# Prevention of depression and anxiety in Australian schools

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#### Introduction

The central importance of promotion, prevention and early intervention for child and youth mental health has been endorsed by The National Mental Health Commission, the NSW Mental Health Commission and the Commonwealth Department of Health and Aging. A core argument for prioritising f prevention activities is that shifting the focus to prevention will maximise ongoing participation by people at risk of mental health disorders and minimise future costs arising from lost productivity and hospital and health care systems. The key argument is that current investment in prevention will provide economic benefits in the future. In line with this priority, the current document aims to provide schools with information about evidence-based programs that will prevent the onset of mental ill-health. By providing a summary of evidence-based school prevention programs (see Appendix 1), this document seeks to assist organisations to implement initiatives which improve mental health understanding and help-seeking, reduce stigma, and prevent depression and anxiety in youth.

#### Mental Health in Adolescence

Mental disorders in adolescence disorders are the leading cause of illness and disability for young people aged 10 to 19 years, ahead of any physical disease. In Australia, approximately 14% of 4 to 17 year olds experience a mental health problem each year, amounting to 560,000 Australian children and adolescents in any one year, with 278,000 and 112,000 experiencing anxiety and depression disorders, respectively [1].

Adolescence is a time of significant change in social, emotional and developmental domains. Approximately 50% of mental illness emerges in adolescence, making it a priority time for intervention. For example, in the case of depression, only 1.1 to 1.2% of youth aged 4 to 11 experience depression before this rate increases more than 300% to 4 to 6% among 12 to 17 year olds (see Figure 1). Therefore, if prevention efforts can be successfully implemented early in life, then they are more likely to prevent the onset of mental disorders.

From a practical perspective, there is good reason to develop prevention interventions for adolescents that can be delivered through the school system as part of the mental health educational curriculum. This is critically important because adolescents with mental disorders have very low rates of help-seeking (35%), and only 30% seek referrals for psychological therapy [2]. Schools provide a setting with unparalleled reach and coverage of young people, in which preventive interventions can be readily administered due to the structured nature of the setting [3]. In addition, the majority of young people who receive services for mental health problems are provided their care through the education sector; schools being the most common point of entry for accessing mental health services [4]. Despite an acknowledged bidirectional relationship between academic achievement and mental health, academic outcomes are rarely measured when evaluating mental health prevention programs [5], though when measured they have been shown to improve academic outcomes [6].

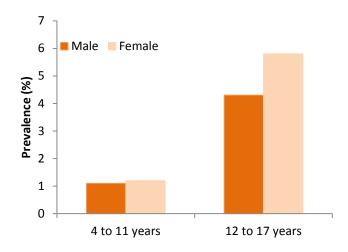


Figure 1. Prevalence of major depressive disorder in the past 12 months in 4 to 17 year olds by gender [1].

Indeed, because mental ill-health incidence rises so dramatically during adolescence, there is a strong economic and moral argument for a return on investment for prevention activities during adolescence and minimising lifetime difficulties. Mental health prevention in adolescents helps to address existing treatment gaps, and may reduce the burden of mental health disorders. Current treatments are not able to ameliorate the disease burden due to (i) limited treatment availability, (ii) patients failing to respond to treatment (40% including partial and non-response), and (iii) relapse or recurrence [7]. Accordingly, only 20% to 30% of the years lived with disability due to depression is averted by current treatments [7]. Studies indicate that depression and anxiety (amongst others) are preventable for approximately 20% of youth using Cognitive Behaviour Therapy (CBT) based prevention programs [8]. Finally and importantly, mental health prevention programs have been shown to be cost-effective [9].

## **Evidence for school-based prevention programs**

Overall, evidence suggests that there is a modest but positive effect of well-designed and implemented prevention programs for depression and anxiety [10-12]. Although effects may be conventionally small at a clinical level, even modest reductions can have tremendous implications at a population level. In Australia, a 22% reduction in cases translates to 44,317 young people every year for whom these mental disorders are preventable.

The largest effects of prevention programs are seen with programs based on CBT [13], and for targeted rather than universal prevention programs [14]. Two important caveats to the support for targeted prevention programs are that (i) they can potentially fail to identify those who aren't yet symptomatic, and (ii) can result in stigmatisation due to students being taken out of class to do the program [15] (though this can be offset by increased levels of participant satisfaction for targeted programs [16]).

**Universal prevention** refers to interventions that target an identified population regardless of risk. For example, universal prevention programs for youth are typically delivered on a large scale in the school environment to every child in the grade.

