



Prevention: A brief, personality-targeted intervention to improve wellbeing and reduce behavioural problems in secondary school students

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Australian Government
Department of Health



THE UNIVERSITY OF
SYDNEY
Matilda Centre

Outline

1. Is mental health a problem in adolescents, and if so, what can we do about it?
2. Could the Preventure program be a solution?
3. Is Preventure effective in reducing substance use & improving emotional wellbeing?
4. What are the new directions for Preventure?

Mental health of adolescents

- Mental disorders (e.g. anxiety disorders, depressive disorders, substance use disorders) are a leading cause of disability for young people worldwide, and a major cause of death in young people, through suicide.
- Mental disorders in adolescents can impact children's learning and development, peer relationships, and family functioning.
- Early onset of mental disorders leads to more chronic mental & physical health problems over the lifetime.



Photo by [Warren Wong](#) on [Unsplash](#)



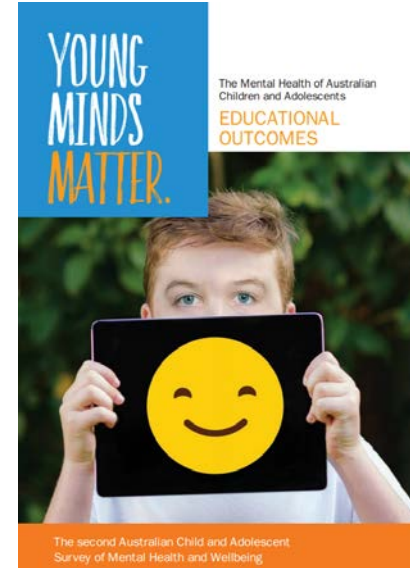
Mental health of Australian adolescents

- 1 in 5 adolescents report high or very high levels of psychological distress (K10)
- 14% had 12-month prevalence of any mental disorder (by parents/carers; M 15.9%, F 12.8%)
 - Highest for anxiety disorders (7%), followed by ADHD (6%), major depressive disorder (5%), conduct disorder (2%)
 - Prevalence of disorders differed by sex
- 8% identified as having major depressive disorder (by self-report):
 - Many reported that parents/carers knew only 'a little' or 'not at all' about how they were feeling, highlighting the importance of schools and peers



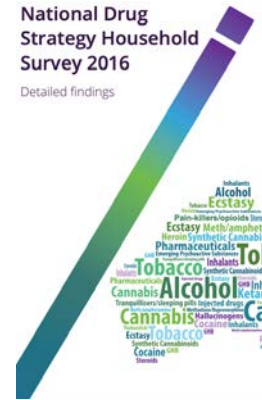
Impact of mental disorders on educational outcomes

- Students with mental disorders had poorer NAPLAN results.
 - Students with mental disorders scored lower than students with no mental disorder in every test domain and year level.
- Gaps in achievement increased over time.
 - By Year 9 students with a mental disorder were 1.5 - 2.8 years behind students with no mental disorder &
 - Students with ADHD or CD were up to 5 years behind.
- Students with mental disorders had more absences from school.
 - Year 7-12 students with a mental disorder missed 23.8 days per year compared with 11 for students without a mental disorder.
- Students with mental disorders had lower levels of connectedness to school and engagement with school work.

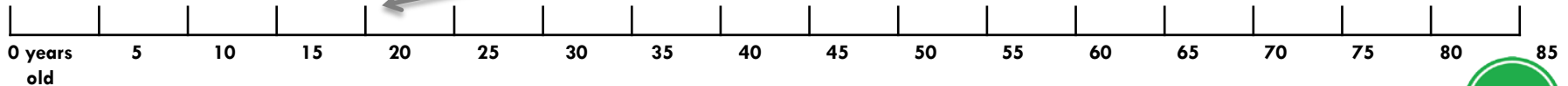


Substance use in Australian adolescents

- Among young people aged 12-17 (in the last year):
 - 45% consumed alcohol/ 5.4% binge drink weekly
 - 7% used cannabis
 - 2% used tobacco
 - 1% used ecstasy
 - 1% used methamphetamine
- The onset of drug and alcohol use is during teenage years

