Adolescent health in an Indigenous context - the potential role for Resilience?

Dr Shane Hearn
Director
CultureLink Consultancy

shane.hearn@culturelinkconsultancy.com.au
ACKNOWLEDGEMENTS

Professor Don Nutbeam
Professor Adrian Bauman
Dr Anne Grunseit
All the schools that participated
<table>
<thead>
<tr>
<th></th>
<th>Growing Older</th>
<th>Growing Younger</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Australian population</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fertility rate</strong></td>
<td>(1.8)</td>
<td>(2.15)</td>
</tr>
<tr>
<td><strong>Median age</strong></td>
<td>36.6 years</td>
<td>20.5 years</td>
</tr>
<tr>
<td><strong>Adult-to child ratio</strong></td>
<td>2.95</td>
<td>1.19</td>
</tr>
<tr>
<td><strong>Infant mortality rate</strong></td>
<td>5.3 per 1000</td>
<td>10.6 per 1000</td>
</tr>
<tr>
<td><strong>Life Expectancy</strong></td>
<td><strong>Male</strong> 78yrs  <strong>Female</strong> 83yrs</td>
<td><strong>Male</strong> 67yrs  <strong>Female</strong> 72yrs</td>
</tr>
</tbody>
</table>
Aboriginal young people are significantly more likely than their non-Aboriginal counterparts to meet criteria for emotional or behaviour problems and to commit suicide. They are less likely to access mental health services.
2002-2004, had a death rate that was 4 times the rate of their non-Indigenous counterparts,

In 2011, young Indigenous people die at a rate of 2.5 times as high as that for non-Indigenous young people.

More likely than other young Australians to experience risk factors such as obesity, physical inactivity, smoking, imprisonment, and lower education attainment.
Defining Resilience

Resilience is a broad conceptual umbrella, covering many concepts related to positive patterns of adaptation in the context of Adversity.

Masten 2001 Describes the phenomena as the “ordinary magic” of lives lived well.

Protective mechanisms that interrupt negative growth trajectories, mitigate risk and promote healthy growth and development

Resiliency and vulnerability result from the dynamic balance of protective and risk factors at a given point in time.
More specific to health and well being

Resilience is identified as the capacity to recover from adversity and have a healthy life despite emotional, mental or physical distress.
Resilience is a process to self-determination, an expression of culture that is overtly linked to a support system of family, friends and community.
An Indigenous perspective of resilience

- Toughness,
- Intellect;
- Exercising the physical emotional spiritual aspects of life;
- As a framework or some sort of structure;
- Family support
- As being able to be the people they really want to be and;
- Allowed to achieve their full potential
Fig. 1. Social determinants of health

Source: Dahlgren G, Whitehead M. Tackling inequalities in health: what can we learn from what has been tried? Background paper for “The King’s Fund International Seminar on Tackling Health Inequalities”. Ditchley Park, Oxford: King’s Fund; Reproduced with permission of the authors.
In summary, resilience:

- Family
- Personal
- Culture
- Friends and mentors
- School and community

The key is to target as many domains as possible and to pursue the ones that make the most difference.
AIM OF THE RESEARCH

To test and develop measures of resilience for use in school aged youth (13-17yrs), describe the prevalence of resilience and related phenomena, and to understand the factors that influence adolescent health risk in both Indigenous and non-Indigenous young people.
The Survey

The survey comprised questions from the following:

- Attitudes to School Scale (LSAY);
- Health Behaviour and Life style Survey (HBLSS);
- Wagnil and Young (RS);
- Author developed questions
- 54 questions in total.
Survey subsets

Demographic characteristics
Resilience measure
Health risk factors
Injury/Bullying
Mental health
Community factors
School environment
A mixed method approach:

- A formative research stage and
- A cross sectional survey.

The formative phase consisted of two components, a qualitative approach and piloting quantitative approach. For the main study a quantitative survey was used to collect the data.
Sample by Gender, Indigenous and Non-Indigenous (n=996)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Indigenous</th>
<th>Non-Indigenous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>%</td>
<td>n</td>
</tr>
<tr>
<td>Male</td>
<td>46.5</td>
<td>167</td>
</tr>
<tr>
<td>Female</td>
<td>53.5</td>
<td>192</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>359</td>
</tr>
</tbody>
</table>
## Age Distribution of the Sample

