

# Assessing Indigenous and non-Indigenous juvenile offenders using the Youth Level of Service Case Management Inventory

Dr Andrew McGrath

Associate Professor Tony Thompson



**CHARLES STURT**  
UNIVERSITY

# The youth level of service inventory (YLS/CMI-AA)

---

History of use: development and introduction to this jurisdiction

Current use

Rationale

Risk versus needs: static and dynamic risk factors

# Subscales of the YLS/CMI-AA

---

1. Prior and current offences
2. Family and living circumstances
3. Education/employment
4. Peer relations
5. Substance abuse
6. Leisure/recreation
7. Personality/behaviour
8. Attitudes/beliefs

# The current study

---

Seeks to answer the following question:

What is the predictive validity of the instrument in assessing risk of re-offending for both Indigenous and non-Indigenous young people?

# Sample

---

All YLS inventories completed between November 2002 and November 2005 from 44 locations throughout the state  
6802 inventories relating to 4238 individuals  
3594 (84.8%) male, and 1342 (30.9%)  
Indigenous.

# Recidivism data

---

From Bureau of Crime Statistics and Research re-offending database

Recidivism defined as an offence subsequent to administration of the YLS attracting a conviction

The final follow-up date was 30 September 2007

Maximum follow-up times ranged from 667 days to 1804 days ( $M = 1210$  days)

# YLS/CMI-AA Descriptive statistics

	N	Mean	Min.	Max.
Prior and current offences	4238	3.69	0	9
Family and living circumstances	4238	2.46	0	7
Education/employment	4238	2.66	0	7
Peer relations	4238	2.21	0	4
Substance abuse	4238	2.35	0	6
Leisure/recreation	4238	1.58	0	3
Personality/behaviour	4238	2.24	0	7
Attitudes/beliefs	4238	1.23	0	5
Total score	4238	18.44	0	48

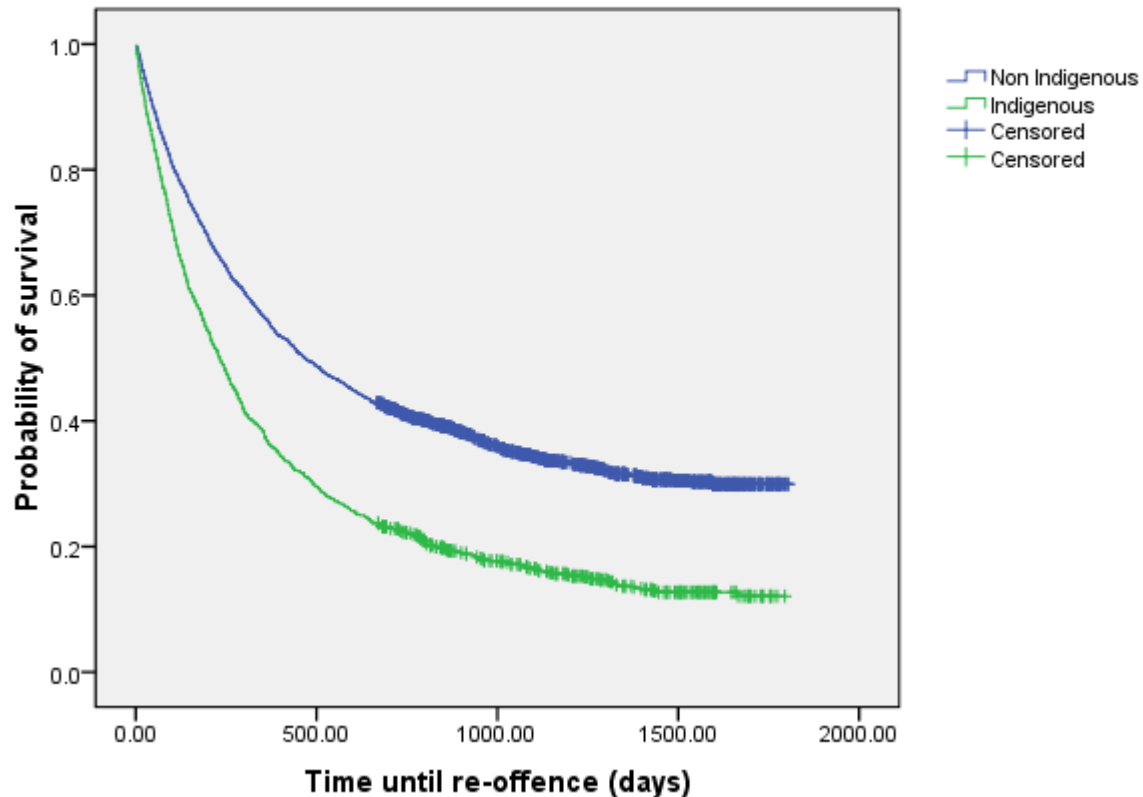
# YLS/CMI-AA Descriptive statistics: Indigenous/non-Indigenous

