Interventions that have the potential to improve outcomes for 9-14 year olds across a range of health issue areas; further information about the evidence:

Studies examining the effectiveness of early interventions have predominantly targeted infancy and early childhood, and the importance of intervening in late childhood and early adolescence has been overlooked.

Interventions delivered during the transition to adolescence are necessary in order to capture three groups of vulnerable children and young people:
1. those who are currently experiencing problems but who did not receive an intervention during early childhood
2. those who received an intervention during early childhood but who continue to experience problems
3. those who are not currently experiencing problems but are at risk for developing problems during adolescence.

Early Intervention

Early interventions aim to reduce the risk factors for mental health problems and health risk behaviours, and enhance protective factors, thus building resilience. Early interventions can be broadly grouped into three categories (Tully, 2007):
1. parenting programs - short-term interventions which primarily target the parent or family and provide parenting education or skills training
2. child-focussed programs - target the child or young person directly and typically involve instructional or skill-based approaches delivered in school settings
3. multi-component programs - involve more than one intervention and may target an entire school, the home and/or community in addition to the child. They often address risk and protective factors in the home, school and/or community and usually involve a combination of classroom approaches, school-wide approaches and family-based approaches.

Education and prevention programs are defined by their audience:
• Universal programs are presented to all students or all families regardless of symptoms
• Selective programs target children and adolescents or families who are at risk of developing a disorder by virtue of particular risk factors, such as being children of a depressed parent
• Indicated programs are delivered to students or families with early or mild symptoms of a disorder
• Treatment programs are provided to those diagnosed with the disorder.

There is evidence that universal and targeted skills-based programs to prevent violence and conduct disorders are effective, at least in the short term, and universal substance use prevention programs that are interactive in content and delivery are also effective.

There is presently mixed support for the effectiveness of programs to prevent bullying, school drop-out and depression, and while research has demonstrated that cognitive-behavioural programs to prevent anxiety are effective, further research is needed.

Please note that interventions that aggregate high risk young people in groups have been found to lead to an increase, rather than a decrease, in substance use and antisocial behaviour problems, via contact with deviant peers and ‘deviancy training’.
Parenting programs

These are short term interventions focussing on parents and families involving parenting education and skills training (eg Triple P).

The following information is taken from a literature review conducted by Centre for Parenting and research, Department of Community Services (Tully, 2007):

- Parenting programs developed for children aged 9 - 14 years generally aim to strengthen protective factors such as positive communication and reduce risk factors such as poor monitoring and supervision in order to enhance child, parent and family outcomes. Note: Monitoring and supervision are linked with higher grades, lower sexual activity and less depression in adolescents (Jacobson and Crockett 2000.)

- There is evidence that universal group parenting programs (enhancing parenting and family communication) delivered in the transition to secondary school are effective in preventing alcohol and substance use in young people.

- Low-cost, self-directed parenting programs, where families work through the materials at home without the involvement of a facilitator, have also been found to be effective, at least in the short term, in enhancing a range of parent and child outcomes.

- Targeted parenting programs have been found to improve parent and child outcomes for families with multiple risks, families with parental depression, divorced parents, step-families, low-income parents, and parents stressed by adolescent substance use.

- Behavioural parenting programs, based on social learning theory, are effective for children and young people with externalising problems, such as conduct disorder, oppositional defiant disorder and attention deficit hyperactivity disorder (however there is a lack of research examining programs based on non-behavioural approaches). Changes in parenting practices, such as increased monitoring and supervision, and improvements in the quality and supportiveness of the parent-child relationship, largely account for the improvements in child externalising behaviours.

- But note: interventions that aggregate high risk young people in groups have been found to lead to an increase, rather than a decrease, in substance use and antisocial behaviour problems, via contact with deviant peers (‘deviancy training’).

- There is some evidence to suggest that multi-component programs that involve parent training, school-wide change and community interventions may lead to stronger effects than single component interventions that simply provide classroom curricula (Browne et al., 2004; Greenberg & Kusche, 2006; Rones & Hoagwood, 2000).

Effectiveness of school-based programs

A recent WHO review of health promotion in schools and health promoting schools (Stewart-Brown 2006) revealed that the most successful programs were those that: adopted a universal approach; adopted a whole of school approach including the local community; promoted changes to the school environment and school ethos; were of longer duration and greater intensity; and promoted personal skills development.