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Total</th>
<th>Indigenous</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total 13 years</td>
<td>184</td>
<td>78</td>
<td>18.6</td>
</tr>
<tr>
<td>Indigenous 13 years</td>
<td>78</td>
<td></td>
<td>22.0</td>
</tr>
<tr>
<td>Total 14 years</td>
<td>468</td>
<td>160</td>
<td>47.3</td>
</tr>
<tr>
<td>Indigenous 14 years</td>
<td>160</td>
<td></td>
<td>45.1</td>
</tr>
<tr>
<td>Total 15 years</td>
<td>284</td>
<td>84</td>
<td>28.7</td>
</tr>
<tr>
<td>Indigenous 15 years</td>
<td>84</td>
<td></td>
<td>23.7</td>
</tr>
<tr>
<td>Total 16 years</td>
<td>50</td>
<td>30</td>
<td>5.0</td>
</tr>
<tr>
<td>Indigenous 16 years</td>
<td>30</td>
<td></td>
<td>8.5</td>
</tr>
<tr>
<td>Total 17 years or older</td>
<td>4</td>
<td></td>
<td>1.3</td>
</tr>
</tbody>
</table>
Two sets of models were developed:

1. A set of linear regression with continuous resilience score as the dependent variable;

2. Logistic regression was used for categorical analyses, with the upper tertile or upper quartile of the resilience score as the high resilience score and then compared to the lower quarters.
Resilience score
(a single score)

The resilience score is a summary score derived from the sum of responses to the fifteen resilience items.
Resilience Scale Mean scores (n=1003)

- Indigenous: 45.14
- Non-Indigenous: 45.84
Resilience and socio-demographic factors

Father employment (n=962)

Not working: 44.65
Working: 46
Tobacco Use

Tobacco use (n=962)

Yes: 44.34
No: 45.85
Alcohol Use

Alcohol consumption (n=962)

- No: 45.76
- Yes: 44.75
Use of illicit drugs (Marijuana) n=956

- No: 45.69
- Yes: 44.95
Illicit Drug Use

Ecstasy (n=947)
Resilience and Social Behaviours

Resilience and Social Behaviours (n=952)
Physical Activity

Physical activity (n=961)
Mental Health
(Feeling about life at present)
n=962

Mental Health (Feeling lonely)
n=962
Mental Health (Confidence) n=962

- Always, often, sometimes: 46.18
- Never, rarely: 40.82

Mental Health (Depressed) n=962

- No: 46.46
- Yes: 45.27
Talk to for support (n=962)
Community Participation (n=952)

- A little, not at all: 44.74
- Strongly involved: 47.6
High Resilience

Father working;
Exercising 4-7 times a week;
Member of sporting club
Talk to a family member or a peer
Being involved in your community
Being involved with a community that is caring, encouraging has opportunities and allows you to express your views
LOWER RESILIENCE IS SIGNIFICANTLY ASSOCIATED

Smoking everyday;
Have been drunk more than 2 times
Use of illicit substances
Being bullied by others
Time alone (other kids not wanting to spend time with you)
Sad, lonely, not-confident and depressed
RESEARCH OUTCOMES

For this study resilience measure summary scores were similar between Indigenous and non-Indigenous adolescents.

Resilience was related to a range of demographic factors, including measures of socio-economic status (fathers employment status, single parent family status).
RESEARCH OUTCOMES

• It was protective against hazardous alcohol use,
• low physical activity,
• Increased when with a sports club membership;
• Related to mental health variables such as feeling lonely and low self-confidence.

• In the adjusted models, family communication, the school environment and community involvement were also significantly related to adolescent health behaviours and mental health.
• Among Indigenous adolescents, resilience was also protective against being bullied.
CONCLUSION
For the measures of resilience the study found when young people are sampled from similar SES background resilience is normally distributed with little difference between Indigenous and non-Indigenous young people.

SES (determinants) that partially explain the observed level of Indigenous disadvantage;

Overall it can be concluded that higher resilience acts as a protective factor and lowers the risk of adverse health behaviours and potentially increases participation in school, alongside other socio-ecologic variables that also contribute to adolescent health and wellbeing.
What is the potential relationship of Resilience measures to Indigenous Adolescent Health

- Can be used as a predictor
- Reduce risk impact;
- Buffer the effects of stressors on psychological and physical health outcomes
- Lessons a persons vulnerability to the vicissitudes of life
- Identifies adaptive coping processes
- Identifies factors that influence school participation;
Future Research

To generate a more valid and reliable body of research,
Investigate longitudinally, and across many other cultures, the relevance of resilience related aspects of Young people growth and development.
Applying the findings methodically to practice with at-risk populations
THANK YOU

shane.hearn@culturelinkconsultancy.com.au