**Targeted prevention** refers to interventions that target populations at increased risk (selective prevention) or who have subthreshold symptoms of a mental disorder (indicated prevention).

## **Challenges to Implementation**

Research into challenges and facilitators of the implementation of evidence-based prevention programs in schools have identified a number of common factors.

Previously identified challenges to implementation include [17, 18]:

- i. *Inadequate funding* including inadequate budgeting for personnel (to deliver and maintain the interventions) and capacity building (of school staff).
  - a. Adequate tools to support implementation of prevention programs
  - b. *Provision of training and technical assistance* to schools to support program implementation
- ii. Competing priorities and lack of time including a crowded curriculum, a focus on academic achievement and competing policy mandates (e.g., physical health versus mental health).
- iii. Lack of support and training for non-research staff involved in the intervention (e.g., students, parents and community members).
  - a. Lack of parental engagement
  - b. Lack of support from school administrators and teachers
- iv. These challenges tend to be exacerbated in remote regions [19] in part due to reduced access to mental health professionals.

## **Facilitators to Implementation**

Identified facilitators to implementation include [20, 21]:

- i. Extensive local planning involving all related persons in decision-making.
  - a. Choosing the most appropriate intervention program for the school context
  - b. Fostering school-family relationships with regard to commitment to implementing all program components.
- ii. Employing regular school staff members as trainers to ensure continuity.
  - a. Providing sufficient time for staff training
  - b. Ensuring adequate supervision and monitoring of trainers.
- iii. Integration of the programme into regular school activities.
- iv. Organisational/administrative support for training and supervision.

- Ensuring adequate resources are available to the school for costs and staffing
- b. Considering and preparing for factors like teacher turnover/burnout
- Monitoring and evaluating program implementation and thereafter regularly provide feedback to all involved persons to ensure programme meets contextual needs.
- v. Clear communication of the rationale and how to implement the intervention to all levels of staff to secure support in delivery;
  - a. Standardisation of program materials.
- vi. Avoid simultaneous implementation of different programmes, except for evaluated combinations.

## **Recommendations for policy makers**

An evidence-based approach to prevention and early intervention for mental ill-health is required. To facilitate the delivery of programs, support at the policy level is needed. Accordingly, we recommend the following:

# Recommendation 1: Increased government funding to support the delivery of evidence-based prevention programs in Australian schools

- Adequate funding needs to be provided to schools, particularly those that are
  economically disadvantaged so that they can allocate resources to train staff, and
  deliver evidence-based prevention programs in their schools.
- Government funding should subsidise evidence-based programs in schools that cannot afford costs associated with such programs (e.g., staff training, program resources).
- Funding for evaluation of existing programs (such as those outlined in the Kidsmatter and Mindmatter initiatives) for quality assurance and improvement.
- Funding for program developers to adapt existing prevention programs to the needs
  of highly vulnerable groups including Aboriginal and Torres Strait Islanders and
  young members of the LGBTI community who are at greatest risk.

# Recommendation 2: Prioritise mental health prevention as part of the National Physical Development, Health and Physical Education (PDHPE) curriculum

- Department of Education to include mental health educational outcomes into the National curricula as a core learning component. This will ensure a basic level of mental health knowledge and literacy.
- Integration of gold-standard programs into the PDHPE curriculum with completion of at least one evidence-based prevention program required for all students.
- Distribution of information listing available evidence-based programs for circulation to school principals and peak bodies (e.g., Principals Institute of Australia) from government for schools to select at least one program for implementation. Please see Appendix for this information.

Recommendation 3: Active support for mental health prevention at all policy levels

- Establishment of a parliamentary working group to discuss and implement strategies for rolling out mental health prevention programs at scale.
- Engagement and consultation by this parliamentary group with youth to ensure mental health programs are delivered in ways that are acceptable.

These recommendations, implemented concurrently will address the need for prevention programs to be adopted and delivered to all students within the curriculum. Currently available research evidence suggests that implementation of effective mental health prevention programs will lower incidence rates of depression and anxiety by up to 22% [8]. What is now needed is a change in policy to ensure that barriers to the implementation of such programs are removed so that every young person has the opportunity to learn potentially lifesaving skills and strategies early in life.

