




He mokopuna He taonga    A child, a treasure

Ko taku tamaiti e noho  
mai nei kei te kōpū    My child who lies within the  
womb

I te huaki pouri    On the edge of darkness,  
come forth

Nau mai, haere mai    Come forth into the world

He wahine, he whenua,  
ka ngaro ai te tangata    Women and land both  
provide sustenance and  
nourishment and without  
them the myriads of  
descendants are lost



Cognitive and social/emotional influences on adaptive functioning in children with FASD: Clinical and cultural considerations.

***2nd Australasian FASD Conference: Our Science Our Stories.***

Andi Crawford

21<sup>st</sup> November 2018



# Background:

- Individuals with FASD require life long support.
- Adaptive functioning difficulties remain after accounting for IQ.
  - Executive functioning.
  - Social cognition.
- Context is also important.
  - Adverse Childhood Experiences.
  - History of Aotearoa.

# Partnership with Te Wāhanga Hauora Māori



- Planning
- Ethics
- Gathering Consent
- Data Collection
- Analysis and Interpretation
- Dissemination of Findings



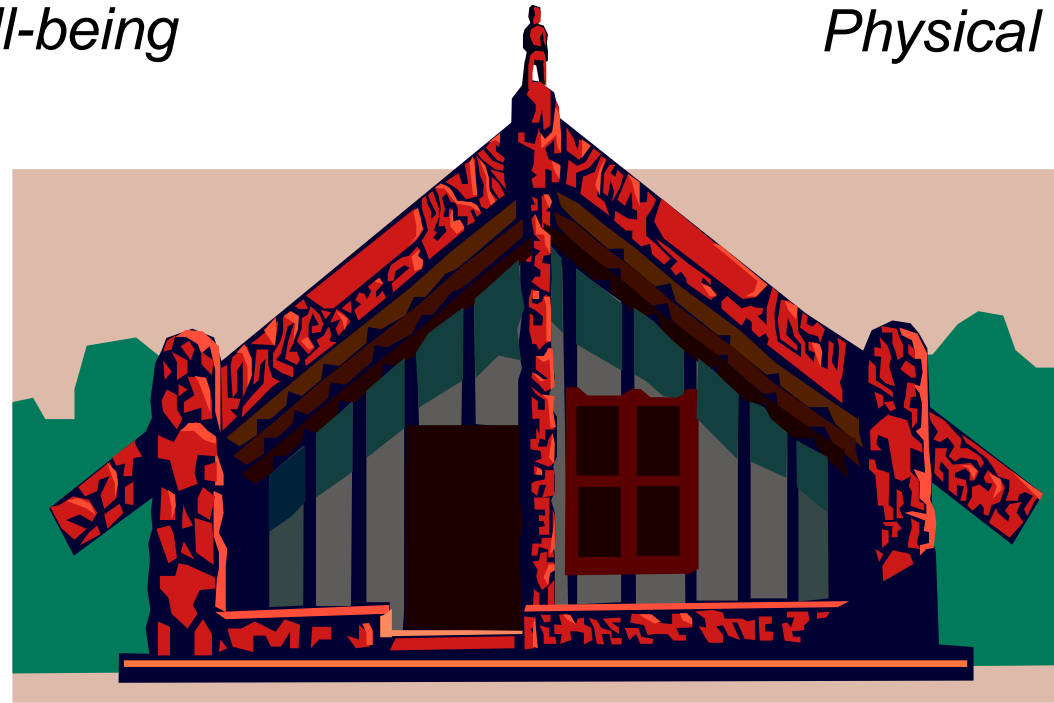
# Context of Aotearoa is important

- Pre-colonisation.
- Colonisation.
- Indigenous FASD prevalence is associated with historical and current trauma.
- Cultural Renaissance.