	Indigenous ( <i>n</i> = 1342)	Non-Indigenous ( <i>n</i> = 2896)		
Subscale	Mean (SD)	Mean (SD)	T	p
Prior/current offences	4.37 (1.97)	3.37 (1.82)	-15.72	0.000
Family/living circumstances	2.92 (1.94)	2.25 (1.92)	-10.41	0.000
Education/employment	2.91 (2.20)	2.55 (2.15)	-5.05	0.000
Peer relations	2.66 (1.28)	2.01 (1.35)	-15.16	0.000
Substance abuse	2.69 (2.02)	2.19 (1.88)	-7.72	0.000
Leisure/recreation	1.80 (1.16)	1.48 (1.18)	-8.36	0.000
Personality/behaviour	2.52 (2.16)	2.11 (2.08)	-5.79	0.000
Attitudes/beliefs	1.49 (1.57)	1.12 (1.45)	-7.33	0.000
Total YLS	21.36 (9.67)	17.08 (9.83)	-13.34	0.000



# YLS/CMI-AA Predictive validity

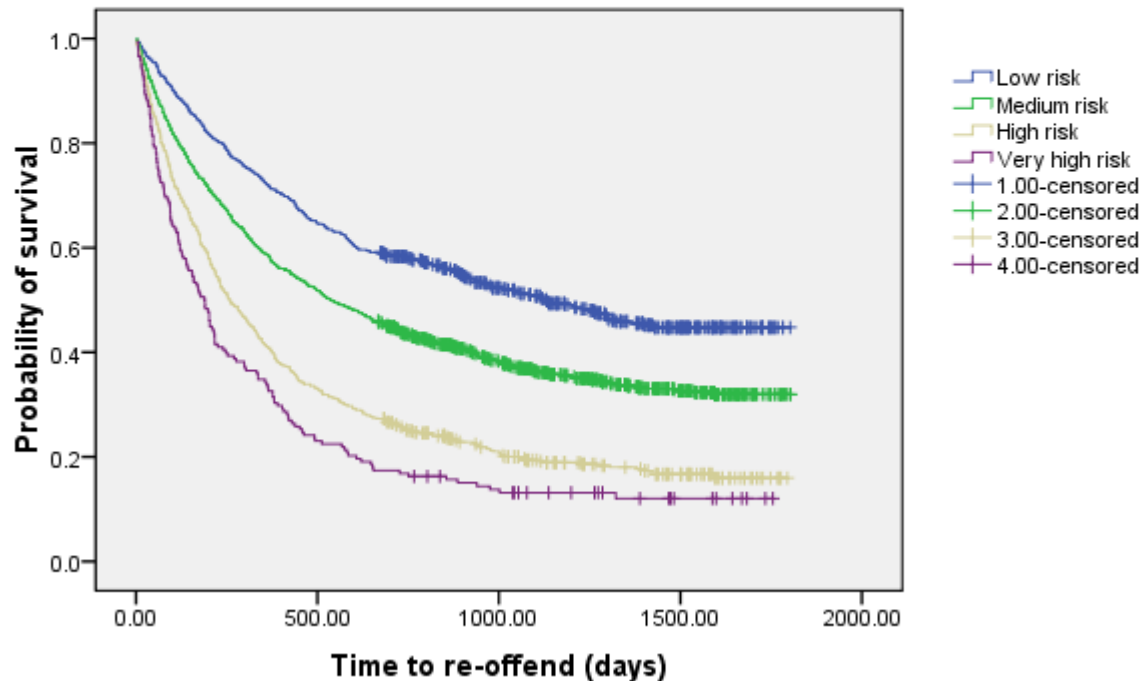
Survival curves for Indigenous and non Indigenous participants