Most effective programs: those that promoted healthy eating and physical activity, mental health and wellbeing, and conflict resolution.

Moderately effective programs: included those aiming to improve self-esteem.

Ineffective programs include those with a risk focus:

- suicide prevention (potential harm);
- prevention of depression and self-harm;
• prevention of substance abuse (including tobacco smoking) – simply providing the ‘facts’ about substances and their consequences have NOT been shown to significantly change attitudes and behaviour;
• sexual health programs - the extent to which children given child sexual abuse prevention instruction will avoid child sexual abuse is unknown - may cause increased anxiety;
• driver education

(2) What evidence is there that the health promoting schools approach is effective?

The school environment

Recognition of the role of the school environment in promoting the development of mental health and psychological resilience in children and young people is increasing worldwide. Schools provide a critical context in shaping children’s self-esteem, self-efficacy and sense of control over their lives.

The term ‘health promoting schools’ relates to fostering a supportive school environment and a school culture which encourages partnerships between school and community in order to promote mental health and wellbeing in children and young people (Commonwealth of Health and Family Services, 1996, cited by Wyn et al., 2000).

WHO’s (1996) four level approach to school change (adapted by Wyn et al, 2000):

![WHO's four level approach to school change](image)

Lessons from the literature include the importance of a positive, warm school environment and the greater effectiveness of interactive programs for the prevention of substance use.

The Health Promoting Schools framework, which is supported by WHO (1996) proposes that school community members working in collaboration with the wider community can have a positive effect on children’s health status by:

- Creating a healthy school environment
- Addressing school policies relevant to health issues
- Involving local community groups in activities and sharing of resources
- Improving health-related knowledge, attitudes and skills of students and staff
- Re-orienting school services to provide health choices (Lynagh et al., 1997)

In addition to promoting adoption of a curriculum in which health is specifically integrated, the Health Promoting Schools approach recognises the significance of school-based health policies, links with health services and partnerships between the school, the family and community. Recent evidence supports the contention that the HPS approach successfully creates an environment rich in social capital. The organisational and social factors inherent in the Health Promoting Schools approach foster children’s emotional or psychological resilience by building
resilience at an organisational level, such that resilient schools are healthy schools (Stewart et al, 2004).

The school environment makes a major contribution to the development of psychological resilience in children. Schools in which students reported more positive adult and peer social networks and feelings of connectedness to adults and peers, and a strong sense of autonomy, were associated with higher self-ratings of resilience in the students. There was also high concurrence by parents and care-givers regarding perceptions of the school environment. These schools rated more highly on health promoting school attributes and principles. Characteristics of such schools included features like shared decision-making and planning, community participation, a supportive physical and social environment, good school-community relations, clearly articulated health policies and access to appropriate health services (Stewart et al, 2004).

**School Connectedness**

There is extensive research on school connectedness (Anderson & Freeman, 2004). Goodenow (1993) defined school connectedness as: ‘...the extent to which students feel personally accepted, respected, included, and supported by others in the school environment’ (p80). An important element is youth participation, involving young people in decision-making about issues that affect their wellbeing at school. Research suggests that school connectedness is an important protective factor for behavioural, emotional and school-related problems and there is evidence that multi-component interventions that specifically target school connectedness improve children’s academic, behavioural and psychological outcomes.

There appear to be 10 constructs that relate to school connectedness: academic achievement; sense of belonging; fairness; extracurricular activities; enjoying school; involvement in decision making; positive peer relations; safety; teacher support; small school size. (Libbey, 2004; McNeely, Nonnemaker & Blum, 2002).

Numerous studies have demonstrated that school connectedness is related to positive academic, behavioural and psychological outcomes in children and young people and is a protective factor against many behavioural, emotional and school related problems. School connectedness is strongly associated with attendance at school, school achievement and expectations of future success (Anderman, 2002; Finn & Rock, 1997; Goodenow & Grady, 1993; Israelashvilli, 1997; Klem & Connell, 2004). It is also associated with enhanced optimism, self-esteem and lower levels of violence, substance use, sexual risk behaviour, emotional distress, depression and suicidal behaviour (Bonny, Britto, Klostermann, Hornung & Slap, 2000; Resnick et al., 1997; Wang, Matthew, Bellany & James, 2005).