# Te Whare Tapa Whā (Durie, 1994)

**Taha wairua –**  
*Spiritual well-being*

**Taha Tinana -**  
*Physical well-being*



**Taha hinengaro –**  
*Mental and emotional well-being*

**Taha whānau –**  
*Family & social well-being*



# Hypothesis: What do I expect to find?



**IQ**

**Executive functioning**

**Social thinking**

**Adverse Childhood Experiences**



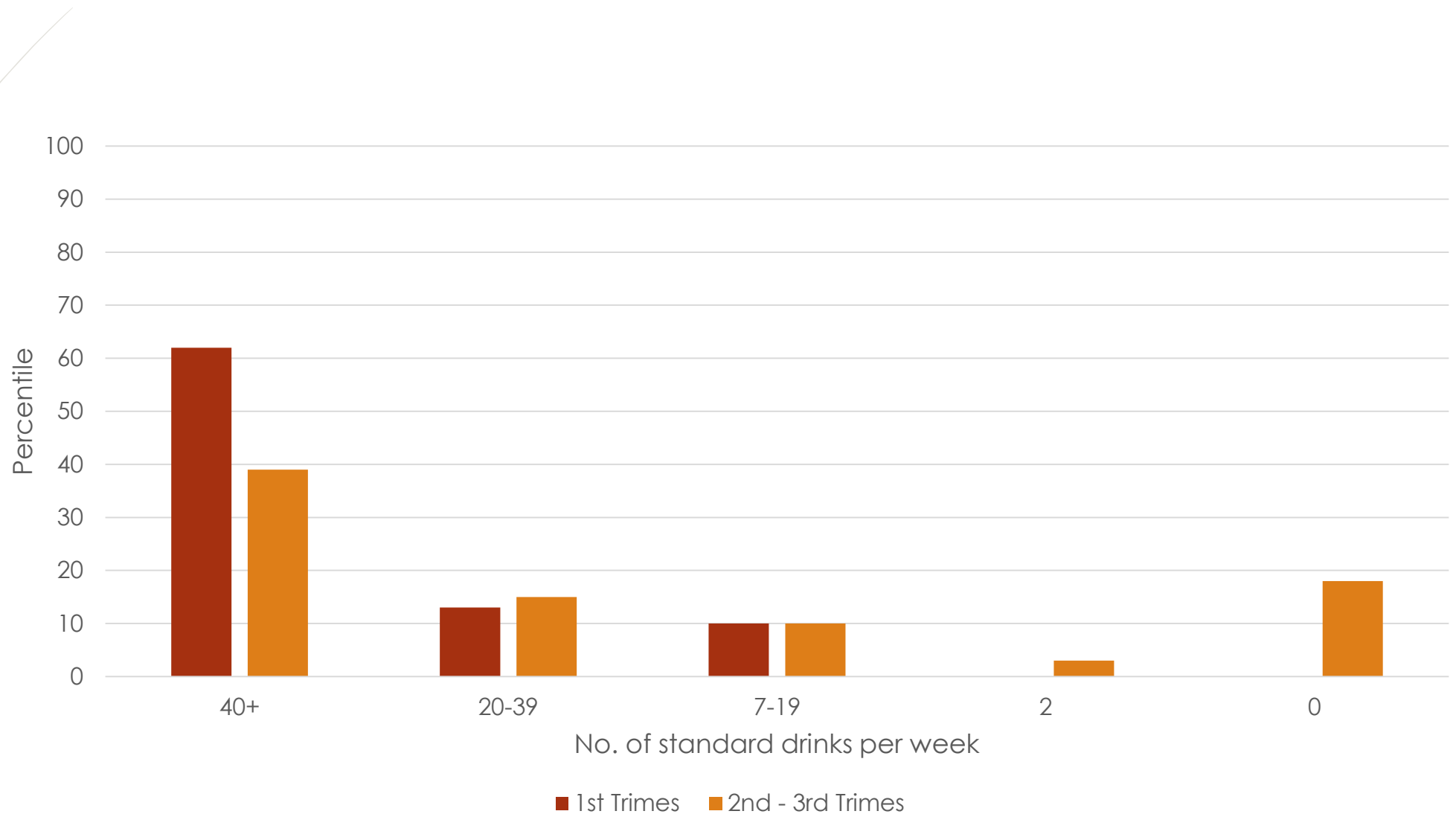
**Adaptive  
Functioning  
(Life Skills)  
Home and  
School**

