




Research with first-nation Australians: challenges for a scientific neuropsychology.
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Financial Disclosures: Bowden

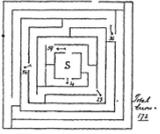
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Porteus, 1917. *Psychological Review*
 Porteus, 1918. *Journal of Educational Psychology*.

THE MEASUREMENT OF INTELLIGENCE: SIX HUNDRED AND FIFTY-THREE CHILDREN EXAMINED BY THE BINET AND PORTEUS TESTS
 S. D. PORTEUS
Superintendent of Special Schools, Fitzroy, Melbourne, Australia

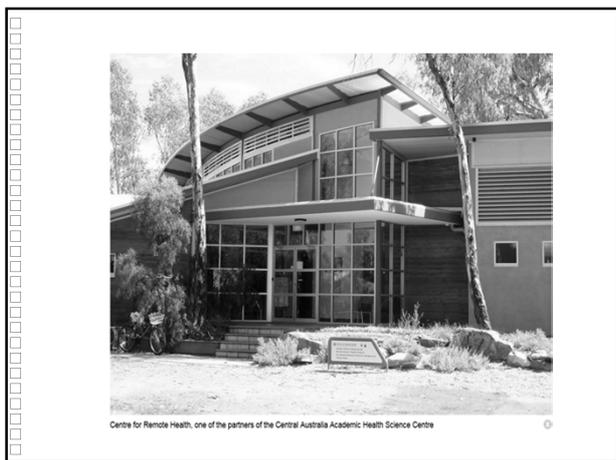
Since the publication of my tests in 1915 amount of work has been done with them, citation of making further comparisons of the results their use with those got by the use of the Binet. They have been applied to several groups of children as well as to feeble-minded. It is the object of this report to report these results and to offer some observations arisen through the extension of their use.



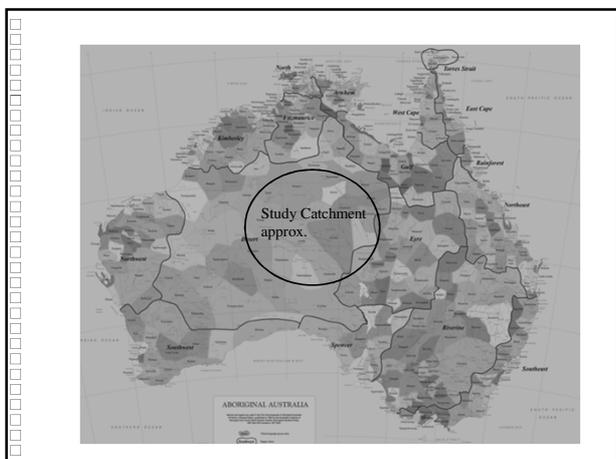
This is Your Test.
 S. D. Porteus.
 1918.

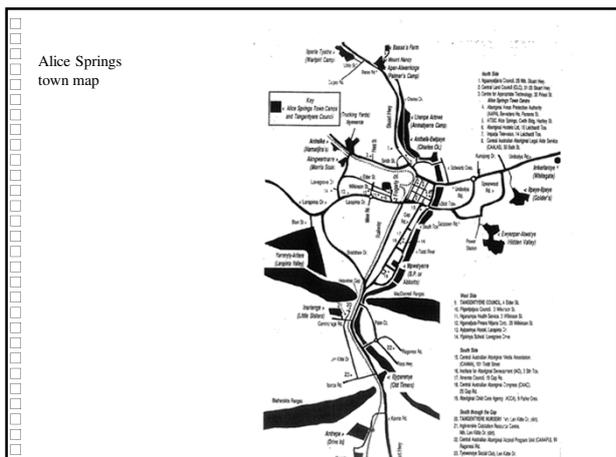
When Given Also Give
 or Give 10 Sec.
 a Starting Point. (S) (S) (S) (S)
 ——— Direction in which to move.
 PORTBUS 4





Centre for Remote Health, one of the partners of the Central Australia Academic Health Science Centre





Dingwall et al. BMC Psychology (2017) 5:26
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BMC Psychology

RESEARCH ARTICLE Open Access

Exploring the reliability and acceptability of cognitive tests for Indigenous Australians: a pilot study

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Abstract
Background: Reliable cognitive assessment for Indigenous Australians is difficult given that mainstream tests typically rely on Western concepts, content and values. A test's psychometric properties should therefore be assessed prior to use in other cultures. The aim of this pilot study was to examine the reliability and acceptability of four cognitive tests for Australian Aboriginal people.
Methods: Participants were 40 male and 44 female (N = 84) Aboriginal patients from Alice Springs Hospital. Four tests were assessed for reliability and acceptability – Rowland Universal Dementia Assessment Screen (RUDAS) (n = 19), PEEL Corsi Blocks Corsi (n = 19), Story Memory Recall Test (SMRT) (n = 17) and a Cogstate battery (n = 18). Participants performed one to three of the tests with repeated assessment to determine test-retest reliability. Qualitative interviews were conducted and analysed based on an adapted phenomenological approach to explore test acceptability. An Indigenous Reference Group gave advice and guidance.
Results: Intra-class correlations (ICCs) for test retest reliability ranged from r = 0.58 (Cogstate One Back accuracy) to 0.86 (RUDAS). Themes emerged relating to general impressions, impacts on understanding and performance, appropriateness, task preferences and suggested improvements.
Conclusions: RUDAS, Cogstate Identification task, and SMRT showed the highest reliabilities. Overall the tests were viewed as a positive challenge and an opportunity to learn about the brain despite provoking some anxiety in the patients. Caveats for test acceptability included issues related to language, impacts of convalescence and cultural relevance.