Resnick et al (1997) found that school connectedness was a stronger protective factor against absenteeism, delinquency and substance use than family connectedness.

Interventions to enhance school connectedness are generally multi-component health promotion programs targeting the classroom, school and family. They generally target the whole school environment and focus is on the promotion of positive development rather than on the prevention of disorder.

**The Gatehouse Project**

Another important piece of evidence comes from the Gatehouse Project conducted in Victorian Schools by the Centre for Adolescent Health. The Gatehouse Project aimed to promote student engagement and school connectedness in order to improve emotional wellbeing and learning outcomes. This intervention comprised a school-based adolescent health team, the identification of risk and protective factors in each school’s environment from student surveys and the implementation of strategies to address these factors. Strategies varied between schools according to the students’ perception of need, but the curriculum generally included problem-solving training.

In a Randomised Controlled trial (RCT), 25 schools were assigned to the intervention or a control and the intervention was delivered with grade 8 students. At a 2- and 4-year follow-up, the
intervention groups showed lower rates of substance use, antisocial behaviour and early initiation of sexual intercourse when compared with the control groups, but no difference was observed in commitment to school, social relationships or depressive symptoms (Bond et al., 2004; Patton et al., 2006).

Four years after beginning an intervention to promote social inclusion within schools, patterns of health risk behaviours among students in intervention schools differed from those in schools in the control group. Marked health risk behaviours were reported by approximately 15% of students in the intervention school group after the intervention, compared with 20% of those in the control group, an overall reduction of a quarter. This difference arose from lower rates of substance use, antisocial behaviour, and early initiation of sexual intercourse by students in the intervention schools. “…our findings support strategies to promote the social milieu of schools as a way of achieving better health and learning outcomes.”

(3) To what extent does the curriculum for middle years students in NSW include a focus on strategies for building resilience? Could programs aimed at building resilience be further integrated into the curriculum?

School mental health

Yes. There is now sufficient evidence to justify a greater investment in school mental health promotion.

School mental health promotion provides a full continuum of mental health promotion programs and services in schools, including enhancing environments, broadly training and promoting social and emotional learning and life skills, preventing emotional and behavioural problems, identifying and intervening in these problems early on, and providing intervention for established problems. School mental health promotion programs should be available to all students, including those in general and special education, in diverse educational settings, and should reflect a shared agenda - with families and young people, school and community partners actively involved in building, continuously improving and expanding them.” (Weist & Murray, 2007)

“In addition to this strong emphasis on quality, school mental health promotion should reflect a purposeful attempt to build a new paradigm in the way mental health is promoted in children and adolescents. The priorities should be environmental improvement and the health of populations of children and adolescents, not solely limited efforts to treat ‘psychopathology’ (a pejorative term) in select individuals.” (Rowling and Weist, 2004).

Likewise: “There us growing awareness of the limitations of the single-issue approach. For example, the ‘positive psychology’ movement has highlighted the previously skewing of practice and argued for addition of a focus on health’ rather than illness and disease, and on the wider environment that affects mental health and wellbeing” (Seligman & Csikszentmihalyi, 2000).

“School mental health promotion as a field is a relatively new endeavour….The impetus for action arises from growing recognition of the expected burden of disease by 2020 from the impact of depression on individuals and communities as well as increasing anxiety. School mental health promotion and prevention are distinct from other school health concerns in their focus and implementation. In particular, there is far less emphasis on dimensions of social control; there are strong ‘don’t messages’ in nutrition, sex education, and alcohol and other drugs education, but mental health, taking a positive perspective, results not in ‘don’t messages’ but in personal and social enhancement ‘do messages’.” Louise Rowling, 2007.

Australian prevention and early intervention programs tend to be based on:

• cognitive behaviour therapy (CBT) - tend to focus on the development of problem-solving and social skills, cognitive restructuring, relaxation, and assertiveness;
• interpersonal therapy (ITP) - focuses on improving social networks, role transitions, perspective-taking and conflict resolution; or
• psychoeducation.
Mental health programs with proven effectiveness

**FRIENDS** (targeted) The program has been specifically designed for use in schools as an anxiety prevention program and resiliency building tool. FRIENDS promotes self esteem, problem-solving, self-expression and building positive relationships with peers and adults and has been shown to lower anxiety immediately and at follow-up. FRIENDS has also been adapted as a universal intervention for culturally and ethnically diverse young migrants to Australia.