# Method: Participants

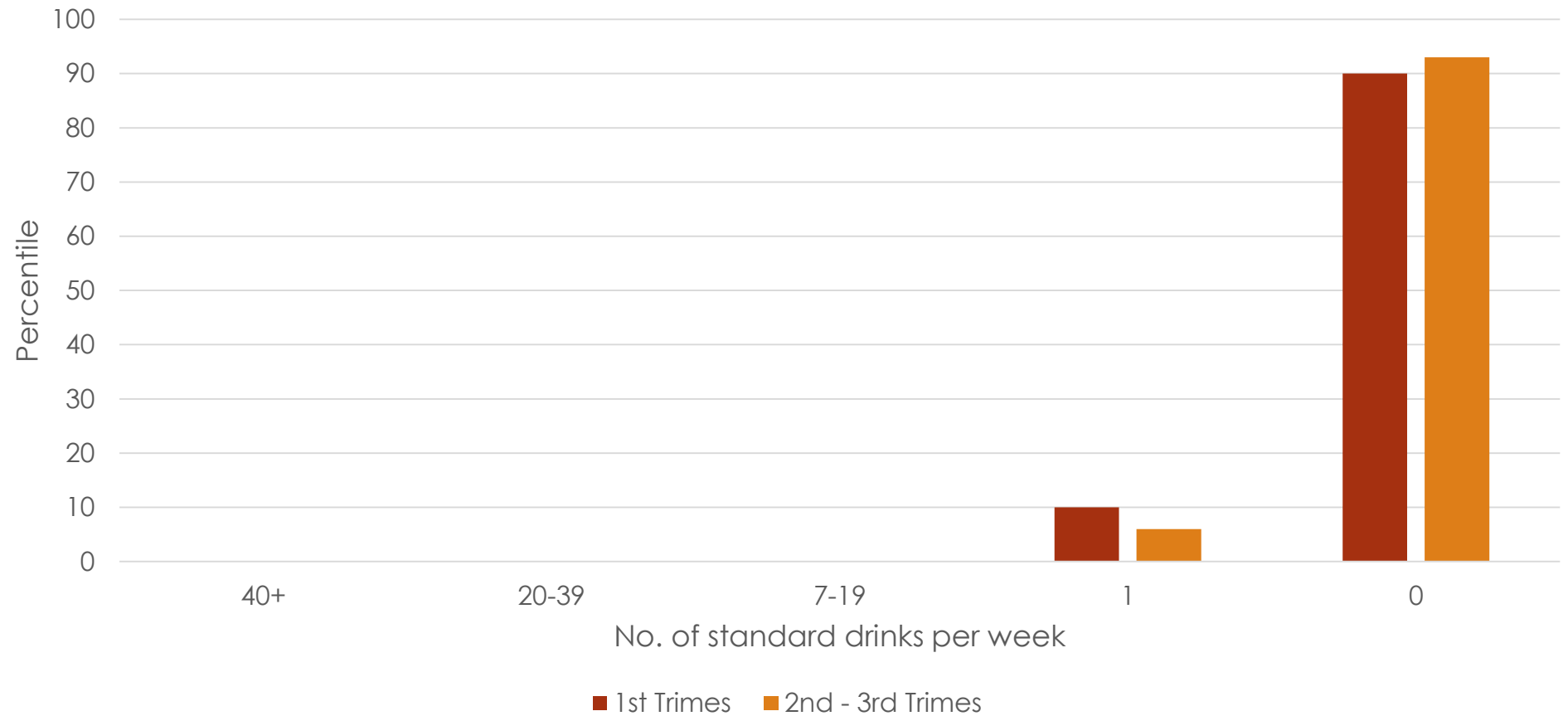
Variable	FASD Group N=39	Comparison N= 29
Age (years), M (SD)	9.51 (1.12)	9.65 (1.12)
Gender (% male)	77%	69%
No Secondary Qualls	72%*	38%*
No Tertiary Qualls	80%	79%
Dep Index 7 - 8	15%	41%
Dep Index 9 - 10	59%	41%
Ethnicity		
Māori	82%	72%
Pākehā	15%	17%
Pacific Nation	3%	10%



