

Smiling Mind

Establishing an evidence base for the Smiling Mind Education Program

- Preliminary results from a large study conducted by Deakin University and InsightSRC

Introduction

The implementation of mindfulness practises in the school setting is growing across Australia and internationally. The Smiling Mind program was developed by psychologists and based on a range of evidence-based interventions but a thorough evaluation of the program was required to fully understand the impact of the program on student and teacher wellbeing. Smiling Mind sought a research partner to undertake an independent evaluation of the Smiling Mind Education program. Prof Peter Hart from InsightSRC agreed to undertake this research and engaged Deakin University and his co-researchers in the project.

This document summarises a large project conducted to establish an evidence-base for the Smiling Mind Education Program. This project was led by Prof Peter Hart, from Deakin University and InsightSRC.

Smiling Mind's vision is to see Mindfulness Meditation on the national Australian school curriculum by 2020. There is an overwhelming amount of evidence to support the benefits of mindfulness in adults. However, little research evidence exists in children and adolescents and even less has been published exploring the benefits of integrating mindfulness into the classroom.

The mental health statistics in children and adolescents are alarming and in recent years attention has started to turn towards taking a preventative approach to enhancing mental health to reduce this burden of mental illness.

Scale and accessibility are key factors in delivering programs that can result in significant change. Technology

We are very excited to share the results of this project. Twelve Victorian schools participated in the research, with 1853 students and 104 teachers taking part in the program. This research provides a wealth of information about the ways in which mindfulness can benefit students and teachers. Most importantly, this research demonstrates the significant benefits that the Smiling Mind Education Program can have on students mental health, sleep quality and behaviour at school.

We are very appreciative of the support of the Department of Premier and Cabinet and the Department of Education and Training in funding and supporting this project.

We look forward to utilizing the outcomes and insights contained within this body of research to inform our work in further developing and integrating the Smiling Mind Education Program throughout Australian schools to ensure even further impact on the Australian community in the future.

Dr Addie Wootten
CEO
Smiling Mind
addie@smilingmind.com.au
+61 402 903101

Executive summary

Prof Peter Hart, Deakin University and InsightSRC, conducted a large trial to examine the benefits of teaching mindfulness meditation to students across 12 Victorian schools using the Smiling Mind Education Program.

Teachers were trained in mindfulness and the Smiling Mind program. Teachers then participated in a 5-week program themselves. Pre- and post-test data were collected from the teachers to evaluate benefits. Students were then allocated into two groups; intervention and wait-list control. Students completed questionnaires at three time points. Baseline, mid-year and at the completion of the research. Teachers and students were asked to use the program at least 3 times per week.

The research results revealed that the program is beneficial for students across a number of domains including sleep quality, mental health, wellbeing, engagement with learning, student safety and reductions in bullying and classroom disruptions. Teachers who participated in the 5-week mindfulness meditation program also experienced significant improvements in the quality of their sleep, reductions in negative wellbeing, improvements in individual distress, reductions in tension, difficulty concentrating, improvements in mindfulness, describing emotions and accepting emotions.

The Smiling Mind program is accessible, low intensity and easily integrated into the classroom and the research data clearly demonstrates that this program is beneficial in enhancing wellbeing for both students and teachers.

Student outcomes after participating in the program

1853 students

1853 students from 12 Victorian primary and secondary schools participated in the research

Improved mental health

Student sleep, wellbeing, ability to manage emotions, concentration, and school behaviour significantly improved

Reductions in classroom disruptions

Students reported significant reductions disruptive behaviour in the classroom and bullying

Students at-risk benefited the most

Students who experienced higher levels of emotional distress before participating in the program showed the biggest improvements as a result of the program

Teacher outcomes after participating in the program

104 teachers

104 teachers from 12 Victorian primary and secondary schools participated in the research

Improved mental health

Teacher sleep, wellbeing, distress, ability to manage, describe and accept emotions, tension and mindfulness all improved

Improved concentration and sleep

Teachers reported significant improvements in their concentration and the quality of their sleep after participating in the program

Table of contents

ITEM	PAGE
Setting the scene	Pg 5
The Victorian 10-year mental health plan	Pg 6
The Victorian Education State plan	Pg 7
The Victorian Resilience Framework	Pg 8
About the research project	Pg 9
About the Smiling Mind Education Program	Pg 11
Teacher training	Pg 13
Why mindfulness in education	Pg 14
The project	Pg 18
Lead Investigators and Project supporters	Pg 19
Technology development	Pg 20
The research	Pg 21
Results	Pg 23
Participant feedback	Pg 26
Next steps	Pg 29

Setting the scene

Mental illness is a major concern facing all Australians. One in five adults will experience mental illness in any one-year and one in two people in their lifetime. The World Health Organisation (WHO) predicts that depression will be the leading burden of disease by 2020.

Mental health is particularly important during childhood and adolescence. It is known that half of all lifetime mental health disorders emerge by age 14 and three quarters by age 24.¹ Data from the Australian National Mental Health Survey shows that young people have the highest incidence and prevalence of mental illness across the lifespan,² with more than a quarter of Australians aged 16-24 experiencing a mental disorder in the prior 12 months.³

Mental illness is estimated to cost the economy up to \$28.6b a year, much of this in direct costs to government.⁴

The recent report on the second Australian child and adolescent survey of mental health and wellbeing revealed that there is a real need to improve mental health outcomes for our youth and striking evidence to support the need for a preventative approach to mental health.⁵

“The data points to the need for re-focused effort by governments and the broader community to develop systems to both prevent mental health problems and to respond early to problems when they emerge. The rates for depression, self-harm and thoughts about suicide in teenagers are particularly worrying, with approximately one in ten indicating that they have engaged in self-harming behaviour.” (Page iii).

**Sussan Ley,
Federal Minister for Health
and Sport.**

The Victorian 10-Year Mental Health Plan

In 2015 the Victorian Government released Victoria's 10-year mental health plan. This plan strongly positioned health promotion, prevention and early intervention as key components of successfully achieving the outcomes identified in the mental health plan.

A number of key outcomes named in the plan directly relate to the work undertaken in this project.

“Good mental health takes more than just good mental health services. For that reason, our actions will address the bigger picture across Victoria. We will take action in health promotion, prevention and early intervention that is not restricted to government services”(p. 17).