Cognitive tests used:

- Rowland Universal Dementia Assessment Screen (RUDAS: Story et al., 2004)
- Cogstate (www.cogstate.com)
 - Identification task
 - One-Back task
- Story Recall (adaptation of WMS style Logical Memory)

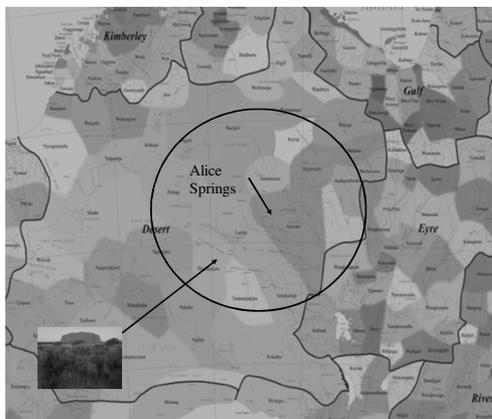
Dingwell et al. 2017, p. 14

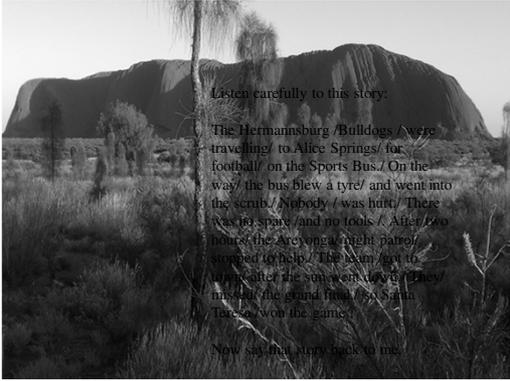
While test anxiety is potentially common across cultures, anxieties identified in our group may have been amplified by a historical misuse of assessment as a process of social and cultural control, leading to suspicion and mistrust of the process among many Indigenous Australians [50]. Interestingly, some participants felt less threatened when completing assessments on the computer, suggesting it was less likely to be "flung back in your face". They also stressed the importance of putting people at ease, and suggested letting people know that they will not get in trouble and that it is ok if they make a mistake.

Story recall to test anterograde memory

The Hermannsburg/ Sports Bus / carrying / the Hermannsburg Bulldogs / to Alice Springs / for football / blew a tyre / and went into the scrub. / No one / was hurt. / There was no spare tyre / and no tools / to fix /the flat tyre. / After two hours / the Areyonga police / stopped to help. / The sports bus / got to town / at dinner time. / The Bulldogs / missed the grand final / and had to forfeit / to Santa Teresa.

Charlie / from Yuendumu / works /as a ranger / in the Council / and likes hunting / for kangaroo / when the sun goes down. / He told his boss / that when he was hunting / on Sunday / he was chased/ by wild dogs / and tripped /and hurt / his leg. /Charlie was sore / and bruised / for a long time after that / and could not work / or go hunting / for one month.





Listen carefully to this story.

The Hermannsburg /Bulldogs /were travelling/ to Alice Springs/ for football/ on the Sports Bus./ On the way/ the bus blew a tyre/ and went into the scrub/ Nobody / was hurt/ There was no spare/ and no tools / After two hours/ the Areonga night patrol/ stopped to help / The team had to leave after the sun went down / They missed the grand final / So / They lost the game.

Now say that story back to me

Effect of participant first-language on test scores

Between-Subjects Factors			
	Value Label	N	
Self report of Patients first language	1	ENGLISH	235
	2	ARABIC	52
	3	PITJANTJANKA	42
	4	ALYAWARRI	22
	5	WALUPUR	42
	6	ANMATJERE	12
	7	LURITJA	32

RUDAS:
First-language $F(6,451) = 8.31, p < .001, \text{Partial } \eta^2 = .099$

Cogstate:
Identification
First-language $F(6,340) = 3.49, p = .002, \text{Partial } \eta^2 = .058$

One-back
First-language $F(6,331) = 8.31, p = .047, \text{Partial } \eta^2 = .038$

Story Recall
First-language $F(6,320) = 8.67, p < .001, \text{Partial } \eta^2 = .140$

Conclusions

- Cross-cultural neuropsychology research requires extensive collaboration with target communities.
 - Many cultural issues are invisible to naïve eyes.