# Prenatal alcohol exposure – FASD Group



# Prenatal alcohol exposure – Comparison Group





# Psychosocial factors – FASD Group

## Strengths/Resilience

Children living with whānau

Connected to marae

Identification of strengths

## Challenges

Multiple placements


Parental learning difficulties

High Adverse Childhood Experiences score

Domicile in high deprivation areas

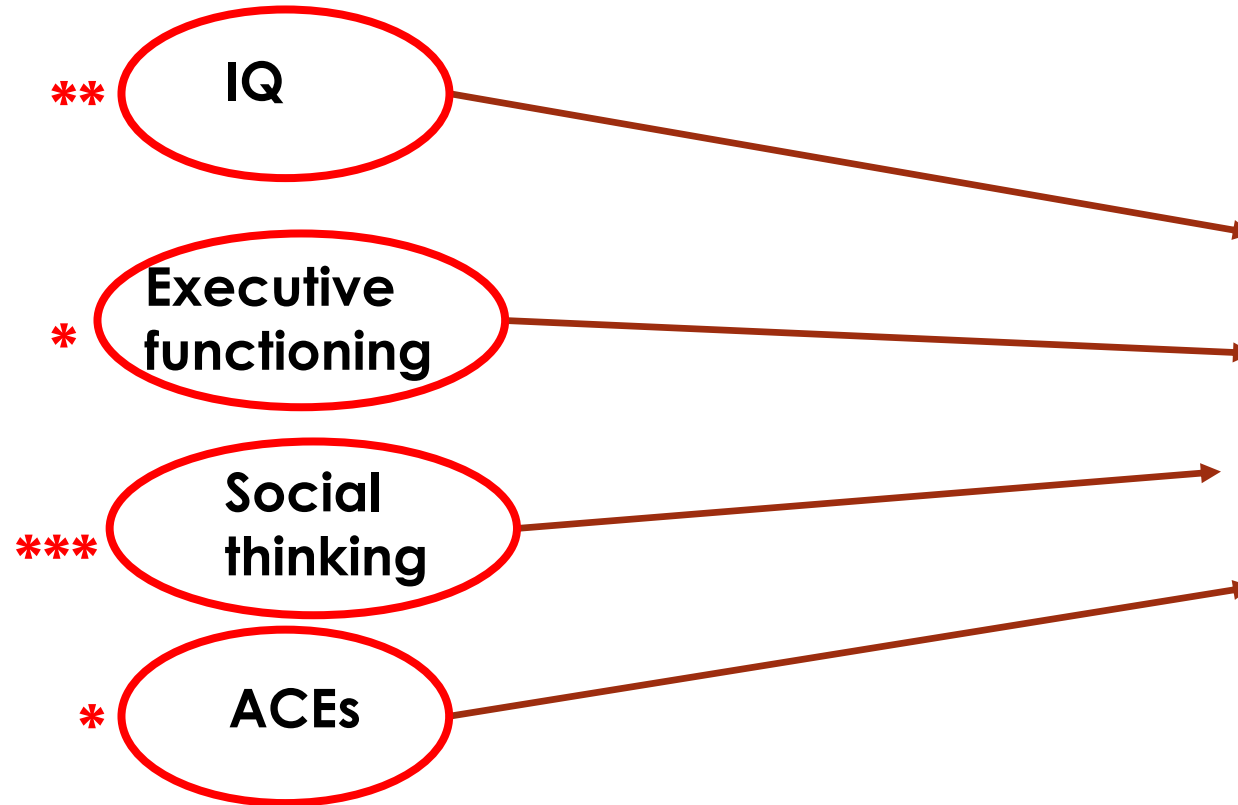


# Results: Between group analysis

- ▶ The comparison group **scored significantly higher** than the FASD group on all measures of:
    - ▶ Social cognition
    - ▶ General intellectual functioning.
    - ▶ Executive functioning.
    - ▶ Adaptive functioning.
  - ▶ Comparison group performed as per norms or above
- 