# YLS/CMI-AA Predictive validity

## Survival Functions

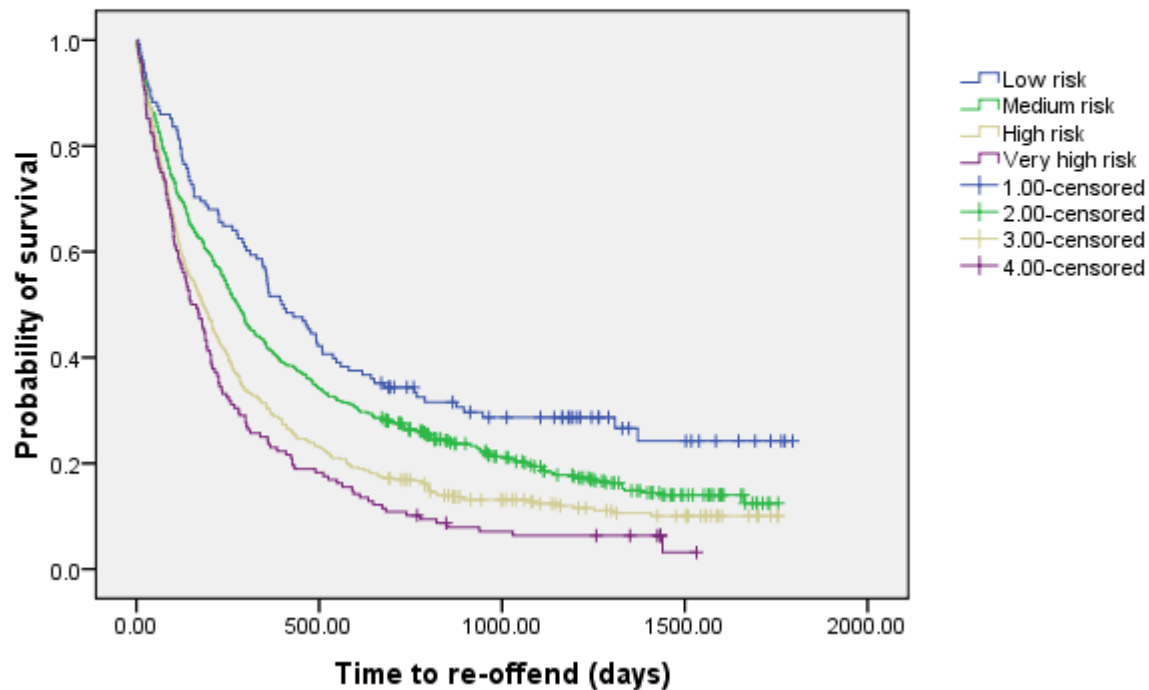
### Non indigenous



# YLS/CMI-AA Predictive validity

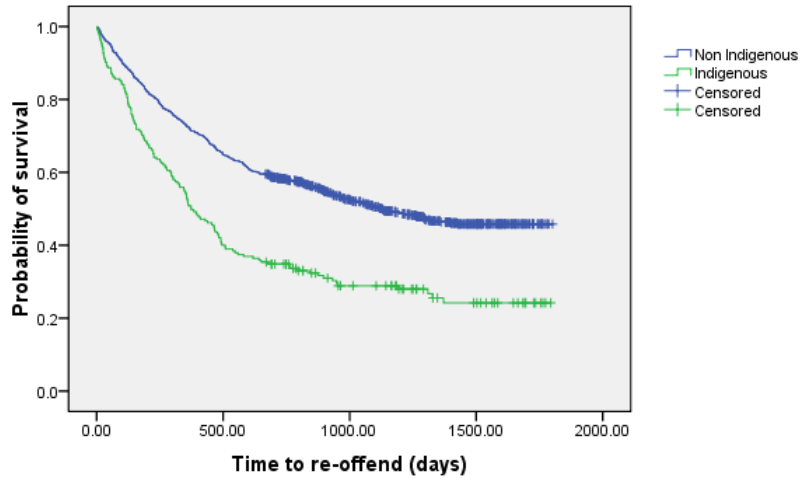
Survival Functions

Indigenous



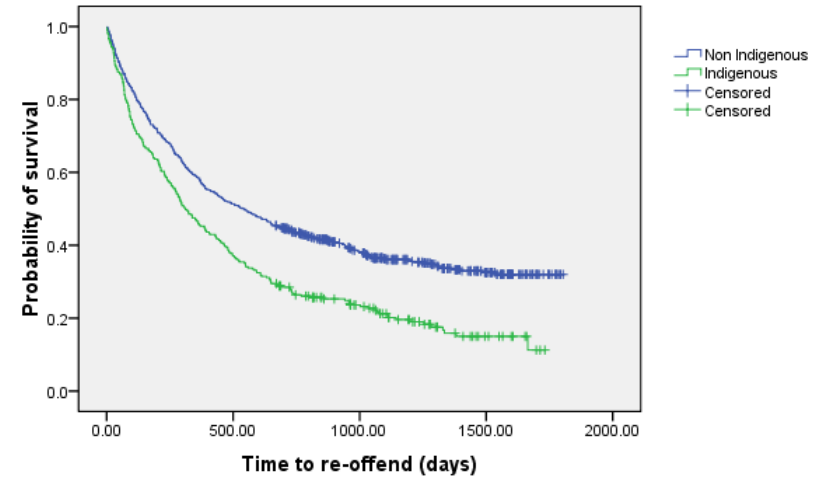
### Survival curves for low risk Indigenous and non Indigenous offenders