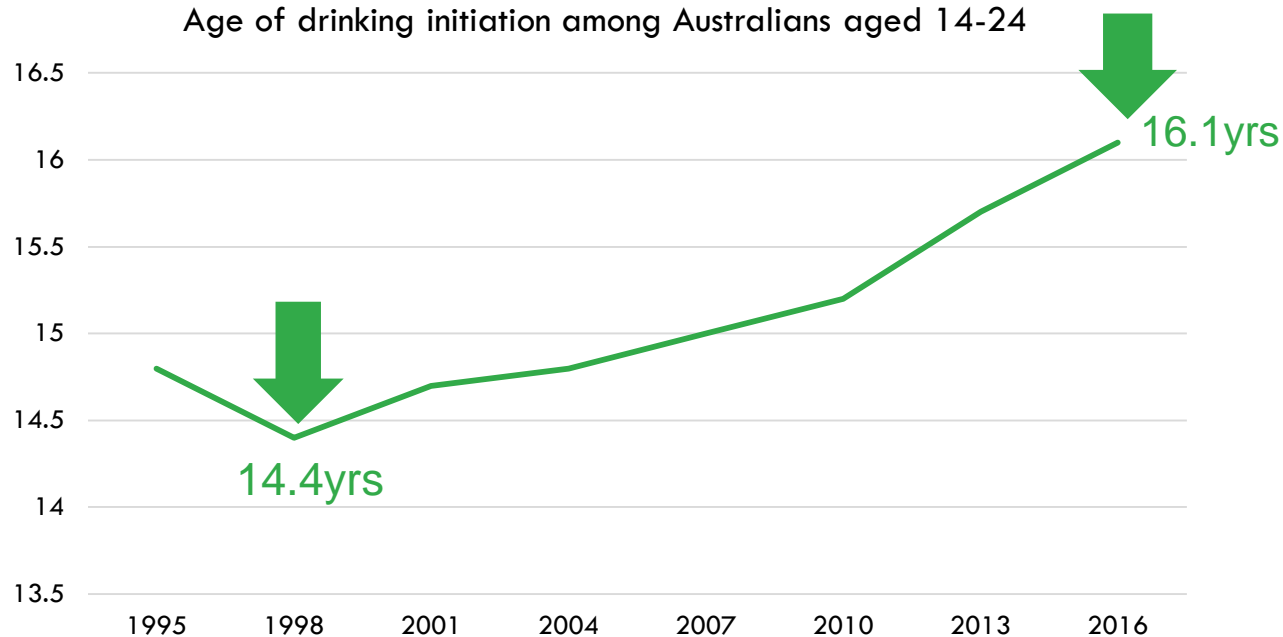


Typical Onset of Substance Use Disorder Age 19



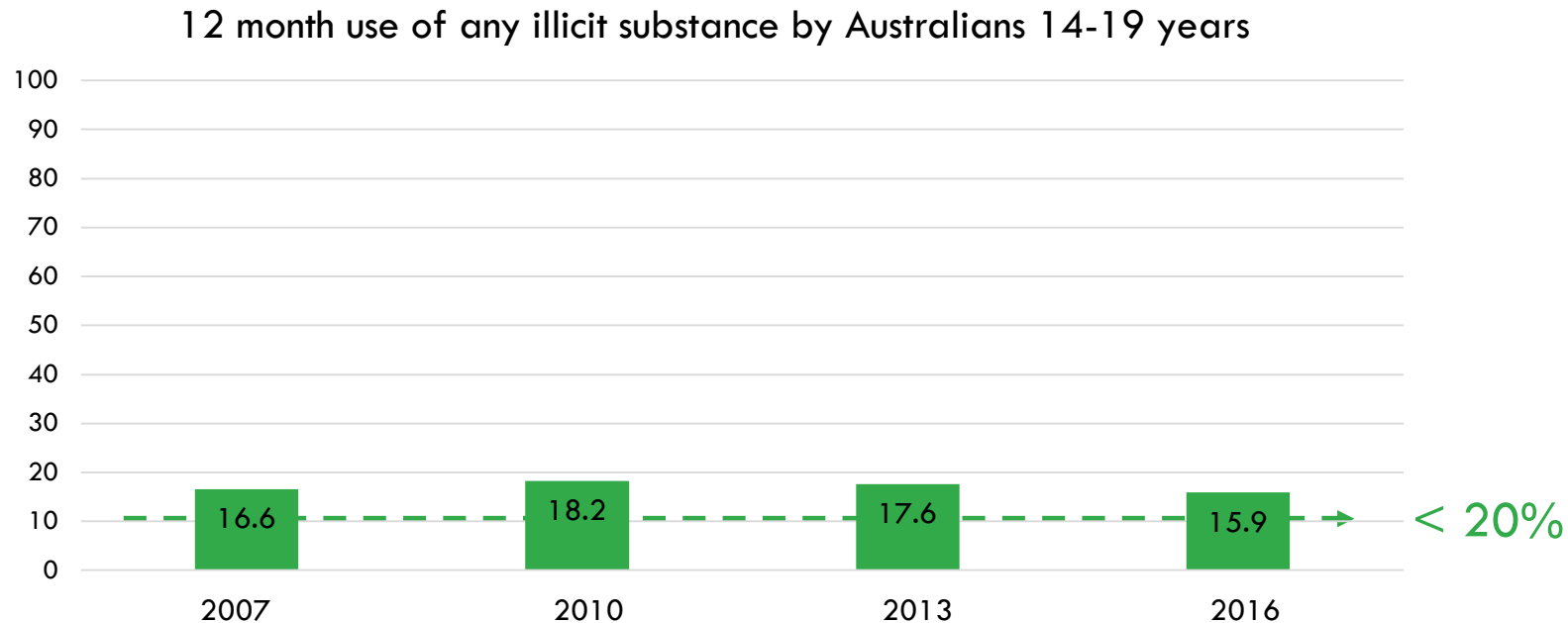
Some good news...