# Results: Correlational Analysis

FASD Group



Adaptive  
Functioning  
(Life Skills)  
School

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

# Results: Correlational Analysis

	FASD Group
	Adaptive Functioning (Teacher)
<b>IQ</b>	<b>.46**</b>
<b>Executive Functioning</b>	<b>.34*</b>
<b>Social Cognition</b>	<b>.62***</b>
<b>Adverse Childhood Experiences</b>	<b>-.37*</b>

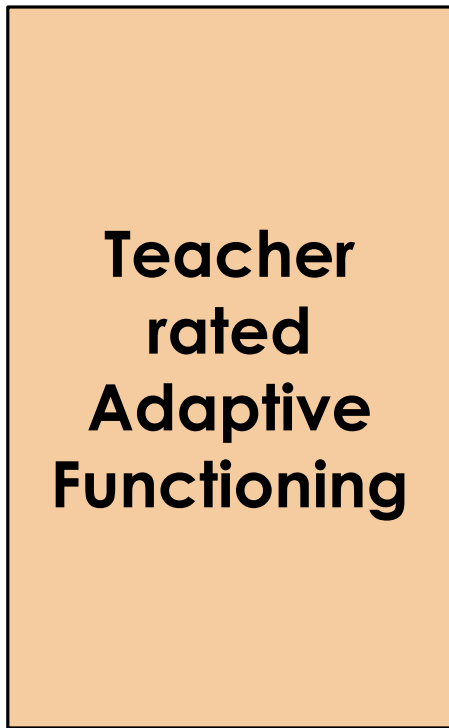
<sup>†</sup> $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$



# Results: Regression Analysis – FASD Group



**IQ  
Executive Functioning  
Social Cognition**



**Teacher  
rated  
Adaptive  
Functioning**



## Results: Regression Analysis – FASD Group

$$R^2 = 0.43 \text{ (F (3,32) = 7.89, } p < .001)$$



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## Results: Regression Analysis – FASD Group

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# Results: Regression Analysis – FASD Group