#### References

- [1] Lawrence, D., Johnson, S., Hafekost, J., et al. (2015). The Mental Health of Children and Adolescents. Report on the second Australian Child and Adolescent Survey of Mental Health and Wellbeing. Department of Health, Canberra.
- [2] Arnarson, E., & Craighead, W. (2009). Prevention of depression among Icelandic adolescents. *Behaviour Research* and *Therapy*, 47(7):577-585.
- [3] Muñoz, R. F., Cuijpers, P., Smit, F., Barrera, A. Z., & Leykin, Y. (2010). Prevention of major depression. *Annual Review of Clinical Psychology*, 6, 181-212.
- [4] Farmer, E. M. Z., Burns, B. J., Phillips, S. D., Angold, A. Costello, E. J. (2003). Pathways into and through mental health services for children and adolescents. *Psychiatric Services*, 54:60-66.
- [5] Hoagwood, K. E., Olin, S. S., Kerker, B. D., Kratochwill, T. R., Crowe, M., & Skak, N. (2007). Empirically based school interventions targeted at academic and mental health functioning. *Journal of Emotional and Behavioral Disorders*, 15(2), 66-92.
- [6] Durlak, J. A., Weissberg, R. P., Dymnicki, A. B., Taylor, R. D., & Schellinger, K. B. (2011). The impact of enhancing students' social and emotional learning: A meta-analysis of school-based universal interventions. *Child Development*, 82(1), 405-432.
- [7] Andrews, G., Issakidis, C., Sanderson, K., Corry, J., & Lapsley, H. (2004). Using survey data to inform public policy: comparison of the cost-effectiveness of treatment of ten mental disorders. *The British Journal of Psychiatry*, 184:526-33
- [8] Cuijpers P., van Straten, A., Smit, F., Mihalopoulos, C. & Beekman, A. (2008). Preventing the onset of depressive disorders: a meta-analytic review of psychological interventions. *American Journal of Psychiatry*, 165:1272-1280.
- [9] Vos, T., Carter, R., Barendregt, J., Mihalopoulos, C., Veerman, J. L., Magnus, A., Cobiac, L., Bertram, M. Y., Wllace, A. L., & ACE-Prevention Team. (2010). Assessing Cost-Effectiveness in Prevention (ACE-Prevention): Final Report. University of Queensland, Brisbane & Deakin University, Melbourne.
- [10] Merry, S. N., Hetrick, S. E., Cox, G. R., Brudevold-Iversen, T., Bir, J. J., & McDowell, H. (2011). Psychological and educational interventions for preventing depression in children and adolescents. *Cochrane Database Systematic Reviews*, Cd003380. doi: 10.1002/14651858.CD003380.pub3
- [11] Stockings, E. A., Degenhardt, L., Dobbins, T., Lee, Y. Y., Erskine, H. E., Whiteford, H. A., & Patton, G. (2016). Preventing depression and anxiety in young people: a review of the joint efficacy of universal, selective and indicated prevention. *Psychological Medicine*, 46, 11-26. doi:doi:10.1017/S0033291715001725
- [12] van Zoonen, K., Buntrock, C., Ebert, D. D., Smit, F., Reynolds, C. F., 3rd, Beekman, A. T., & Cuijpers, P. (2014). Preventing the onset of major depressive disorder: a meta-analytic review of psychological interventions. *International Journal of Epidemiology*, 43, 318-329. doi: 10.1093/ije/dyt175
- [13] Hetrick, S., Cox, G., & Merry, S. N. (2015). Where to go from here? An exploratory meta-analysis of the most promising approaches to depression prevention programs for children and adolescents. *International Journal of Environmental Research and Public Health*, 12, 4758.
- [14] Werner-Seidler, A., Perry, Y., Calear, A. L., Newby, J. M., Christensen, H. (in press). School-based depression and anxiety prevention programs for young people: A systematic review and meta-analysis. *Clinical Psychological Review*.
- [15] Offord, D. R., Kraemer, H. C., Kazdin, A. E., Jensen, P. S., & Harrington, R. (1998). Lowering the burden of suffering from child psychiatric disorder: trade-offs among clinical, targeted, and universal interventions. *Journal of the American Academy of Child & Adolescent Psychiatry*, 37(7), 686-694.
- [16] Rapee, R. M., Wignall, A., Sheffield, J., Kowalenko, N., Davis, A., McLoone, J., & Spence, S. H. (2006). Adolescents' reactions to universal and indicated prevention programs for depression: Perceived stigma and consumer satisfaction. Prevention Science, 7(2), 167-177.
- [17] Agron, P., Berends, V., Ellis, K., & Gonzalez, M. (2010). School wellness policies: Perceptions, barriers, and needs among school leaders and wellness advocates. *Journal of School Health*, 80(11), 527-535.
- [18] Langley, A. K., Nadeem, E., Kataoka, S. H., Stein, B. D., & Jaycox, L. H. (2010). Evidence-based mental health programs in schools: Barriers and facilitators of successful implementation. School mental health, 2[3], 105-113.
- [19] Rajkumar, S., & Hoolahan, B. (2004). Remoteness and issues in mental health care: experience from rural Australia. *Epidemiologia e Psichiatria Sociale*, 13(02), 78-82.
- [20] Evans, R., Murphy, S., & Scourfield, J. (2015). Implementation of a school-based social and emotional learning intervention: understanding diffusion processes within complex systems. *Prevention Science*, 16(5), 754-764.
- [21] Paulus, F. W., Ohmann, S., & Popow, C. (2016). Practitioner review: School-based interventions in child mental health. *Journal of Child Psychology and Psychiatry*. doi:10.1111/jcpp.12584
- [22] Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2014). Mental health interventions in schools in high-income countries. The Lancet Psychiatry, 1[5], 377-387.