- Young people are delaying onset of drinking



Recent trends in illicit drug use

- Rates of illicit drug use are fairly stable



But there's more bad news...

- Still a number of young people drinking at risky levels in Australia
- Rates of very high-risk binge drinking remain significant and are highest among young people
- Younger people remain more likely to be victims of alcohol related crime
- Similar to findings from Europe & North America
 - Even though we are seeing some positive shifts we still have substantial evidence of risky patterns of drinking and harms among young people



Source: AIHW 2017. National Drug Strategy Household Survey 2016 Key Findings.
Canberra: AIHW.



Why is it important to prevent substance use?

- Burden of disease and social costs associated with alcohol use disorders is substantial (*Whiteford et al, 2010*).
- Early initiation increases risk of:
 - Substance use disorders
 - Co-occurring mental health problems
 - Poor academic performance/drop out
 - Neuropsychological deficits

Each year we delay the onset of drinking we reduce the odds of developing an alcohol use disorder by 9% (*Grant et al., 2001*)



Could school-based prevention be the answer?

- First onset of substance use and other mental disorders is typically in childhood or adolescence
- Most mental disorders remain undetected and untreated
 - Optimal intervention for substance use and other mental disorders should be timed prior to their onset, targeted to those at greatest risk, and be easily accessible to all in need
 - Schools are the ideal setting to implement such programs
 - However, the delivery of targeted prevention programs for substance use and other mental disorders in schools is limited and few evidence-based programs are routinely used in schools

But, there is a program that ticks all these boxes...



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What is the 'Prevention' program? *(Conrod et al)*

- Prevention is an evidence-based prevention program that is feasible for delivery in schools and is targeted to adolescents with a greater risk of experiencing substance use and mental health issues, based on their personality traits
- Developed by Professor Conrod at the University of Montreal, and has been adapted for use in multiple countries
- Delivered to 13-14yr olds, just prior to the age of onset for substance use and many mental disorders
- Aims to increase coping skills to prevent substance use & improve wellbeing



The 'Prevention' program *(Conrod et al)*

- Targets four personality profiles linked to adolescent substance use & mental health problems *(Woicik et al., 2009)*

Negative Thinking (NT)

- low mood, negative beliefs about self, others & future

Anxiety Sensitivity (AS)

- fear of anxiety-related physical sensations

Impulsivity (IMP)

- rapid decision-making & action, poor response inhibition

Sensation Seeking (SS)

- elevated need for stimulation, risk-taking



How do the personality types relate to substance use?

- Earlier onset drinking
- Heavy consumption
- Greater drinking to cope

Negative Thinking

Anxiety Sensitivity

- Later onset drinking
- Increased levels of drinking
- More responsive to anxiety-reducing effects of alcohol

- Earlier onset drinking
- Greater binge drinking
- More alcohol-related harms
- Drink due to enhancement effects

