFSM)
  - Kessler 10 psychological distress scale adapted for Indigenous Australians (Nagel et al. 2009)
  - Social Determinants questionnaire (demographics, income, education, kitchen infrastructure, access to shops, reliable transport)
- Test-retest of mUS 18-item HHFSM

## **Stage 2** used qualitative interviews:

- Initial discussions (individuals/ families)
- In-depth interviews (individuals)



## **Stages 1 and 2 occurred concurrently**

- Administered the questionnaires
- Initial discussions when administering mUS 18-item HHFSM.
- Formulated early 'Themes' for further discussion (inductive process)
- Indepth interviews
- Thematic analysis

# Stage 1 findings

N = 32 families

- 59% food secure, 41% food insecure
- National food insecure data prev. 31% remote and 20% non-remote persons (ABS 2015).

Test-retest mUS 18-item HHFSM N=26

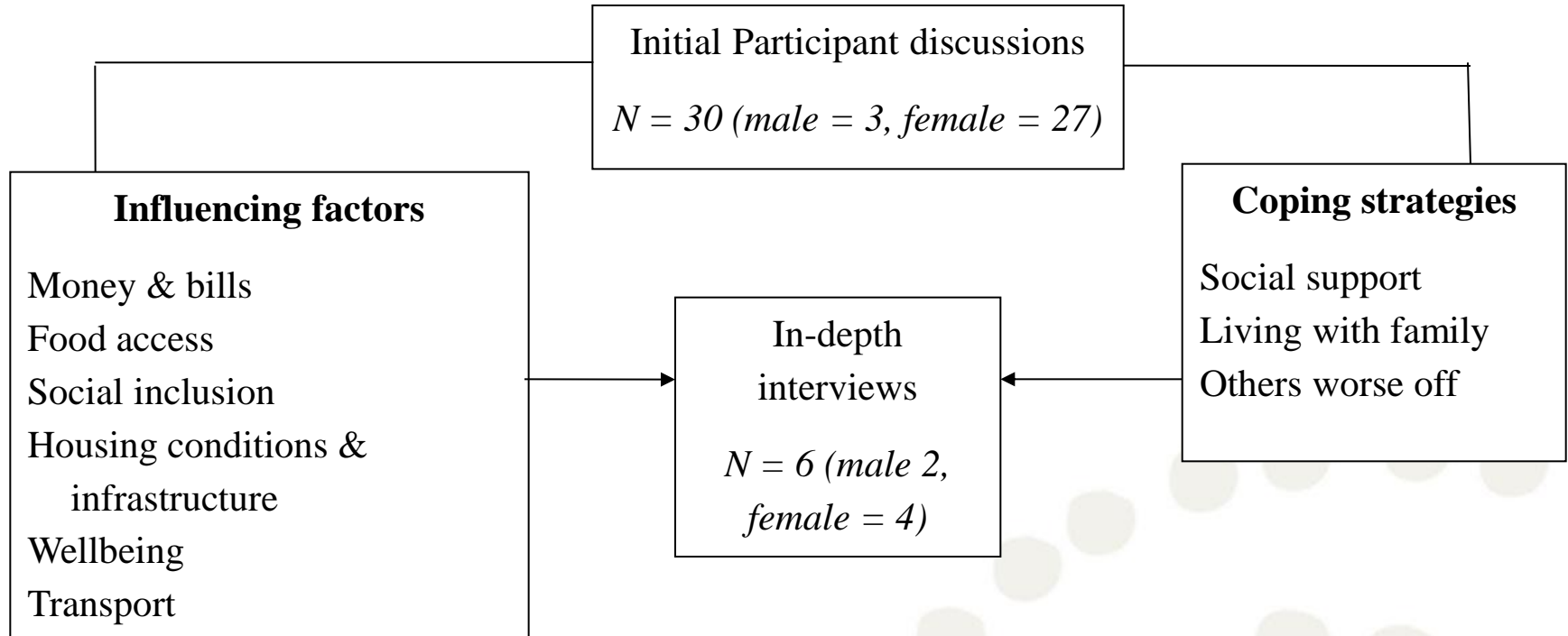
- Kappa indicated fair agreement between test and retest.