Focus areas 1: Victorians have good mental health and wellbeing

Outcome 1: Mental health and wellbeing – the prevalence of mental illness is reduced, and Victorian individuals, families and communities are resilient.

✓ The Smiling Mind programs enhance emotional wellbeing, reduce stress and build resilience.

Focus area 2: Victorians promote mental health for all ages and stages of life

Outcome 5: Early in life – infants, children, young people and their families are supported to develop the life skills and abilities to manage their own mental health.

✓ The Smiling Mind programs are tailored to young ages and designed to support the development of important life skills to enhance and self-manage mental health.

Focus area 3: Victorians with mental illness live fulfilling lives of their choosing, with or without symptoms of mental illness

Outcome 10: Self-management – people experiencing psychological distress or mental illness, and their families or carers, have the skills and support to manage and maintain their best mental health.

✓ The accessibility of the Smiling Mind programs online or via our App ensure that people can use our programs wherever or whenever they need them.

Focus area 4: The service system is accessible, flexible and responsive to people of all ages, their families and carers and the workforce is supported to deliver this

Outcome 12: Choice – people with mental illness have genuine choice about the treatment options, rehabilitation and support available and provided to them.

✓ Our free programs are easily accessible online and via our App, ensuring everyone has the opportunity to choose to use our programs.

Victorian Education Plan Education State

The ambitious Education State plan maps out a range of key targets for education across Victoria over the next 10-years.

A number of key Education State goals directly align with our programs:

“We are making Victoria the Education State by building an education system that produces excellence and reduces the impact of disadvantage.”

A number of key Education State goals directly align with the Smiling Mind programs:	
Learning for life	<ul style="list-style-type: none"> ✓ The Smiling Mind programs enhance learning outcomes; improves attention and concentration and engagement with school.
Happy, healthy and resilient kids - School will be a positive experience and nurturing environment for our children to develop confidence, social skills and healthy life habits.	<ul style="list-style-type: none"> ✓ The Smiling Mind programs build resilience; enhance wellbeing and confidence both personally and in their school environment.
Breaking the link - Students at risk of poor learning outcomes will be supported to reach their potential and stay in education for better life opportunities.	<ul style="list-style-type: none"> ✓ The Smiling Mind programs enhance outcomes for all students, particularly those who are at risk.
Pride and confidence in our schools - Parents and communities will report their level of pride and confidence in their local government schools. We want Victorians to be proud of the great government schools in their communities.	<ul style="list-style-type: none"> ✓ The Smiling Mind programs are a whole of school approach including teachers, students and parents. Our programs foster engagement, confidence and connection. <p><i>“Our school has embraced mindfulness using the Smiling Mind App over the last couple of years and we have noticed a great difference in the children. Parents are also using it at home. Thank you for this initiative that makes a difference for all ages”</i></p> <p>Teacher - Camberwell Primary School</p>

The Victorian Resilience framework

Victorian Department of Education and Training have established an evidence-based resilience framework. This framework is a model to support children and young people to build resilience. This framework establishes a clear focus, again, on building mental health capacity with a strong focus on resilience.

The Smiling Mind program is referenced in this framework as an important resource.

“Building Resilience: A model to support children and young people is based on research which highlights the importance of taking a multi-dimensional school-wide approach to building resilience.”



About the research project

This research project sought to evaluate the Smiling Mind education program to establish an evidence-base for the benefits of the integration of our mindfulness based mental health and wellbeing programs in the school setting via our technology platform.

The project sought to support government services by increasing the accessibility and quality of Smiling Mind's established programs to:

- Educate young people about the importance of pre-emptive health measures, and
- Provide online, action based tools to support young people's mental wellbeing.

This project aimed to provide the evidence required to support the use of the Smiling Mind programs to increase the government's capacity to provide mental health education and services, as well as young people's capacity to manage their own mental health.

About Smiling Mind

Vision

Our vision is to see Mindfulness Meditation on the Australian school curriculum by 2020.

Mission

Provide accessible, lifelong tools based in mindfulness meditation; creating happier, healthier, more compassionate people.





The world needs mindfulness and in this fast-paced, stressed and distracted world, the children of today probably need it more than any previous generation. Smiling Mind is taking mindfulness meditation to where it is needed most, into the hearts and minds of young Australians, but it's more than just a technique, and more than just a life-skill. Mindfulness is a way of life.