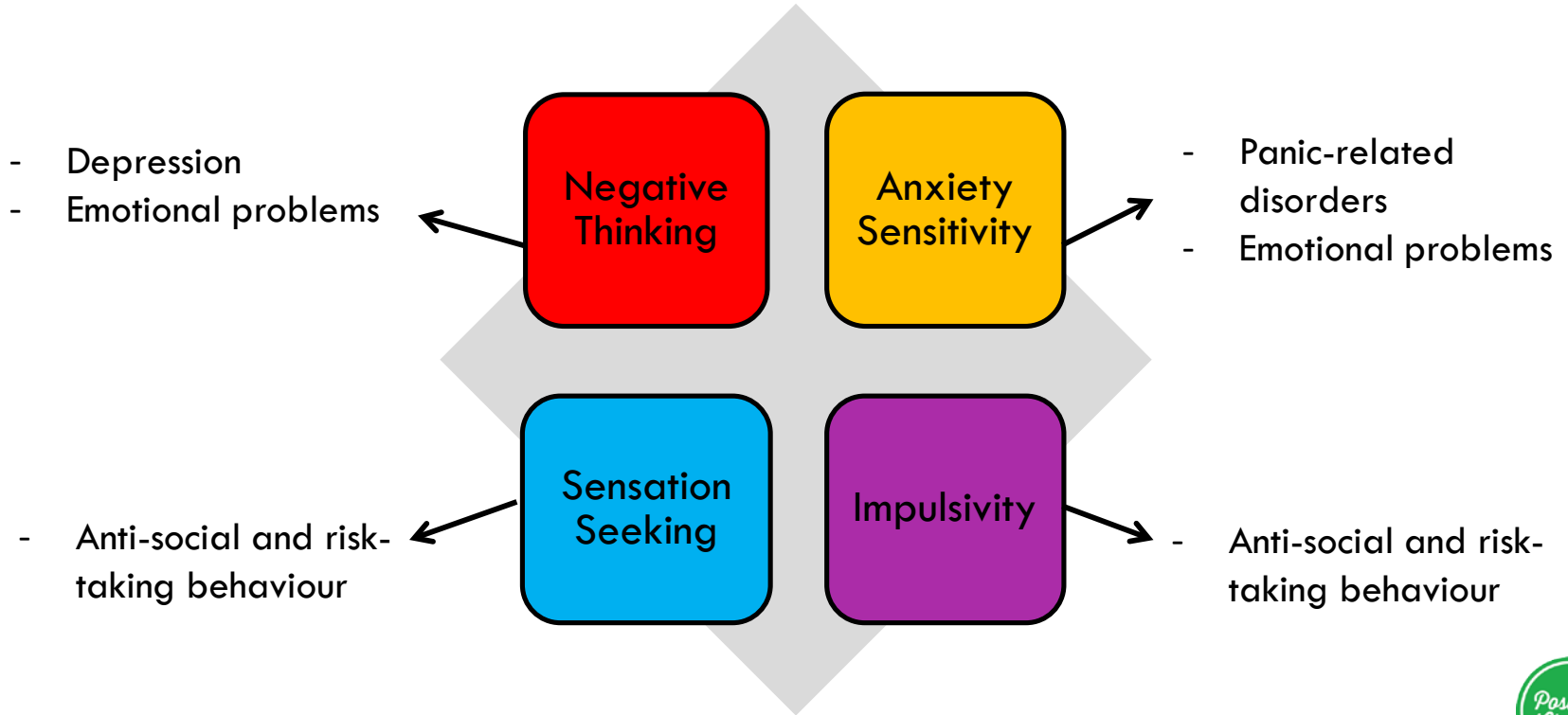
Sensation Seeking

Impulsivity

- Earlier onset drinking
- More problematic drinking
- Drink due to poor response inhibition



How do the personality types relate to other emotional & behavioural problems?



What does the Preventure program involve?

Step 1: Screen adolescents using the Substance Use Risk Profile Scale (SURPS)

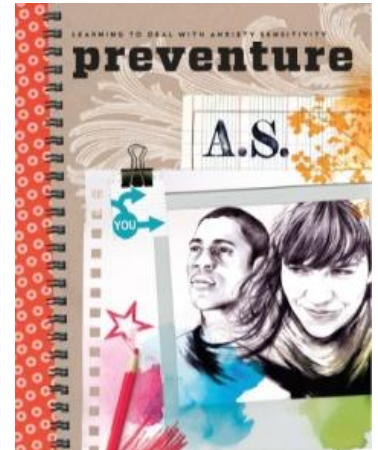
- 23-item self-report scale
- Assesses risk along 4 personality dimensions - **NT**, **AS**, **IMP**, **SS**.
- Measures personality and not substance use, therefore identifying adolescents “at risk” for substance use prior to the onset of use.
- Previous studies of the SURPS have demonstrated:
 - Reliable & valid in predicting substance use and emotional problems
 - High cross-cultural validity in Europe, Asia, North America, Australia



What does the Preventure program involve?

Step 2: Invite eligible students to take part in the program

- 2 x 90 minute coping skills workshops, run one week apart
- Focused on personality, not substance use
- Interventions are based on:
 - **Motivational interviewing:** goal setting, pros and cons
 - **Cognitive-behavioural therapy:** understanding links between thoughts, physical sensations, actions; identify and challenge personality-specific cognitive distortions



What does the Preventure program involve?