**Social Thinking**

**TOPs**

**SCST**

**Recognising emotions  
(Adult faces)**

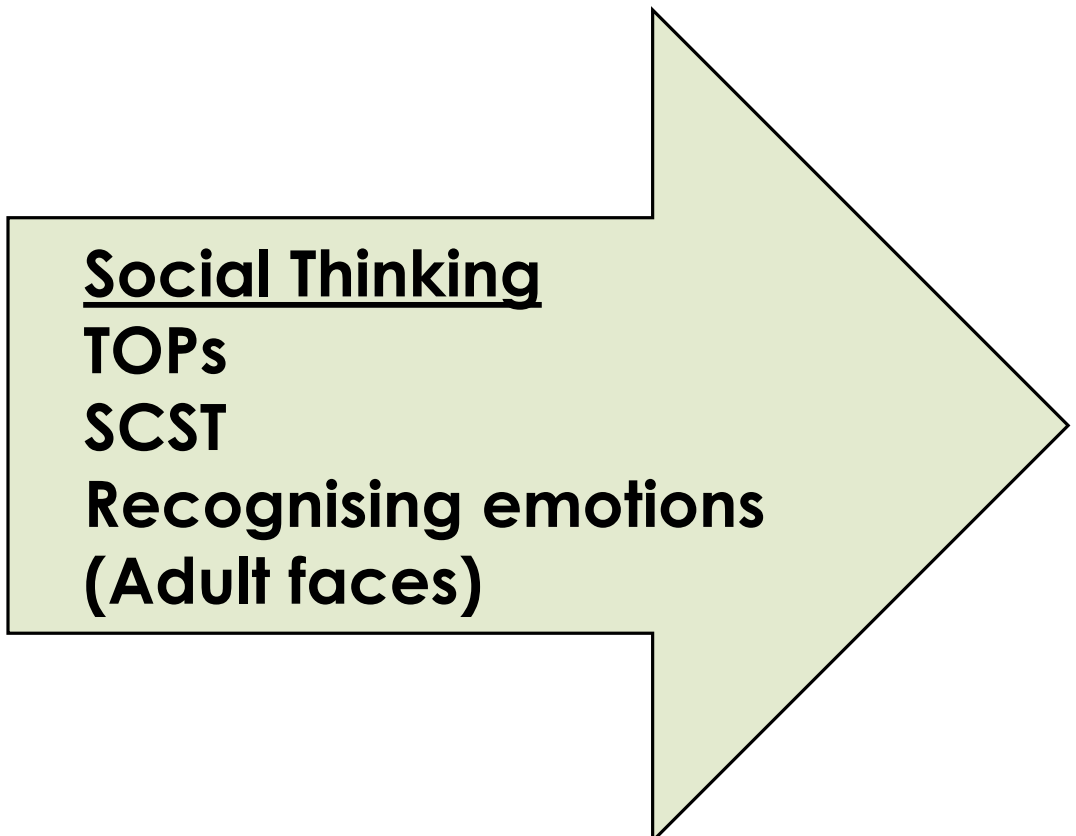


**Teacher  
rated  
Adaptive  
Functioning**

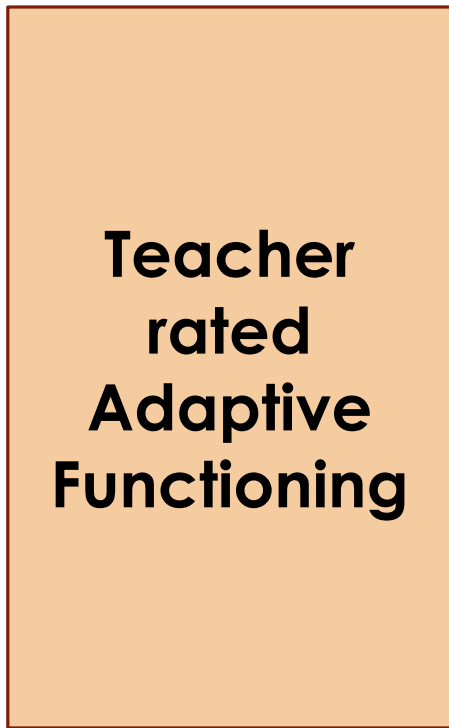


## Results: Regression Analysis – FASD Group

**$R^2 = 0.38$ , (F (3,32) = 6.49,  $p = .001$ )**



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# Main findings:

- ▶ Children with FASD experience significant learning and behaviour difficulties, often in the context of psychosocial complexity.
- 



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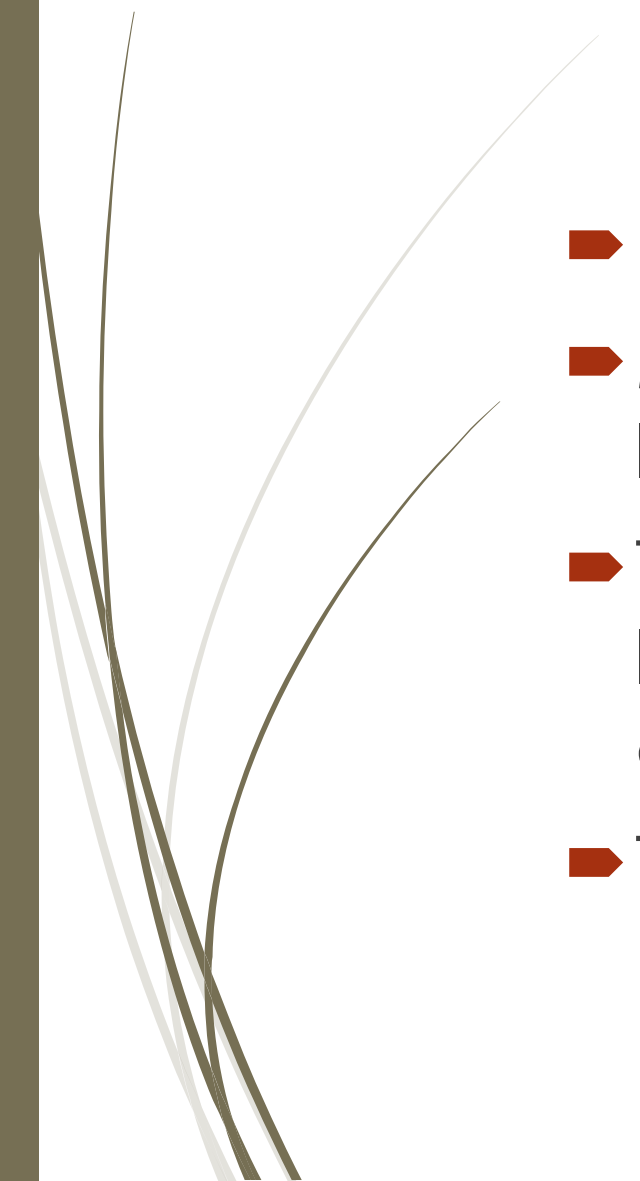