# Quick guide to evidence-based programs to prevent depression and anxiety – Schools Resource

Deciding which psychological programs to deliver within your school can be challenging. Researchers at the Black Dog Institute have reviewed the literature and identified evidence-based psychological programs that are designed to prevent or treat depression and/or anxiety for children and adolescents in school settings.

The programs included in this document meet the following criteria:

- At least one Randomised Controlled Trial has been conducted to demonstrate the program's effectiveness.
- ✓ The program can be delivered in the classroom during school hours as part of the curriculum, or before or after school on school premises.
- The program is available in Australia and there is a manual available with instructions on how to deliver the program.



ONLINE PROGRAMS FOR STUDENTS									
Program	What is it for?	Who is it for?	Who delivers it?	How long does it take?	Who developed it and how do I find out more about it?				
MoodGYM	To reduce symptoms of depression	Year 7 +	Accessed online	5 modules (typically one module per week in class, 30-60 minutes per module)     Students can also work independently	Developed by the Australian National University moodgym.anu.edu.au				
SPARX-R	To reduce symptoms of depression	Year 7 +	Accessed online	<ul> <li>7 modules (20-30 minutes each)</li> <li>Can be delivered in the classroom or students can work independently</li> </ul>	Developed by the University of Auckland Will be available in 2017 blackdoginstitute.org.au				



SCHOOL-BASED FACE-TO-FACE PREVENTION PROGRAMS									
Program	What is it for?	Who is it for?	Who delivers it?	How long does it take?	Who delivered it and how do I find out more about it?				
Resourceful Adolescent Program (RAP)	To reduce symptoms of depression	Years 7-10	Delivered by certified facilitators, who may be mental health professionals, school counsellors, teachers, chaplains or community workers.	11 sessions (40-50 minutes).     Ideally delivered to small groups (≈15 students).	Developed by Queensland University of Technology rap.qut.edu.au Training occurs regularly in Sydney and Brisbane				
Aussie Optimism Program (AOP): Positive Thinking Skills	To reduce symptoms of depression and anxiety	Versions available for: Year 4 Years 5-6 Years 7-8	Teachers and school staff attend a 1-day training workshop for each version of the program they would like to run.	- Delivered to whole classes, over a term with 1 session per week.	Developed by Curtin University curtin.edu.au Psychology and Speech Pathology Aussie Optimism				
FRIENDS	To prevent and treat anxiety and depression	Versions available for: Year 2 Years 3-6 Years 7-10	Teachers, parents or health professionals can become a FRIENDS program facilitator and administer the program.	- 5 sessions (2-2.5 hours each).	Developed by Professor Paula Barrett (University of Queensland) friendsprograms.com Online training sessions are available				
Cool Kids	To prevent and treat anxiety	Versions available for: Years 2-6 Years 7-12	Training is offered at Macquarie University to school counsellors, psychologists and health professionals.	<ul> <li>Typically, 10 in-school sessions for children</li> <li>2 parent information sessions, and individual parent consultations.</li> </ul>	Developed at Macquarie University mq.edu.au  Centre for Emotional Health Clinic Programs for Children and Teenagers				
Penn Resiliency Program (PRP)	To reduce symptoms of depression	Years 7-9	Teachers, counsellors, psychology and education graduate students, and mental health professionals trained by the Penn team.	- Typically delivered in 12 x 90-minute lessons or 18-24 x 60-minute lessons.	Developed at University of Pennsylvania ppc.sas.upenn.edu  Services Resilience Training for Schools				

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