# Characteristics of FI Households

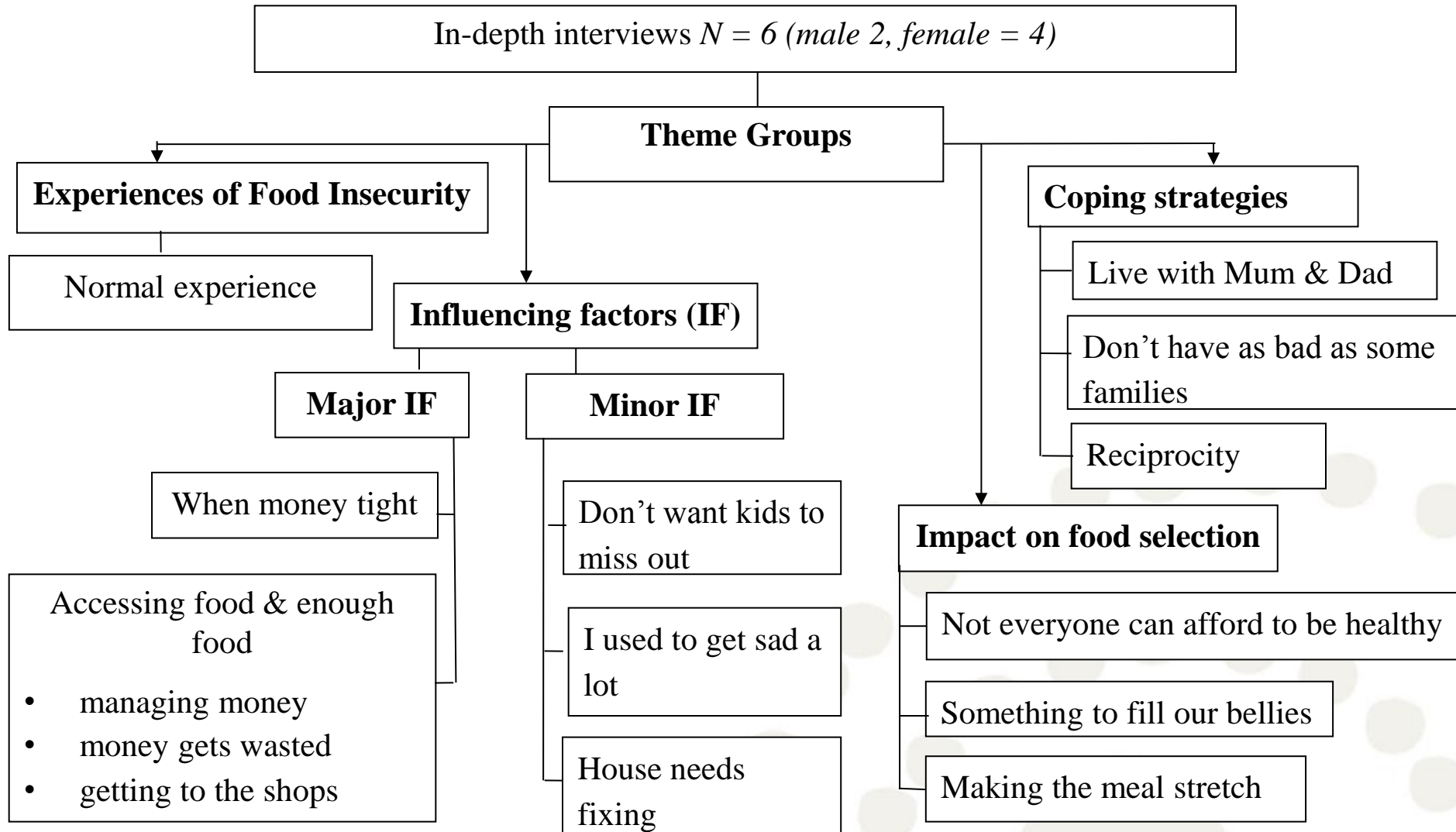
N = 32 families

- 91% Females as primary carers (81.2% mothers)
- Median 7 people per household (range 3 -15 per household)
- 67% younger children (at least 1 child aged 6-24months)
- 54% lower education attainment (highest qualification yrs10-12)
- 92% lower income ( $\leq$  \$1,999.00 per fortnight)
- 46% not in paid employment (home duties, FT study, not working)
- 16% shopped closer to home (smaller shops & service stations)
- 23% often had transport issues ( $> 2$  days/ week) and 46% used public transport for shopping (taxi and/ or bus)
- 23.1% reported higher levels of psychological distress (past 4wks).

# Stage 2 initial discussion findings



# Stage 2 Indepth interview findings





1. Food insecurity is a real experience for families.
2. Having enough money is a major factor.
3. mUS 18-item HHFSM found prevalence of FI higher than 2 items used in national Australian surveys
4. Limitations:
  - Small sample size (N=32), interpret results with caution.
  - mUS 18-item response timeframe (12 mo) potential issue with responses – Kappa fair agreement

# Acknowledgements

- PhD supervisors – Professor Anne Chang and Assoc. Professor Julie Brimblecombe
- Participants, Danila Dilba Health Service, Bagot Community Health Service, Bagot Community Council, NTG Department of Health
- Financial Support:
  - Ian Potter Foundation Indigenous Research Fellowship (Grant ID 20070455)
  - NHMRC Public Health Postgraduate Scholarship (App ID APP1017539)
  - Menzies Foundation Allied Health Scholarship

# References

- American Dietetic Association (1998) Position of the American Dietetic Association: Domestic food and nutrition security. Journal of the American Dietetic Association. March;98(3):337-42.
- Australian Bureau of Statistics (2015) Australian Aboriginal and Torres Strait Islander Health Survey: Nutrition Results – Food and Nutrients, 2012-13. Australian Bureau of Statistics, Canberra.