## Main findings:

- Children with FASD experience significant learning and behaviour difficulties, often in the context of psychosocial complexity.
- Impairments in social and emotional cognition (especially recognising emotions on adults faces) appear to be the most important influence on adaptive functioning.
- Challenges in all of the pillars of Te Whare Tapa Whā.



# Recognising Emotions

- First stage of social information processing.
  - May affect relationship with the adults in their life e.g. teachers
  - Those that need increased support may be less likely to receive it because they are not connected to their teachers.
  - The importance of a secure relationship.
- 





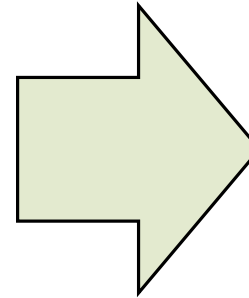
# Social thinking is especially important in Te Ao Māori.

- Society is organised by whakapapa (ancestry).
- Connectedness vital for passing down values and beliefs.
- Tikanga required high levels of social and emotional competence.
- Whakawhanaungatanga is essential in creating a secure identity.
- Whakawhanaungatanga helps us advocate for ourselves.

# But do services meet the need?

**Disability Services?  
39% meet criteria for  
Intellectual Disability**

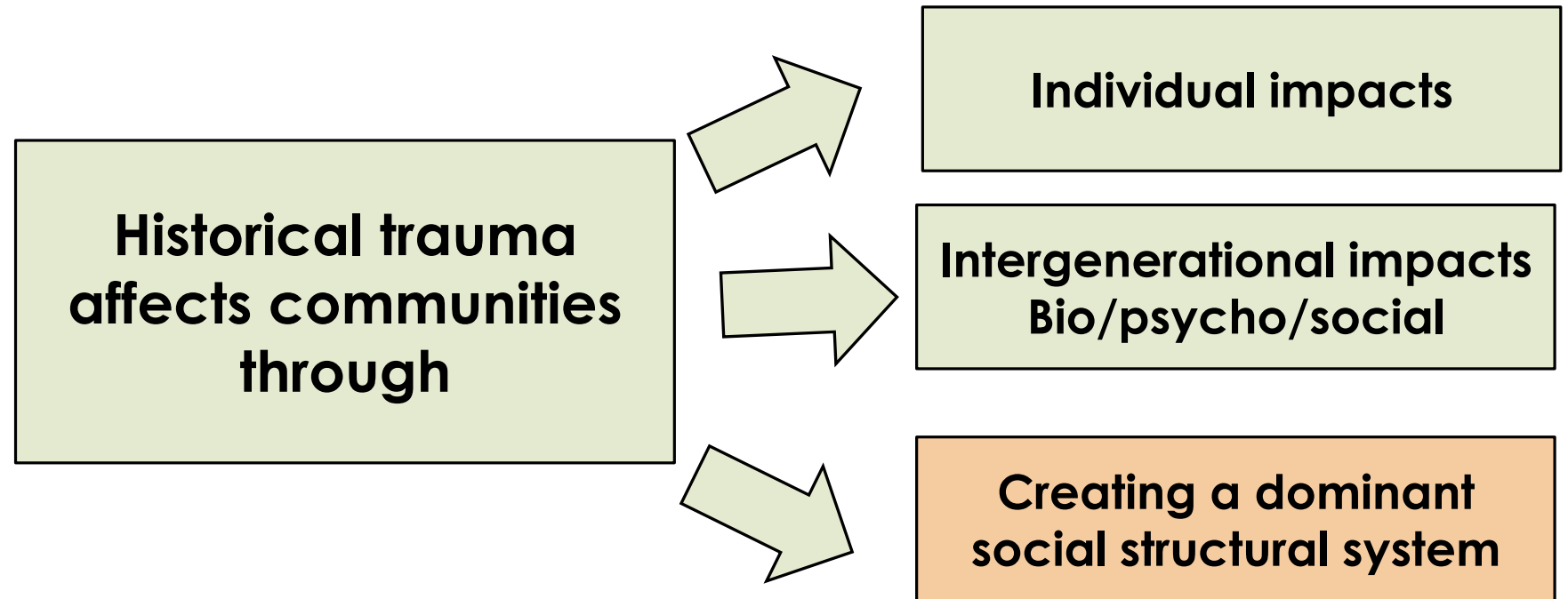
**Mental Health  
Services?  
5-8% meet criteria  
for Depression &  
Anxiety**