– Dr Craig Hassed



About the Smiling Mind Education Program

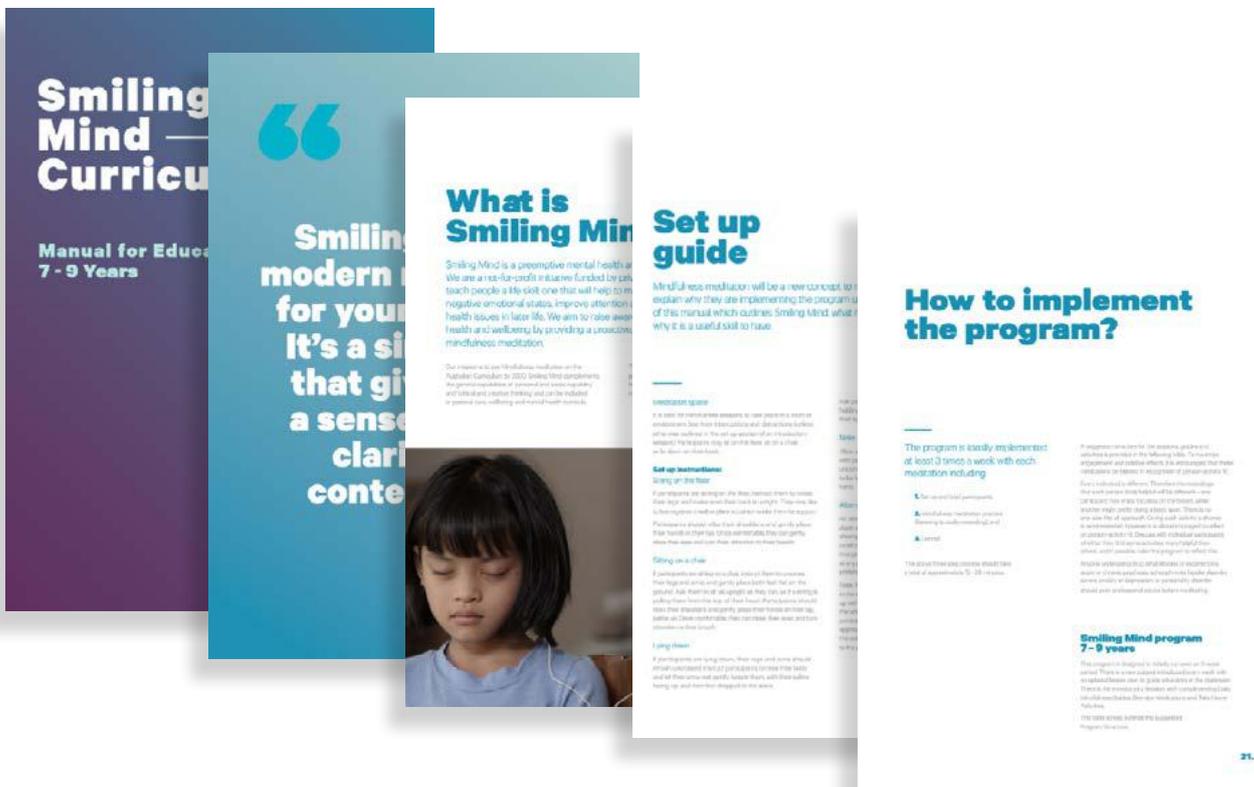
The Smiling Mind Education Program is an established and well-regarded pre-emptive mental health and wellbeing program delivering mindfulness based education programs for primary and secondary school students. The programs include key lesson plans and recorded meditations delivered through our website and app, which have been mapped to the curriculum.

The programs have been developed to provide accessible and flexible educational resources for teachers, students and parents.

The Smiling Mind programs are designed to offer all the resources needed to support teachers to integrate the program materials directly into their classrooms. This enables widespread engagement and the ability to deliver programs on a large scale.

The Smiling Mind Education Program has two major applications in the classroom:

- **Group settings:** A teacher or facilitator logs into the Smiling Mind Education Program website and works through the program as a class, using the communal platform to generate discussion and learning. Mindfulness practices are played via website or the smartphone speaker and the class practices the mindfulness activities and meditation as a group.
- **Individual:** Students download the Smiling Mind App on their Smartphone or iPad /tablet and utilises it when directed by a teacher and/or at the student's discretion on an as needs basis both in and out of the school environment.



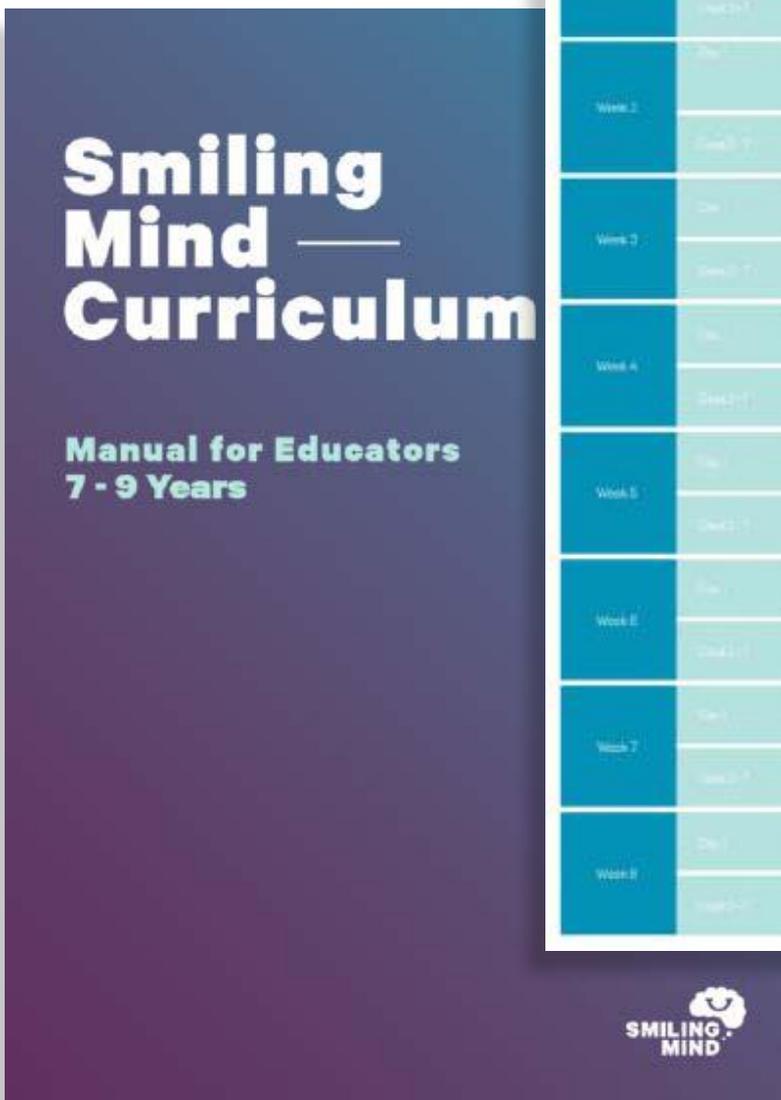
Aged-based resources



All Smiling Mind education program resources have been developed to align with the developmental needs of each age group.

- Ages 7-9 years
- Ages 10-12 years
- Ages 13-15 years
- Ages 16-18 years

The education program follows an 8-10 week timetable where teachers introduce the concepts of mindfulness and begin to teach meditation using the online and app-based Smiling Mind guided meditations at least three times per week. Student activities are included in the program as well as take home activities designed to integrate the learning objectives into their lives.