**Adolescents Coping with Emotions (ACE)** (targeted)
ACE is an early intervention program targeting 13-15 year olds, which builds resilience and increases positive coping in young people using cognitive behavioural and interpersonal skills. ACE systematically focuses school counselling and health professional resources on those students most at risk of becoming depressed. An innovative aspect of the program is the implementation in schools, with small groups of 8-10 students, utilising co-leaders from education (school counsellors) and community adolescent mental health services. This program was positively evaluated by Dept of Education and Training, Northern Beaches Adolescent Service, RNSH Child and Adolescents Psychiatry and Macquarie University (1999).

**Resourceful Adolescent Program (RAP)** (universal); developed by Schochet & Associates; RAP-A for 13-15 year olds, 11 sessions covering:
- Personal Strengths: the recognition & affirmation of existing strengths and resources;
- Thought Court: the recognition & challenging of cognitive distortions to achieve positive self-talk
- Support Networks: the development of support networks & appropriate help seeking behaviour
- Keep Calm: the development & self-management of self-soothing strategies
- Problem Solving: the generation, choice and evaluation of solutions to problems
- Keep the Peace: the recognition of different perspectives & the development of empathy & strategies to promote harmony & avoid conflict escalation.

**Other programs requiring further evidence of effectiveness:**
- **Cool Kids**: (primary) - a targeted anxiety treatment program
- **Rock and Water**: (10 years and up) - a universal or targeted mental and social skills program.

**Mental health programs are also awaiting proof of effectiveness:**

a. **MindMatters** is a national resource and professional development program (funded by the Commonwealth Department of Health and Aging) providing a framework that integrates existing mental health education and health promotion interventions in Australian schools (Wyn et al., 2000).

The program takes a whole-school approach in promoting the emotional and social wellbeing of all members of the school community. It encompasses professional development in recognition that the development of teachers is fundamental to the success of any innovation and provides classroom materials to support programs in four areas: enhancing resilience, dealing with bullying and harassment, grief & loss, and understanding mental illness (Wyn et al, 2000).

A key part of MindMatters is linking community mental health services with school, which enables comprehensive and integrated approaches for addressing the complex needs of students and families (Anderson & Doyle, 2005a).

**MindMatters** has been disseminated nationally since 2001 and the program is being evaluated for its effect on rates of absenteeism and dropout and social and academic skills (Rowling & Mason, 2005).

b. The **MindMatters Plus** initiative also addresses the needs of students with high support needs in mental health (Anderson & Doyle, 2005b). Seventeen schools have been involved in the pilot of the program which aims to identify pathways of care in school communities, linking schools and
general practitioners. The purpose of this intervention is early intervention of mental health problems, along with a trial of specific evidence-based programs (Rowling & Mason, 2005).

c. **Beyondblue** is a national initiative of state and territorial governments that works in partnership with schools, health services, workplaces, universities, media and community organisations to raise awareness and reduce stigma related to depression. The initiative also supports people with depression by providing them with resources and treatment options and by encouraging relevant research. www.beyondblue.org.au

d. **NSW School-Link** involves schools, TAFE and mental health services collaborating to promote mental health and facilitate the early identification, management and support of students with mental health problems. It aims to:

- improve pathways to care
- training of counsellors on mental health issues
- support for expansion of mental health prevention and promotion

Research has been conducted to examine the three foci of the School-Link initiative, namely prevention, early intervention and service access. “Improvements witnessed since the commencement of School-Link include an increase in the number of evidence-based mental health promotion programmes in schools, improvements in the communication between health and education departments, improvements in referral patterns and better practices such as improved feedback, in both health and education sectors. School counsellors feel more supported in their role by health services and better able to manage certain patients.” (Maloney and Walter, 2005).

“School-Link has established a strong partnership between health and education, raised the awareness of child and adolescent mental health problems and contributed in the areas of prevention and early intervention.” (Maloney et al, 2008)

e. **Headspace, the National Youth Mental Health Foundation (NYMHF)** is a national program of reform aimed at enhancing access, coordination and quality of services in youth mental health ($54 million).

