

# Maori and Neuropsychological Assessment

New Zealand Special Interest Group in  
Neuropsychology (NZSIGN)

New Zealand College of Clinical  
Psychologists (NZCCP)

Waipapa marae

University of Auckland

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Te Rarawa, Te Aupōuri, Ngāti Kahu



# Goal of this workshop

**To work toward obtaining competence in cross-cultural practice with Māori**

- **Identify which aspects of culture impacts neuropsychological performance**
- **Consider the widespread implications for Māori and neuropsychological assessment**
- **Identify previous NZ studies**
- **AUT Postdoc research**
- **Current HRC Postdoc research**
- **“Tips” on working with Māori**



# Universalism of neuropsychology

**“...a very limited kind of neuropsychology, appropriate to only a fraction of the world’s population, is presented to the rest of the world as if there could be no other kind of neuropsychology, and as if the education and cultural assumptions on which it is based were obviously universals that applied everywhere in the world” (Mathews, 1992. p.421).**



# Acculturation

**“Neuropsychological instruments are suitable for individuals from minority cultures who have become fully assimilated and acculturated into a majority group.” (Uzzell, 2007, p.6)**

**“Some Māori are part of Māori society. Some Māori are part of general society. Some Māori are alienated from both. (Durie, 2001)**



# Education

**“The effects of education on neuropsychological functioning are potent and pervasive. They show up on almost every kind of test used for neuropsychological assessment. Their potency becomes obvious when one subject group has had significantly less education than comparison groups or the population on which the test has been developed” (Lezak, Howieson & Loring, 2004).**



# Fletcher-Janzen, Strickland, & Reynolds, (2000)

**“The cost of not considering the possible impact of cultural factors on expectations is clear: The patient may not be optimally motivated or co-operative during the evaluation. This can lead to an underestimation of the patient’s true cognitive capacities or an attribution of reduced effort to internal, dispositional factors on the patient’s part”.**

**P14.**



# Wider social implications of neuropsychology and Māori

- Māori are over-represented in the incidence of TBI and stroke and there is a predicted sharp increase for the incidence of dementia.
- Māori are also over-represented in non-neurological/medical settings where neuropsychological assessments are routinely implemented.



# NZ Studies

- **Haitana, Pitman, & Rucklidge, 2010**
- **Ogden & McFarlane-Nathan, 1997**
- **Ogden, Cooper & Dudley, 2003**
  
- **Shepherd and Leathem, 1999**
- **Dudley, Wilson & Barker-Collo, 2014 (in press)**



# Common themes from NZ studies

- **Lack of information**
- **Testing environment**
- **The neuropsychologist**
- **Test content**



# AUT Short term Postdoctoral Fellowship

**6 months**

**\$4, 000 research costs**

**Aim: To investigate the experiences of Māori who had undergone a neuropsychological assessment within the past 5 years.**



# Demographics

- **N = 16**
- **Male = 9**                      **Female = 7**
- **Urban = 9**                      **Rural = 7**
- **Age range: 16 years to 64 years**
- **Severity of head injury:      Mild = 3**  
**Moderate = 6**  
**Severe = 7**

**Ngāpuhi, Ngāti Hine, Ngāti Kahu Ki Whangaroa,  
Ngāti Maniapoto, Ngāi Tahu, Ngāti Wai, Rongowhakaata, Tainui,  
Te Arawa, Te Aupouri,  
Te Rarawa, Tuhoē.**



# Findings

## 4 Themes emerged

1. Positive experiences
2. No Choice
3. Cultural Invisibility
4. Preferred ways of doing



# Positive Experiences

## *Neuropsychologist*

- **Yeah, He was really great , you know. He broke it all down for me. He was brilliant I've gotta say, and he explained a lot of things. There's a lot a things I couldn't understand**
- **Oh my gosh there was no one else that could of pulled me out of the dark. I would have been waiting until NN came along**