Week 1	Day 1	Lesson Plan 1: The Basics Journey Take Home Activity: Book The Book
	Day 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 2	Day 1	Lesson Plan 2: Daily Smiling Take Home Activity: 'A' mindfulness suggestion sheet 'A' cards between friends!
	Days 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 3	Day 1	Lesson Plan 3: Exploring Trees Take Home Activity: Where Did My Food Come From?
	Days 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 4	Day 1	Lesson Plan 4: Exploring Trees Take Home Activity: Count to your Service
	Days 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 5	Day 1	Lesson Plan 5: Another Skills Journey Take Home Activity: Name the weather
	Days 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 6	Day 1	Lesson Plan 6: My Internal Weather Take Home Activity: Under The Sunnet
	Days 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 7	Day 1	Lesson Plan 7: The Night Time Take Home Activity: Looking after Myself
	Days 2-7	Daily Mindfulness Guide (5 mins x) Repeat Take Home Activity where relevant
Week 8	Day 1	Lesson Plan 8: Preparing for the Week Five
	Days 2-7	Extended Daily Mindfulness Guide (10 mins x)



Teacher training

Teachers are supported to deliver the Smiling Mind Education Program. This model enables scalable delivery of the program and an opportunity to up-skill and support teachers to learn new skills and capabilities.

Teachers are provided with training across two stages:

1. An introduction to mindfulness and meditation as it relates to themselves and their own personal development. Teachers participate in this initial workshop to ensure depth of understanding of mindfulness based meditation practice and guiding principles and it is recommended that teachers take on a personal practice for at least 5-weeks prior to implementing the program in their classroom.
2. The second stage of teacher training focuses on the delivery of the program materials to their students, the place of mindfulness education in the school curriculum and the ways in which our programs can be integrated. The benefits and expected outcomes of the programs in relation to student learning and wellbeing are discussed.

Smiling Mind strongly recommends that the teachers continue a personal mindfulness and meditation practice and resources are provided to teachers to support this practice.



Why mindfulness in education?

In recent years, a considerable body of work has attempted to identify the key factors that contribute to children's academic, emotional and interpersonal success at school. This has led education researchers, policy makers and practitioners, alike, to focus on the emotional wellbeing of students. The potential link between students' emotional wellbeing and their learning outcomes has also taken on more importance since the advent of the positive psychology movement (e.g., Seligman, 2013). This has led school communities to develop a range of methods for supporting and developing students' wellbeing, especially given the growing body of evidence that suggests happiness is a key component of flourishing, which contributes to people's success in a wide range of settings (e.g., Hart, Cotton & Scollay, 2015).

Meditation, mindfulness and mental health

The 21st Century has seen a significant increase in the practice of meditation, particularly as the evidence suggests it has positive benefits on an individual's capacity for maintaining holistic health and wellness. Various studies involving healthy adult populations have shown that practice of meditation can lead to reduced trait anxiety and rumination as well as better stress and emotional management.⁶

One form of meditative practice is mindfulness. As with most forms of meditation, mindfulness is derived from Eastern meditation practices^{7,8}, specifically those practices that are characterised by open monitoring and awareness of present moment experiences. Mindfulness meditation involves a series of practices that work to enhance an individual's ability to remain non-judgmentally aware of their experiences such as their sensations, thoughts and feelings, moment by moment. Although mindfulness-based interventions have been in use for over 20 years, mindfulness has only recently begun to gain footing as a psychological construct.⁹

Mindfulness has been broadly defined as a form of awareness of one's present state that is cultivated by deliberately attending to currently occurring thoughts, sensations, emotions, actions and surroundings.⁷

This process has two key components, the first being an attitude of non-judgment, acceptance and openness, and the second being a mental state oriented towards giving focused and sustained attention to experiences as they occur¹⁰. Paying mindful attention to current experiences is thought to raise awareness about habitual, automatic reactions and enables people to respond in ways that are not influenced by these.¹¹

Mindfulness is believed to positively impact on psychological health by enabling elements of conscious and unconscious experience to be perceived from a removed and accepting stance¹². This disrupts reactivity, strengthens attention and brings problem-solving and behaviour under conscious control. As an example, when negative thoughts drive rumination, they can contribute to depression. However, when such thoughts are mindfully observed and accepted, they can be experienced as mental events that will pass, and are less likely to lower mood and drive rumination^{13,14}. Researchers believe that mindfulness is important in helping an individual to self-regulate their behavior, which in turn drives wellbeing enhancement¹⁵. While increased self-regulation may have less of a direct effect on wellbeing, mindfulness is thought to have a direct impact by adding clarity and heightening moment to moment experiences¹⁶.

Meditation, mindfulness and education

When reviewing recent education literature Appleton, Christenson & Furlong (2008)¹⁷ noted that it is the day-to-day experience of students that underpins their performance at school. Student experience can involve wellbeing, the quality of teaching, student's motivation to learn, and the relationships they experience whilst at school. The intention behind the development of the Smiling Mind education program has largely been to enhance mindfulness in order to increase the likelihood that children will have a more positive experience at school (and in life generally) and in turn, achieve better outcomes, both emotionally and academically.

“Our school has embraced mindfulness using the Smiling Mind app and we have noticed a great difference in the children. Parents are also using it at home. In term 4, one of our teachers will be conducting mindfulness sessions in the morning for parents and students before school starts” - Teacher, Camberwell Primary School

Mindfulness interventions

As a result of the potential psychological benefits of mindfulness, there has been an increasing focus on the development of mindfulness-based interventions and treatments⁸. In assessing the possible benefits this program may have for students, it is important to consider other interventions reviewed in the research literature in order to judge whether the program is likely to make a difference. Interventions such as Mindfulness-Based Stress Reduction (MBSR) and Mindfulness-Based Cognitive Therapy (MBCT), are formalized programs that involve individual and group training and practice sessions over the course of several months¹⁸. Such programs have, however, been criticized as they require a substantial time and resource investment that is not always feasible¹⁹. As a result, a number of studies have begun to explore whether the benefits of these interventions can be delivered using less intensive methods such as pure or guided programs that employ books, workbooks, IT applications and audio-visual materials to teach mindfulness²⁰.

Studies using informal methods have found that they produce significant improvements on measures of mindfulness, acceptance, depression and anxiety with small to medium effect sizes²⁰. They are also associated with a number of additional benefits, including access to interventions that may otherwise be costly or locally unavailable, reductions in the stigma associated with accessing interventions in mental health settings, cost effectiveness, ease of updating material as new evidence becomes available, and increases in self-efficacy, learnt resourcefulness and agency for the program participant.