- Delivered by trained facilitators and co-facilitators
- Facilitator training = 3 day workshop + supervision
 - Day 1: Theoretical underpinning covering personality, motivation & CBT, Preventure evidence base
 - Day 2: Counselling skills
 - Day 3: Reviewing CBT & MI principles + role plays
 - Supervision: 4 hours of supervision (observation while delivering interventions plus feedback)



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International evidence for Prevention

**Prevention reduces
alcohol use, binge
drinking & drinking-
related harms by
30-50%**

**Source: Conrod (2016)
Curr Addict Rep**



Table 1 Summary of eight randomized trials of personality-targeted interventions for substance misuse and standardized effect sizes (Cohen's *d* equivalent)

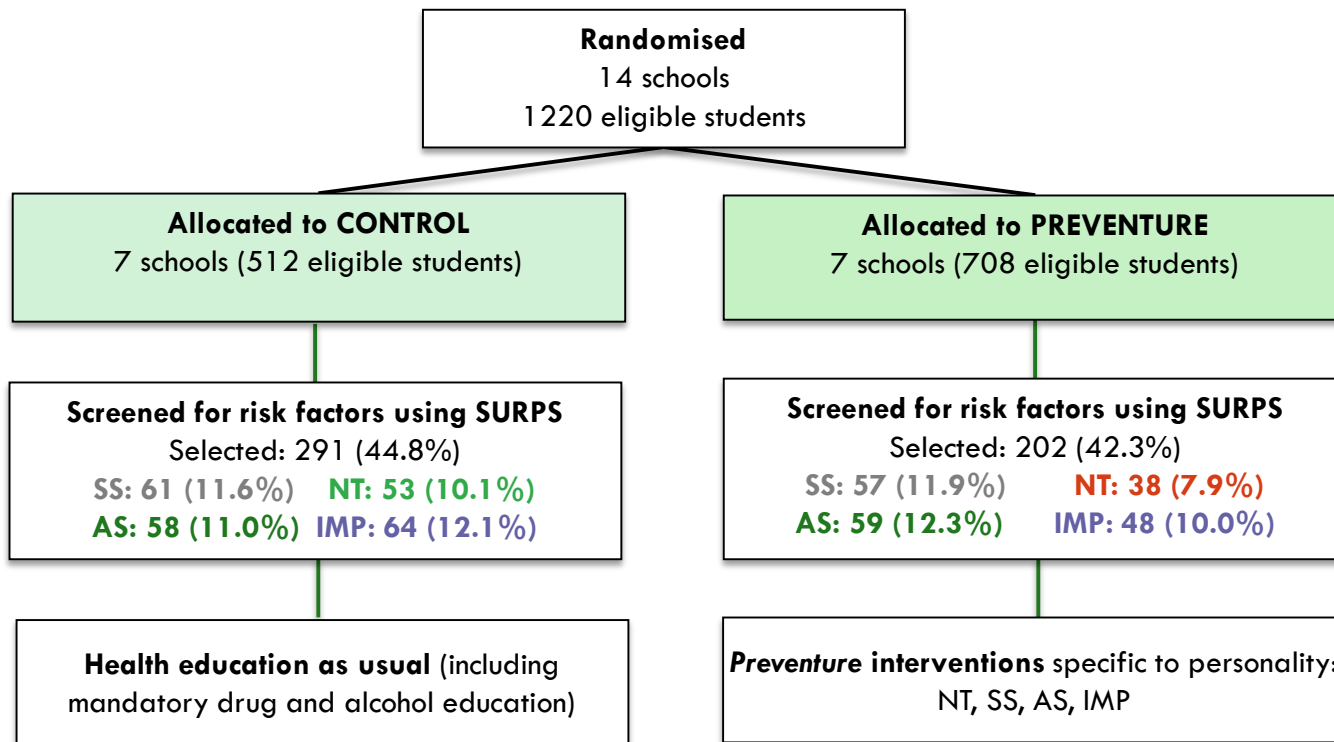
Trial	Personality traits targeted	Population targeted	Behavioural outcomes targeted	Effect sizes all reported as Cohen's <i>d</i>
1. Montreal Prescription Drug and Alcohol Dependence Trial [22]	IMP/SS, AS, HOP	Alcohol and/or prescription drug-dependent women Int: <i>n</i> = 78 Ctr: <i>n</i> = 45	Alcohol use Alcohol QF Dependence symptoms Remission prescription drug use	0.47 (0.10 to 0.84)* 0.02 (-0.35 to 0.39) 0.47 (0.10 to 0.84)* 0.46 (0.10 to 0.83)* 0.58 (0.03 to 1.13)*
2. Canadian Prevention Trial [60]	AS, SS, HOP	HR secondary students (drinkers) Int: <i>N</i> = 166 Ctr: <i>n</i> = 131	Alcohol use (4 months) Binge drinking (4 months) Drinking problems (4 months)	0.20 (-0.02 to 0.43) 0.37 (0.14 to 0.60)* 0.32 (0.09 to 0.55)*
3. College AS Trial ^a [78]	AS	College students Int: <i>n</i> = 51 Ctr: <i>n</i> = 56	Drinking frequency Binge drinking Drinking problems	00 (ns) Not reported 0.37 (-0.02 to 0.75)
4. UK Prevention Trial ^b [61, 62*, 81]	AS, IMP, HOP, SS	HR secondary students Int: <i>n</i> = 190 Ctr: <i>n</i> = 157	Alcohol use (6 months) Binge drinking (6 months) Drinking problems (6 months) Drinking problems (2 years) Drug use frequency (2 years) Cannabis use (2 years) Cocaine use (2 years)	0.22 (0.00 to 0.43)* 0.21 (0.00 to 0.42)* 0.35 (0.00 to 0.42)* 0.33 (0.12 to 0.54)* 0.25 (0.10 to 0.40)* 0.16 (0.04 to 0.34)* ^d 0.80 (0.94 to 1.17)* ^d
5. Dutch Prevention ^c Trial [77]	AS, IMP, HOP, SS	HR secondary students (drinkers) Int: <i>n</i> = 343 Ctr: <i>n</i> = 356	Alcohol use (12 months) Binge drinking (12 months) Drinking problems (12 months)	0.02 0.33 (0.17 to 0.47)* 00 (ns)
6. Adventure Trial ^c [24, 63*]	AS, IMP, HOP, SS	HR secondary students Int: <i>n</i> = 558 Ctr: <i>n</i> = 437	Alcohol use (2 years) Drinking Q (2 years) Binge drinking (2 years) Binge drinking-freq (2 years) Binge drinking-growth (2 years) Drinking problems (2 years) Cannabis use (2 years)	0.68 (0.55 to 0.81)* 0.36 (0.23 to 0.49)* 0.88 (0.75 to 1.0)* 0.38 (0.25 to 0.50)* 2.07 (1.91 to 2.22)* 1.02 (0.88 to 1.16)* 0.06 (-0.06 to 0.18)* ^d
7. Australian CAP ^c Study [51]	AS, IMP, HOP, SS	HR secondary students Int: <i>n</i> = 202 Ctr: <i>n</i> = 291	Alcohol use (3 years) Binge drinking (3 years) Drinking problems (3 years)	0.47 (0.29 to 0.65)* 0.65 (0.46 to 0.84)* 0.54 (0.35 to 0.72)*
8. CBT for High AS [64]	AS	Community-recruited adults	Alcohol use Binge drinking Drinking problems (phys) Drinking problems (interper)	Not reported Not reported 0.64 0.48