# No Choice

- *Environment*
- I would have had it at home just because of the stage where I was at, at that time – it's familiar surroundings. I just think it wouldn't have added to my anxiety. I never ever experienced those [anxiety] until my head injury and those kind of things are heightened really quickly for me so to be given the option I would have been quite happy to have it at home...
- I think you see the true person in their own environment. You do dress up and look the part when you go to different places like these flash clinics



# No choice

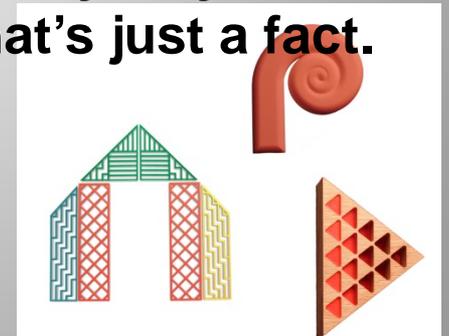
- Again it's like you're going to all these people who you have no idea who they are or what they are trying to achieve. To me it felt like another part of the “getting well” that I had to do, not understanding why I was there. I suppose I should have asked but you feel a bit intimidated sometimes.



# Cultural Invisibility

## *Maori Identity*

- Māori had nothing to do with it. I just put my ethnicity on the form.
- I told him I was Tuhoe, but I could see it didn't mean anything to him.
- Nah, it's a Pākehā place [neuropsychologist's office] – you don't [expect cultural acknowledgement]. As a Maori, you always feel different going into anything that's Pākehā. I'm bloody 60 years old! Nothing in my life leads me to expect that. That's just a fact.



# Preferred ways of doing

*Most preferred to have a Māori clinician*

- I just felt you could relate with Māori a bit more. They have more understanding you know, from my perspective.
- Yeah...he knows the rules of the Māori and how they work.
- What I'd like to see for Māori is a lot more Māori people working with Māori with injuries because they have that belief, you know our cultural beliefs.



# Preferred ways of doing...ctd

## *Maori content*

- Yeah that would be good, much better. I just feel they're very Pākehā-fied tests.
- Yeah, I'd say that if there were some Māori words in there I probably would remember it.

## *Karakia*

- I think if they really cared they would have asked what your nationality was and to see if you wanted anything done like karakia. Being part Māori I have that spiritual thing in me that when I go into the marae you can feel it inside. So I know that doing that sort of thing with any kind of doctor, it helps.



# Preferred ways of doing...ctd

## *Māori Models of Health*

- ...like his tinana and hinengaro can be healed here but when he gets home his wairua will be healed and that is all part of his Māori stuff. They might not realise it around here but he won't be 100 per cent until he is home.
- That is very much where the neuropsychologist comes from, a medical model, a western view...and the way it positioned us, like because we didn't go down that path we were like not caring.



# Dissemination

- **Auckland Regional Neuropsychology Peer Group**
- **He Mānawa Whenua Indigenous Research Conference – Hamilton 2013**
- **Poster presentation - Annual Conference of the American National Academy of Neuropsychology. San Diego Oct 2013**
- **NZ Psychology Journal (in print)**
- **IHP- in service**
- **ABI- in service**



# Suggestions on how to improve neuropsychological services for Māori

- a) Māori normative data for existing measures
- b) More research about the cultural equivalence and relevance of items within various tests
- c) Modification of current tools to include Maori content
- d) Utilisation of Māori Health Models in rehabilitation recommendations
- e) Workforce development – need more Māori practising neuropsychology/psychology
- f) Develop cultural competence of non-Maori neuropsychologists



# HRC funded postdoc 2013 - 2015

- Māori normative data for WAIS-1V
- N= 280
- Age: 16-20, 21-30, 31-40, 41-50, 51-60, 61-70, 71+
- Balance of:
- male/female, education/SES/urban/rural
- Seven different sites throughout NZ
- MMM-ICE
- ACS - TOPF



# Dissemination

- **Neuropsychology Peer Group**
- **Website/app**
- **Hard copy manual**
- **Journal Article**
- **INS Conference 2016 Boston**