One population that has received little attention in the research literature is adolescents, although interest in this area is burgeoning given the vulnerability of this population to the social and emotional environment^{12,18,21}. The US Surgeon General's Report (2000)²² found that one in five US youth suffer from social, emotional and behavioral problems that place them at risk for school failure. Even adolescents not suffering from these problems face a host of developmental challenges that threaten their physical and emotional wellbeing, and require a high level of social and emotional competence to successfully navigate¹². Physical changes during this period also mean that adolescents are particularly reactive to emotional information and sensitive to the effects of stress. As a result, there is a need for the prioritization of programs that teach emotion regulation skills to adolescents in a school setting.

Mindfulness may be uniquely suited to teaching emotion regulation skills to adolescents, and early studies with this population show promise²³. In adolescent clinical populations (psychological disorders), mindfulness-based interventions have been linked to reductions in problem behaviour, impulsivity, substance abuse, anxiety, anger and emotional distress⁷, and improvements in sleep, attention, awareness, happiness and perceived quality of life^{23,7,24}. In non-clinical adolescent populations, mindfulness has been linked to reductions in anxiety, depression and stress¹² and improved emotion regulation, attention, wellbeing and quality of sleep^{12,25}. One recent study found that an adapted version of Mindfulness-Based Stress Reduction significantly reduced somatization, negative affect, negative coping, rumination self-hostility and post traumatic symptom severity in a public school cohort of fifth to eighth graders²⁶. Mindfulness programs have been well received by adolescents¹⁸, with participants generally reporting that they are better able to recognize and label feelings, are less anxious and reactive to difficult thoughts and feelings, and show a greater array of coping abilities¹².

Of particular note, a study on the effect of mindfulness training on distress tolerance among a cohort of 372 students (again using a version of Mindfulness Based Stress Reduction) found that individuals with the poorest baseline distress tolerance levels showed a greater decline in perceived stress following participation in the program²⁷. This study is important because it suggests who might benefit most from mindfulness training.

Although mindfulness studies with adolescents show promise, they have been criticized as they have not used rigorous experimental designs¹⁸ and have often presented with methodological issues. Criticisms have included use of small sample sizes and self-selection processes, a lack of control groups and randomisation and the impossibility of conducting studies under double-blind conditions^{18,10}. Studies have also been criticised for adapting measures and programs that have been used with adults rather than designed specifically for adolescents²¹, leading to issues with program length given existing school and home commitments²⁸. Such criticisms highlight a need for large, well-designed studies with robust methodologies that assess the effects of mindfulness programs that are shorter, are appropriate for the adolescent population, and can be integrated seamlessly into the high school curriculum¹⁸.

“After, I felt warm, collected, happy and like a rainbow was inside me.” - Student, year 4

The Smiling Mind program

There is an obvious link between meditation and mindfulness given that mindful practice involves meditation, as per the Smiling Mind Program. As such, the benefits of both align and meditation could be perceived to drive mindfulness. In turn, mindfulness has been shown to have a great deal of benefits for a wide range of people but most importantly, in adolescent populations. Such benefits can include improved wellbeing, sleep and engagement in learning. A diagrammatic representation of this relationship is presented below.



The project

Development and scoping

This project involved collaboration between a range of project partners to ensure successful completion. Project implementation included review of the technology, content and evaluation and assessment requirements.

Technology

Technology development requirements were identified to support Android devices and to ensure all platforms were utilizing the latest privacy and security systems. Data collection measures were also reviewed to ensure high quality data was collected throughout the project.

Research

Researchers from Deakin University and Insight SRC reviewed the literature and developed a research methodology designed to provide a thorough examination of the Smiling Mind education program. Lead clinicians and researchers from Young and Well CRC and Smiling Mind were consulted at key milestones to provide feedback and support the research where needed. The research methodology and design was approved by Deakin University Human Research Ethics Committee. The research was then undertaken to examine the impact of the Smiling Mind mindfulness program on students across 12 Victorian primary and secondary state schools. 1853 students and 104 teachers participated in the research program.

“The gratitude journal is working well. Quite a few students have discovered things to be grateful for that they have never considered before. Obviously this is of personal benefit to the students, but I also think it has a broader social benefit in making them aware of what others may not have.”
- Teacher, Victorian College of the Arts

Lead investigators



Project supporters



Premier and Cabinet



Department of Education and Early Childhood Development



19

The research

Project design

Students

This project was designed to ensure valid and reliable outcomes and employed a revolving panel design. Participants were allocated to one of two groups using a three-wave counter-balanced design.

In the first wave, baseline data was collected from the control group and treatment group (Time 1). These data were used to establish the psychometric properties of the assessment tools and provide a baseline assessment of all students.

In the second wave, data were collected from the treatment group (post-program) and the control group was measured again (Time 2). The control group then participated in the program and thus became a second treatment group in term 3.

In the third wave, post-program data was collected from both groups (Time 3).

Teachers

Teachers completed a brief survey about their own wellbeing, the culture and climate in the school and their experiences of implementing the Smiling Mind program at Time 1, Time 2, and Time 3. Teachers also completed this survey at Time 0, which was used as a baseline before they completed the training and undertook the 5-week program to introduce them to their own personal mindfulness practice.

Measures

A range of validated measures were used to assess positive wellbeing, negative wellbeing, quality of sleep, engagement in learning, mindfulness, teacher-student-relationships and student misbehaviour.

Participating schools

Twelve Victorian Schools were invited to participate in the project.

- Canterbury Primary School
- Stonnington Primary School
- Karingal Primary School
- Sorrento Primary School
- Reservoir High School
- Mill Park Secondary College
- Victorian College of the Arts
- Lara Secondary College
- Dromana Secondary College
- Williamstown Secondary College
- Rosebud Secondary College
- Melbourne Girls College

Student participants

1,853 students participated across 12 Victorian Government schools. 300 students attended primary schools and 1,553 attended secondary schools, and 54.6% of students were female.

Teacher participants

Teachers from participating schools were also invited to take part in the study to explore the benefits of the program for teachers personally. One hundred and four teachers from four primary schools, and eight secondary schools participated.