Adapting *Preventure* for Australian students

- Two focus groups with:
 - 69 students scoring highly on one of the 4 personality traits, from 3 schools, gave feedback on manuals matched to their personality type
 - Teachers/Health professionals (n=6)
- Students provided good suggestions
 - Scenarios - why would you/wouldn't you drink? Personality specific scenarios
 - Images and vocabulary
- Teachers/health professionals (survey, n=6)
 - Program already appropriate in terms of learning, educational content, student acceptability, and efficacy
 - Manuals to be updated and made more relevant for Australian adolescents



Efficacy of Prevention in Australia



Methods

Sample:

- 438 selected students from 14 schools completed baseline
- Mean age: 13 years

Assessments:

	Baseline Survey	Prevention program	Post-test survey	12 month F/U survey	24-month F/U survey	36-month F/U survey
Grade	Year 8	Year 8	Year 8	Year 9	Year 10	Year 11
CONTROL	✓		✓	✓	✓	✓
PREVENTURE	✓	✓	✓	✓	✓	✓



Results

Over 3 years, relative to students in **control** schools, students in **Preventure** schools reported **significantly less alcohol use**, including:

- Less uptake of alcohol
- Less binge drinking
- Less alcohol-related harms

and significantly less emotional and behavioural issues, including:

- Psychological distress
- Anxiety symptoms
- Depressive symptoms
- Conduct problems
- Hyperactivity



Photo by Baim Hanif on Unsplash

What did the students think?

What **did** you like about the sessions?

- ‘**It opens up a part of our personality** we were unaware of’ (Female, IMP)
- ‘**It helped us reflect** on who we are and what we aim for’ (Male, SS)
- ‘We **got to understand** what anxiety is and how to get rid of the feelings’ (Female, AS)
- ‘It helped me **identify and challenge** my thoughts and feelings’ (Male, AS)

What **didn't** you like about the sessions?