(4) **How important is participation in activities such as sport and arts outside school for building resilience in this age group? Are you aware of any research looking at the impact of arts and sports programs on outcomes for children and young people in this age group?**

“There is mixed evidence to support the effectiveness of extracurricular activities, after-school programs and mentoring programs as a strategy for high-risk children and young people, although these approaches may be beneficial for low-risk children” (Tully, 2007).

**Arts programs**

Arts programs include youth development approaches as well as therapeutic programs like Kidsxpress and the arts program at the Department of Adolescent Medicine, The Children’s Hospital at Westmead. Evidence of effectiveness is limited, due to a lack of evaluation.

**Sports programs**

A Cochrane Collaboration review looking at mental health found supportive evidence for the use of exercise for both prevention and treatment of anxiety and depression (Larun, 2006).
In evidence given to the Inquiry, Professor Bennett identified the Better Futures Program has a good evidence base. Could you provide further information about the evidence base for Better Futures?

Better Futures

“The Better Futures Regional Strategy has used the evidence about factors that are known to enable children and young people to attain the resilience they need to negotiate the challenges in their own lives successfully, and to achieve successful adulthood, to identify three fields of activity:

- Keeping young people at school and improving their educational attainment
- Strengthening key protective factors for young people and reducing risks;
- Supporting young people at very high risk.” (Wise et al, 2003)

Wise et al (2003) outlined the research implications for improving the effectiveness of youth programs and services in a paper that was developed to provide a background for participants of a Roundtable on Better Futures for Young people: what works? Why?. They found that the evidence suggested that programs that are effective in preventing and reducing at-risk behaviours had several characteristics in common. In particular, they:

- address multiple risk and protective factors
- work at all levels of influence: the individual, the family and the local and macro environments
- build on existing community resources through integrated case management, strong referral networks and brokerage systems to link young people and their families to the services they need
- focus on the positive outcomes desired by young people, not the negative behaviours that adults want to prevent
- target interventions for high-risk groups
- can offer timely interventions - For young people this can mean within 24 - 48 hours of seeking help
- offer services during hours that suit young people - after school, in the evening, on weekends and in places where young people congregate
- involve young people in their development and management

Wise et al (2003) also found the evidence also suggests that effective interventions to enhance the likelihood of young people’s successful transition to adult life must:

- build and enhance the personal knowledge, skills, values, beliefs and self efficacy of children and young people
- ensure that government policies, institutions and processes enable and support children and young people to acquire these competencies
- ensure that children and young people who are at risk of not acquiring these competencies receive high quality, evidence-based care and support
- ensure that children and young people who are already experiencing significant problems are cared for, supported and assisted

Youth Development Roundtable

In 2005, Communities Division, Department of Community Services, contracted NSW CAAH to undertake background research on how to strengthen youth development programming (Chiang et al, 2006). Findings from this review provided the framework and basis for discussions in the Roundtable on Youth Development, held in September 2006. The Roundtable on Youth Development was commissioned with the aim to strengthen the efforts of government agencies, non-government organisations and other stakeholders in youth development, through networking, information exchange and the sharing of resources (NSW CAAH, 2006). Roundtable delegates recommended the following actions to improve young people’s lives in NSW:

1. Reframe young people positively in the media
2. Formalise young people’s participation
3. Improve planning, responsiveness and long term vision for youth development
4. Continued support for young people’s development; through continued investment and by adopting a whole of community approach.

**Home school collaboration**

There is some limited evidence that involving parents in a school-based intervention enhances the effects of the intervention (Shepard & Carlson, 2003). The term home-school collaboration (also known as family-school partnerships) refers to the relationship between families and schools, where parents and educators work together to promote the academic, social, emotional and behavioural development of children (Christenson & Sheridan, 2001; Cox, 2005).

The most effective interventions were those where parents and school personnel worked together to implement an intervention and had a two-way exchange of information. However, interventions that involved one-way, school-to-home communication, such as daily report cards and telephone contact between home and school, were also found to be effective.

Research has demonstrated that partnerships between parents and teachers are important for children’s educational outcomes; there is evidence that home-school interventions, which involve an exchange of information between parents and teachers, are effective in managing behaviour and school-related problems.

**References**