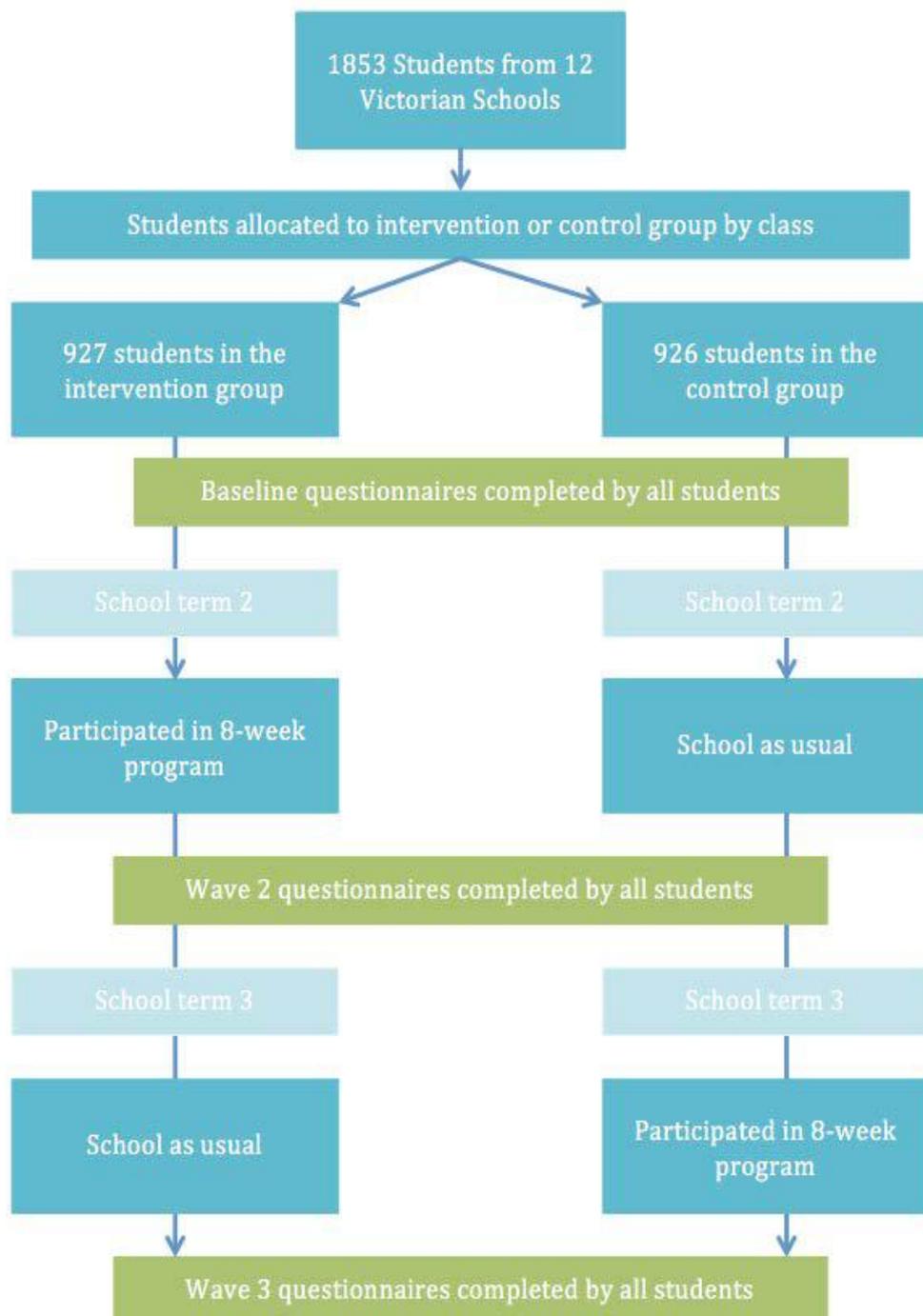
Measures and assessment

A range of validated measures were used to assess the outcome variables. These measures were selected based on psychometric properties, review of the literature and peer review / consensus.

- Satisfaction with Life Scale (Diener, Emmons, Larsen, & Griffin, 1985).
- Kessler 10 (Kessler et al., 2003).
- The Short Mood and Feeling Questionnaire – Child Version (Angold et al., 1995).
- Student Morale and Student Distress subscales from the Student Attitudes to School Survey (Hart et al., 2013)
- Student Attitudes to School Survey (Hart et al., 2003)

Two measures were developed, assessed and validated as part of this study.

- A tailored measure of mindfulness for use with school-aged children was developed and the psychometric properties assessed
- A measure of sleep quality for use with school-aged children was developed and the psychometric properties assessed
- Qualitative information was also gathered to obtain program-related feedback from students and teachers.



The students

1,853 Students

1,853 students from 12 Victorian Schools took part in the research .

Participation in the program significantly improved sleep

Students who participated in the Smiling Mind Education Program experienced significant improvements in sleep quality compared to the control group.

Significant increase in student safety at school and decrease in classroom disruptions

Participation in the Smiling Mind Education Program resulted in significant improvements in student reported safety at school as well as significant reductions in classroom disruptions. Students also reported reductions in the experience of bullying.

Students at-risk for emotional distress experienced the most benefit from the Smiling Mind program

Students with lower levels of wellbeing at the commencement of the program reported significantly better sleep quality, reduced psychological distress, enhanced positive wellbeing, enhanced ability to manage emotions, improvements in concentration, improvements in student safety, reductions in bullying and improved classroom behaviour.

Benefits for students

The effect of the Smiling Mind Program was firstly examined across all participating students by comparing the Wave 1 and 2 results for the treatment group with the results reported by the comparison group. Students who participated in the intervention reported significantly better sleep and ability to cope with student misbehavior in their classrooms than students in the control group who did not receive the intervention.

To further explore the effects of the program, students were split using the median score on the psychological distress measure (Kessler 10). Students who reported lower emotional wellbeing before participating in the intervention were compared to the participants in the control group. Students with lower levels of wellbeing at the commencement of the program reported significantly better sleep quality, reduced negative wellbeing, enhanced positive wellbeing, enhanced ability to manage emotions, improvements in concentration, and reductions in bullying and classroom disruptions after completing the 8-week intervention.