- ‘It can be **uncomfortable** talking about personal stories’ (Male, AS)
- ‘**Not enough time**; maybe needed more sessions – a bit rushed’ (Male, SS)
- ‘It takes up lesson time – **perhaps lunch?**’ (Female, IMP)



Prevention may be helpful for bullying and related harms

- Both bullies & victims were more likely to be high in suicidal ideation, internalising problems & externalising problems than uninvolved students
- Victims in Prevention schools reported reduced:
 - Victimization
 - Suicidal ideation
 - Emotional symptoms
 - Conduct problems
- Bullies in Prevention schools reported reduced:
 - Suicidal ideation (F)
 - Conduct problems



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New research

A Novel Approach to Tackling Bullying in Schools: Personality-Targeted Intervention for Adolescent Victims and Bullies in Australia

Erin V. Kelly PhD, MCLinPsych ^{a, b, c, d, e}, Nicola C. Newton PhD ^f, Lexine A. Stapinski PhD, MCLinPsych ^g, Patricia J. Conrod PhD ^h, Emma L. Barrett PhD, MPsych (Forensic) ⁱ, Katrina E. Champion PhD ^j, Maree Teesson PhD ^k

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<https://doi.org/10.1016/j.jaac.2019.04.010>

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Referred to by Lucy Bowes

Editorial: Selective Prevention in Anti-Bullying Programs: Could Targeting Personality Be the A...

Journal of the American Academy of Child & Adolescent Psychiatry, Volume 59, Issue 4, April 2020, Pages 504-505

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Objective

To examine the secondary effects of a personality-targeted intervention on bullying and harms among adolescent victims and bullies.

So where does this leave us?

- First study in Australia to support the long-term effectiveness of *Preventure* in:
 - Slowing the growth of alcohol use & binge drinking
 - Reducing alcohol-related harms
 - Reducing internalising & externalising problems
 - Reducing bullying victimisation and related harms
- Results consistent with trials in UK & Canada

**Now we need to focus on translation –
making *Preventure* available to schools in Australia**



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The School-led Preventure study

- Aim: Examine the effectiveness of Preventure on alcohol use, depression and anxiety symptoms, when **delivered by school staff in Australia**
- Enable broader reach of Preventure across schools at low cost
- Measures:
 - Alcohol and other drug use, depression and anxiety symptoms
 - School engagement, attendance and grades
 - Bullying, peer and family relationships
 - Quality of life and self-compassion
 - COVID-19 impact and distress, climate change anxiety
- Follow up over 1 year
- Now recruiting schools in Greater Sydney / Wollongong regions



What's involved?

- Participating schools will be randomly allocated to either Preventure or control (health education as usual)

Timing					
Participant	Term 3 2020	Term 4 2020	Term 2 2021	Term 4 2021	Term 1 2022
Intervention staff (2 per school)	Training workshop + supervision	Deliver Preventure and complete intervention adherence survey	Staff survey		
Intervention student		1. Student baseline survey 2. Selected students only: Preventure + feedback survey	Student 6-month follow up survey	Student 12-month follow up survey	
Control staff					Training workshop + supervision (offered)
Control student		Student baseline survey	Student 6-month follow up survey	Student 12-month follow up survey	

Prevention training in Australia

- General training is offered ~3 times per year in Australia
- Sign up to the mailing list to be informed of next training dates
<https://positivechoices.org.au/teachers/prevention#future-training>
- Registrations are processed online and are on a first come, first serve basis
- Special training workshops for your group can be arranged, trainers can travel to you – please contact Lucy at lucinda.grummitt@sydney.edu.au



Online delivery coming soon to Australia

https://www.preventure.ca


PreVenture ABOUT US PROGRAM TAKE PART NEWS & EVENTS CONTACT US PREVENTURE ZONE

PreVenture

A Mental Health & Early Intervention Program for Teens

PreVenture is an evidence-based prevention program that uses personality targeted interventions to promote mental health and delay substance use among teens. PreVenture workshops are designed to help students learn useful coping skills, set long term goals and channel their personality towards achieving them.

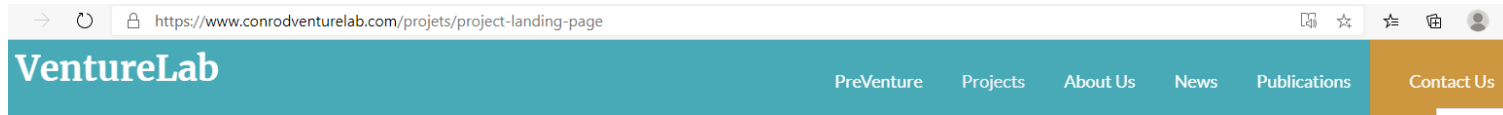
IMPORTANT NEWS: Online delivery of the PreVenture Program is now available!