# Working with Māori

- Acknowledge differences
- Provide pre-assessment information
  - Invite whanau along
  - TPO
- Room/environment
- 3 Ks
- Inquiry into cultural background
  - Iwi, hapu, Bilingual.
- Explore the extent of involvement in Te Ao Maori



# Testing Environment

- **Durie, (2001) recognised that the degree of comfort felt by Māori when accessing health services can impact on the extent to which they access those services as well as the success of any treatment or care then delivered.**



- **Establishing Premorbid Ability for Māori may require more inquiry.**
- **Consider using more culturally neutral measures e.g. RAVLT, Spot-the-word, TMT.**
- **Consider Maori models of Health**
  - **Te Whare Tapa Wha**
  - **Paiheretia**
- **Reference to culture in NR?**

## **COE - Principle 2 Responsible caring**

**“Any reservations concerning the validity or reliability of an assessment procedure, arising from its administration, norms, or domain-reference, should be made explicit in any report”**



# Cultural Competence

- Professor Mason Durie emphasised that while cultural safety is focused on the experiences of the client, *cultural competence* has as its primary concern the health workers capacity to improve health status through the integration of culture into the clinical context. He stressed that the purpose of cultural competence is to maximise health gains from the health intervention where the practitioner and client are from different cultures (Durie, 2001).



# Recommended Reading

## *Books:*

**Cross-cultural Neuropsychological Assessment V. Neil (2008)**

**Anything by Mason Durie!**

## *Articles:*

**McFarlane, A., Blampied, N. & McFarlane, S. H. (2011). Blending the Clinical and the Cultural: A framework for conducting formal psychological assessment in bicultural settings. *New Zealand Journal of Psychology*, (40) 2, 1–15.**

**Rivera Mindt, M., Byrd, D., Saez, P., & Manly, J. (2010). Increasing culturally competent neuropsychological services for ethnic minority populations: A call to action. *The Clinical Neuropsychologist*, 24(3), 429-453.**

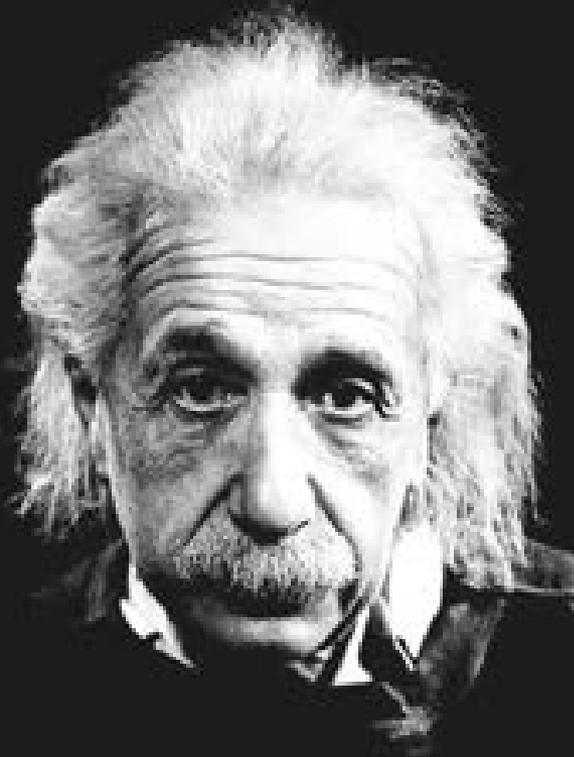


**In her keynote address to the conference on neuropsychological rehabilitation in Ireland in 2005, Ogden stated:**

**“Within the psychological community in NZ perhaps the most important factor for change has been educating ourselves about Māori history and values, and coming to an understanding ‘from the soul’ about the effects of colonisation (or being a minority), on health outcomes”.**



**"Not everything that  
counts can be counted,  
and not everything that  
can be counted counts."  
-Albert Einstein**



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# Dorothy Gronwall 1931-2001