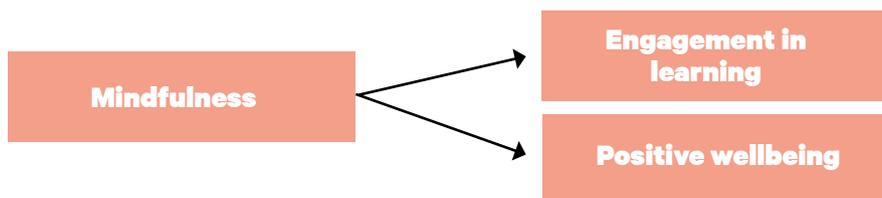
The participants in the comparison group actually reported deteriorations in negative wellbeing and difficulty concentrating.



How mindfulness benefits students

Using all three waves of student data from the research project a structural model was developed to test the relationships between mindfulness and the outcome variables. This allowed a comprehensive examination of the ways in which mindfulness impacted on student outcomes. The key findings are summarised below.

Mindfulness had a direct effect on engagement in learning and positive wellbeing.



Mindfulness had a stronger overall effect on positive wellbeing than negative wellbeing. This supports the benefits of mindfulness in the development of positive emotional wellbeing and resilience.

Mindfulness also improves sleep quality and reduces negative wellbeing.



Mindfulness assists students concentration and enables them to more effectively manage their emotions. This then has flow on effects in improving quality of sleep and reducing negative wellbeing.

Greater benefit was seen as the program continued, indicating that more consistent practice resulted in greater benefit for students.

The teachers

104 Teachers

104 Teachers from 12 Victorian Schools took part in the research .

Participation in the program significantly improved mental wellbeing

Teachers who participated in the 5-week Smiling Mind program using the App at least three times per week reported significant improvements in:

- Sleep
- Psychological distress
- Tension
- Concentration
- Mindfulness
- Ability to describe emotions
- Ability to accept emotions

Benefits for teachers

Teachers who participated in the 5-week mindfulness meditation program experienced significant improvements in the quality of their sleep, reductions in negative wellbeing, improvements in individual distress, reductions in tension, difficulty concentrating, improvements in mindfulness, describing emotions and accepting emotions.



Feedback from students

“I thought the Smiling Mind program was really beneficial for me because it calmed me down and helped me to relax and concentrate. I found when I was upset or angry and my emotions were getting the best of me, doing the meditation really did help”

“This research project could change my life. It sometimes works really well and helps me concentrate.”

“I thought the Smiling Mind program was really beneficial for me because it calmed me down and helped me to relax and concentrate. I found when I was upset or angry and my emotions were getting the best of me, doing the meditation really did help.”

Feedback from teachers

“My group this term are the Year 7 Performing Arts students. They have made the connection between the benefits of breathing and meditation to conquer nerves before a performance. Several of them told me it worked well for them before a recent dance spectacular. They have also reported using meditation before a Maths Test, NAPLAN and vaccinations. The Gratitude Journal is also working well. Quite a few of them have discovered things to be grateful for that they have never considered before.”

“I think it's having a positive impact on these students. On Monday I came into class and half of them were already lying on the floor ready to go! They were very disappointed when I said we would be doing the session tomorrow and not then.”



RoxburghHomesteadPS @RHPS6443 · 50m
The Bubble Journey @Smiling_Mind for Education Week @DETvic
#bePresent #mindfulness



Epsom Grade 1/2P @epsom_p04 · 15h
Internal Weather Check before we head off! Never leave school on a negative!
@Smiling_Mind @Mel_Vile @12_stonetuehey

2 NETWORKETS 2 FAVORITES

8:03 PM · 7 May 2015 · Details

Hide photo



What does this mean?

The Smiling Mind Education program is beneficial for students across a number of domains including sleep quality, mental health, wellbeing, engagement with learning, student safety and the classroom environment.

Integrating the brief, accessible, Smiling Mind program into the classroom at least three times per week is essential in order to see these benefits.



Next steps: systematically implementing the Smiling Mind education program into schools

Mindfulness meditation on the curriculum by 2020

The success of the research evaluating the Smiling Mind education program provides a strong evidence base to support our vision - to see mindfulness meditation on the Australian school curriculum by 2020. This research clearly demonstrates that our program is important in providing children with the skills needed to prevent mental illness, to improve sleep quality and enhance wellbeing. Our program also has the capacity to enhance learning outcomes and engagement with schools.

Our data supports strong alignment with achieving the goals of the Victorian 10-year Mental Health Plan and the Education State Plan.

The results of the research evaluating the Smiling Mind education program indicates that our program can improve mental health outcomes, mental wellbeing and sleep quality; thereby reducing the prevalence of mental illness in the future (Outcome 1; Victorian 10-year mental health plan). Not only did the Smiling Mind Education Program have a positive impact on sleep quality and positive emotional wellbeing and reductions in distress but the research also indicated that it had a significant impact on building key student capabilities that are associated with resilience including awareness of emotions, ability to manage emotions and ability to concentrate.

The Smiling Mind Education program is designed to support all ages and is heavily focused on supporting students early in life. The research results indicate that our program provides students, their teachers and their families, with the skills needed to develop good mental health using an accessible self-management approach (Outcome 5 and 10; Victorian 10-year mental health plan). The program also offers a whole-school approach, where students, teachers and parents can utilise and benefit from the program. This directly aligns with the Education State plan to build pride and confidence in Victorian schools.

One key outcome of the research is the impact on the school environment for students. The results of the research highlight the benefits of the Smiling Mind Education Program in improving student safety at school, reducing student report of bullying and reducing the impact of classroom disruptions on student learning. These results strongly support the utility of integrating the Smiling Mind Education Program into classrooms to ensure all students have the opportunity to learn for life (Victorian Education State Plan).

The Smiling Mind Education Program has the potential to change lives, build resilience and enhance learning. A systematic roll-out of our programs into schools across the state would enable further evaluation and development of the programs as well as the ability to examine long-term benefits on student and teacher mental health and academic outcomes.

Curriculum mapping, advanced lesson plans and resources

The Smiling Mind Education Program has been extensively mapped to the National Australian school curriculum. From this mapping process we identified the need to break down our age groups into two year brackets to be more appropriate for the developmental stages of students. New programs have been developed across four age levels: 7-9, 10-12, 13-15, 16-18 years.