Learn More



Exciting new projects internationally



Our research focuses on risk factors for youth substance misuse and mental health problems. We aim to understand why early onset substance use is so highly concurrent with other mental health concerns and future addiction. We also apply our research findings to develop new prevention approaches targeting identified risk profiles. We study environmental factors, genetic factors, and use computerized assessments and neuroimaging tools to measure functional brain development during the adolescent period. Our youth advisors assure that our research addresses issues and uses methods that relevant and appropriate for youth.



PreVenture

An evidence-based prevention program that uses personality targeted interventions to promote mental health and delay substance use amongst teens. The program is designed to help students learn useful coping skills, set long term goals and channel their personality towards achieving them.



CUSP

The Canadian Underage Substance Use Prevention (CUSP) Trial is a multi-site, pan-Canadian study that aims to evaluate the long-term effects of PreVenture on preventing risk behaviours that can lead to substance misuse amongst senior high school students. The study is funded by the Canadian Institute of Health Research (CIHR).

Well-Venture

Adapting Personality-Targeted Interventions for Reducing the Risk of Substance Use and Mental Health Problems in Youth in Child Welfare System. This study is supported by a CIHR Fellowship to Dr. Hanie Edalati and the following Research Chair to Dr. Patricia Conrod: Fondation Julien/Marcelle et Jean Coutu en Pédagogie Sociale en Communauté de l'Université de Montréal.



Exciting new projects internationally



ProVenture

ProVenture is a brain imaging project designed to study changes in neurodevelopment brought about by cannabis consumption. This study is funded by the Canadian Institute of Health Research (CIHR).



NeuroVenture

This project aims to identify behavioral and cognitive factors predisposing to substance abuse among adolescents as well as to evaluate the impact of this abuse on neurodevelopment. Another part of the project aims to assess the impact of a targeted short intervention on substance use.



InterVenture

InterVenture is a research project that evaluates different psychosocial approaches in school settings to better prevent substance abuse and mental health problems among youth. The research project also involves a parent-training intervention, delivered by a multidisciplinary teams of professionals, aimed at improving parental abilities in the management of child behaviour problems and collaborative care for youth with mental health or substance abuse problems.

Acknowledgements

Research Team

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(via Positive Choices)

More information


- positivechoices.org.au/teachers/Preventure
- www.conrodventurelab.com/
- www.preventure.ca/




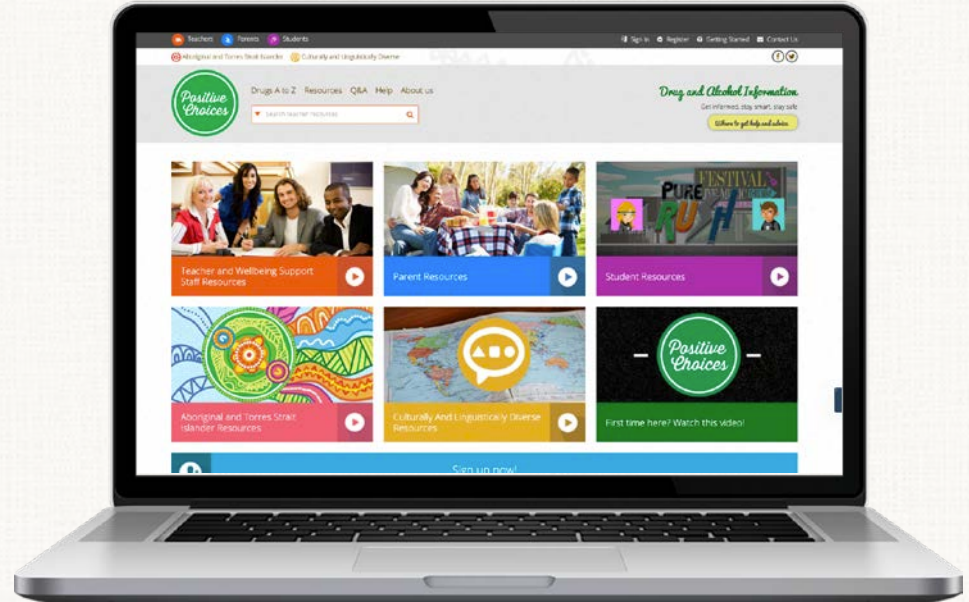


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