

Through early-life to adolescence and beyond: charting the lifecourse of Pacific families

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The Pacific Island Family Study

1,398 children born in 2000 at Middlemore Hospital in South Auckland

Includes family members

Overall aims:

- Identify and characterise those experiencing positive and negative health outcomes
- Understanding the mechanisms and pathways to those outcomes
- Make recommendations to improve the well-being of Pacific children and their families

Selected findings across age 0-18 years: At 4 years a less healthy more Western diet

- 739 Pacific children aged 4 years
- Low vegetable intake (35%)
- Eat a Western diet (only 5% consume Pacific diet)
- ↑protein intake associated with ↑BMI and ↑early childhood weight gain

At 6 years more TV time

- 254 Pacific children aged 6 years
- 8 days of accelerometry and recorded sedentary behaviour
- 59% overweight or obese
- ↑Higher BMI associated with ↑TV mins and ↑maternal waist circumference



Factors influencing activity at 6 years

261 children aged 6 years, 60% overweight or obese

254 mothers, 96% overweight or obese

Assessments at 6 weeks, 1, 2, 4 and 6 years of age

MVPA for ≥ 60 mins/day (accelerometer):

25% children

15% mothers

Factors associated with lower child MVPA:

low maternal MVPA, female, wet weather, Winter months

NOT neighbourhood safety

Mothers appear not see physical activity as an issue of importance



Pacific mothers experience suboptimal housing

844 Pacific mothers of 11 year old children

96% of mothers working

	NZGSS 2010	Pacific mothers
House too cold	15%	33%
Housed too small	11%	27%
>7 household members	6%	25%
House too expensive	5%	12%

Maternal psychological distress associated with:
post-partum depression at 6 weeks
social deprivation



Poor hearing common in children

920 Pacific children aged 11 years

Otoscopy, tympanometry, acoustic reflexes

Only 11% had normal peripheral hearing

Type B tympanogram 4x more likely than in Dunedin cohort study

Middle ear disease at 2 yrs - OR 2 for middle ear disease at 11 yrs

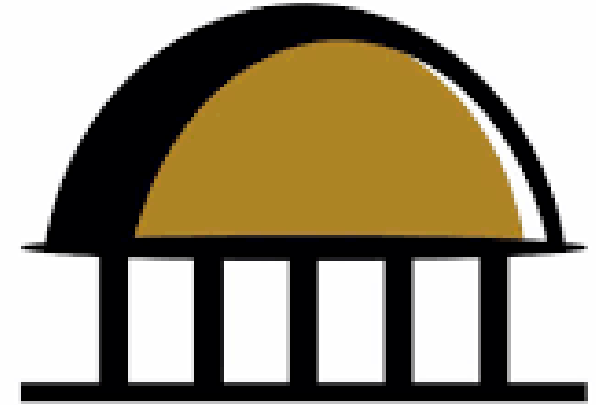
Speculation

Poor hearing has educational, social and psychosocial impacts



Cultural alignment or identity

- Individuals closely aligned traditional Pacific culture - better maternal and infant outcomes
- Less prone to single parenthood, unplanned pregnancy, PND, gestational smoking and alcohol, and IPV
- Infants were less likely to be SGA and admitted to hospital, and more likely to be exclusively breastfed
- Later, they were less likely to have behavioural problems at ages 4 and 6 years



3 Current Research Projects

1. Respiratory function
2. Growth and development
3. Pacific Grandparents



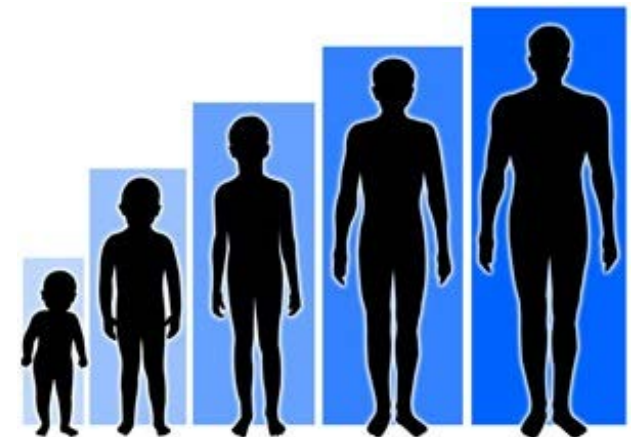
1. Respiratory Function & Early Life

- Early-life events
 - Breastfeeding, smoking, housing conditions etc.
- Current respiratory function
 - Spirometry, Allergies, Blood samples, Chest X-rays
- Longitudinal trajectories
 - Lifecourse approach
 - Focus on high-risk population
 - Research collaboration



2. Pacific adolescent growth & development

- Weight gain 2-14years vs. Metabolic risk factors
 - Insulin, leptin, LDL cholesterol, urate etc.
- Rapid growth associated \uparrow conc. risk factors
 - Rapid wgt gain & \uparrow bodywgt in early childhood associated higher risk of metabolic disease
- Lifecourse perspective
 - Monitoring growth trajectories – target interventions
 - Develop research capacity
 - Focus on high-risk population - Pacific



3. Pacific Grandparents Study

- 3 ethnic groups
 - Samoan
 - Tongan
 - Cook Islands
- Focus groups and workshops
 - Develop priorities
 - Propose solutions and strategies
- Participatory action research - collaboration



Future Considerations

- Pacific-focussed research
 - Pacific leadership
 - Priority areas
- Collaborations – important to be realistic
 - Timeframe
 - Feasibility
 - Funding



Future Considerations

- Accountability - engagement
 - Media
 - Stakeholders - communities
- Always consider who benefits from work
 - Ongoing relationship
 - Ethical responsibility



Acknowledgements



Further information via website: www.aut.ac.nz/pif

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