#### Low risk (0-10)



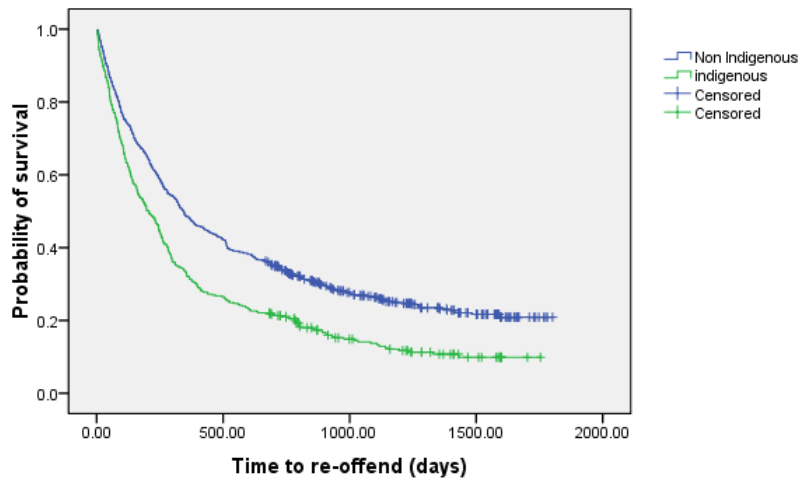
### Survival curves for medium risk Indigenous and Non Indigenous offenders

#### Medium risk (11-17)



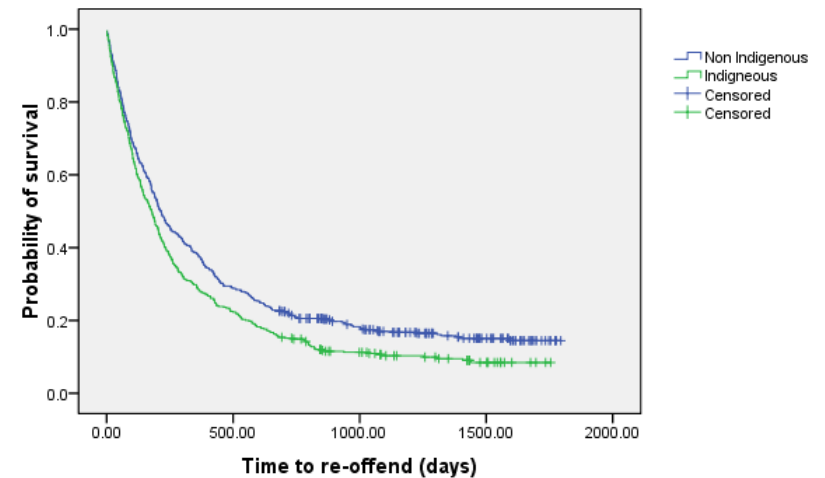
### Survival curves for high risk Indigenous and non Indigenous offenders

#### High risk (18-25)



### Survival curves for very high risk Indigenous and non Indigenous offenders

#### Very high risk (26-48)



# Predictors of re-offending: Indigenous vs non-Indigenous

	Indigenous	Non-Indigenous
Subscale	Odds (p)	Odds (p)
Prior/current offences	1.19 (< 0.001)	1.17 (<0.001)
Family/living circumstances		
Education/employment	1.08 (0.008)	1.10 (<0.001)
Peer relations	1.12 (0.029)	1.12 (0.003)
Substance abuse		1.09 (<0.001)
Leisure/recreation		
Personality/behaviour		
Attitudes/beliefs		
R-squared	0.07	0.10

# Predictors of re-offending: Overall sample

	<b>Odds (p)</b>	<b>Odds (p)</b>
Prior and current offences	1.20 (<0.001)	1.17 (<0.001)
Family and living circumstances		
Education/employment	1.09 (<0.001)	1.10 (<0.001)
Peer relations	1.15 (<0.001)	1.12 (<0.001)
Substance abuse	1.05 (0.003)	1.06 (0.004)
Leisure/recreation		
Personality/behaviour		
Attitudes/beliefs		
Indigenous status		1.77 (<0.001)
Gender		1.71 (<0.001)
R-Square	0.11	0.14