**Non-government  
organisations  
BUT  
can be limited in  
resource and are  
overwhelmed**

**And all systems focus on the individual child.....**

# Historical Trauma & Institutional Racism



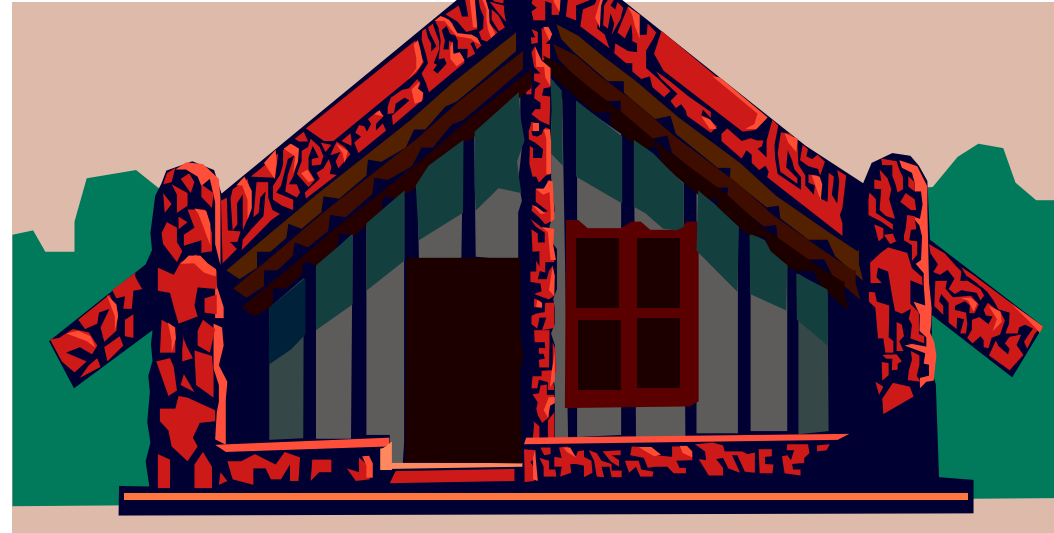
**Institutionalised Racism – When systems are set up to meet the needs of the dominant race whilst penalising minority groups.**

(Rangihau et al, 1988)

# Service Delivery and Interventions:

**Taha wairua** - *Spiritual well-being*

**Taha Tinana** - *Physical well-being*




**Taha hinengaro** - *Mental and emotional well-being*

**Taha whānau** - *Family & social well-being*

- The way services are contracted must replicate what we are expected to do in clinical and cultural practice.



# Nothing should be done without:

- 
- Partnership
  - Embedding research in the historical context.
  - Interpreting findings from an Indigenous worldview.



# He Karakia Whakakapi

Kia whakairia te tapu  
Kia wātea ai te ara  
Kia turuki whakataha ai  
Kia turuki whakataha ai  
Hui e! Tāiki e!

Restrictions are moved  
aside  
So the pathways is clear  
To return to everyday  
activities  
Forward together!