Lesson plans have been developed that directly link our program to the school curriculum and provide teachers with easily accessible resources to integrate the program into their classrooms.

Smiling Mind has just launched a new web and app-platform that enables teachers and other educators with direct access to these new resources.

Whole of school approach

The results of our research indicate that the Smiling Mind programs have benefits for both teachers and students. We recommend our programs are adopted as a whole of school approach to ensure optimal mental health and wellbeing outcomes for students and teachers. Whilst our research did not explore the role of parents we have identified parents as another group who could benefit from our programs themselves and whose outcomes may also have a significant impact on student outcomes.

Increasing reach and widespread adoption

The success of the Smiling Mind Education Program in the Victorian schools that participated in the research demonstrates strong support for widespread adoption of our programs nationally. Smiling Mind is committed to providing our program resources to all teachers and schools nationally and will be working hard to ensure all teachers are aware of our programs.

Our technology-based programs have the potential to reach all students across the country.

In the next five years our aim is to see 10,000 Australian schools, 295,000 teachers and 3.75 million students accessing our programs and integrating mindfulness into their classrooms on a regular basis.

References

1. Kessler, R.C., Berglund, P., Demler, O., Jin, R., Merikangas, K.R. & Walters, E.E. (2005). Lifetime prevalence and age-of-onset distributions of DSM-IV disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry*, 62, 593- 602.
2. Milnes, A., Pegrum, K., Nebe, B., Topfer, A., Gaal, L., Zhang, J., & Hunter, N. (2011). *Young Australians: Their Health and Wellbeing 2011*. Canberra: Australian Institute of Health and Welfare.
3. Slade, T., Johnston, A., Oakley Browne, M. A., Andrews, G., & Whiteford, H. (2009). 2007 National Survey of Mental Health and Wellbeing: methods and key findings. *Australasian Psychiatry*, 43(7), 594-605.
4. Ernst & Young, Australia. (2015). *Putting our minds to it: Addressing the invisible risk of mental health*.
5. Lawrence D, Johnson S, Hafekost J, Boterhoven De Haan K, Sawyer M, Ainley J, Zubrick SR (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.
6. Horowitz, S. (2010). Health Benefits of Meditation: What the Newest Research Shows. *Alternative and Complementary Therapies*, 16 (4), 223 – 228.
7. Bogels, S., Hoogstad, B., van Dun, L., de Schutter, S., & Restifo, K. (2008). Mindfulness Training for Adolescents with Externalizing Disorders and their Parents. *Behavioural and Cognitive Psychotherapy*, 36, 193-209.
8. Fix, R., & Fix, S. T. (2012). The effects of mindfulness-based treatments for aggression: A critical review. *Aggression and Violent Behavior*, 18, 219-227.
9. Dellbridge, C., & Lubbe, C. (2009). An adolescent's subjective experiences of mindfulness. *Journal of Child and Adolescent Mental Health*, 21 (2), 167-180.
10. Chiesa, A. C., & Serretti, A. S. (2009). Mindfulness-based stress reduction for stress management in healthy people: A review and meta-analysis. *The Journal of Alternative and Complementary Medicine*, 15 (5), 593-600.
11. Thompson, M., & Gauntlett-Gilbert, J. (2008). Mindfulness with Children and Adolescents: Effective Clinical Application. *Clinical Child Psychology and Psychiatry*, 13 (3), 395-407.
12. Broderick, P. C., & Blewitt, P. (2012). *The life span: human development for helping professionals* (3th ed). New Jersey: Prentice Hall.
13. Segal Z.V., Williams J.M.G., Teasdale J.D. (2002). *Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse*. New York: Guildford Publications.
14. Segal Z.V., Williams J.M.G., Teasdale J.D. (2013). *Mindfulness-based cognitive therapy for depression*. New York: Guildford Publications.
15. Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55, 68-78.
16. Brown, K. W., & Ryan R. M. (2003). The Benefits of Being Present: Mindfulness and Its Role in Psychological Well-Being. *Journal of Personality and Social Psychology*, 84 (4), 822-848.
17. Appleton, J. J., Christenson, S. L., & Furlong, M. J. (2008). Student engagement with school: Critical conceptual and methodological issues of the construct. *Psychology in the Schools*, 45(5), 369-386.
18. Burke, C. A. (2009). Mindfulness-Based Approaches with Children and Adolescents: A Preliminary Review of Current Research in an Emergent Field. *Journal of Child & Family Studies*, 19, 133-144.
19. Carmody, J., & Baer, R. A. (2009). How long does a mindfulness-based stress reduction program need to be? A review of class contact hours and effect sizes for psychological distress. *Journal of Clinical Psychology*, 65 (6), 627-638.
20. Cavanagh, K., Strauss, C., Forde, L., & Jones, F. (2014). Can mindfulness and acceptance be learnt by self-help?: A systematic review and meta-analysis of mindfulness and acceptance-based self-help interventions. *Clinical Psychology Review*, 34, 118-129.
21. Brown, K. W., West, A. M., Loverich, T. M., & Biegel, G. M. (2011). Assessing Adolescent Mindfulness: Validation of an Adapted Mindful Attention Awareness Scale in Adolescent Normative and Psychiatric Populations. *Psychological Assessment*, 23 (4), 1023-1033.
22. U.S. Department of Health and Human Services. *Mental Health: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Mental Health Services, National Institutes of Health, National Institute of Mental Health, 1999.
23. Ames, C. S., Richardson, J., Payne, S., Smith, P., & Leigh, E. (2014). Innovations in Practice: Mindfulness-based cognitive therapy for depression in adolescents. *Child and Adolescent Mental Health*, 19 (1), 74-78.
24. Britton, W. B., Bootzin, R. R., Cousins, J. C., Hasler, B. P., Peck, T., & Shapiro, S. L. (2010). The Contribution of Mindfulness Practice to a Multicomponent Behavioral Sleep Intervention Following Substance Abuse Treatment in Adolescents: A Treatment-Development Study. *Substance Abuse*, 31, 86-97.
25. Bei, B., Byrne, M. L., Ivens, C., Waloszek, J., Woods, M. J., Dudgeon, P., Murray, G., Nicholas, C. L., Trinder, J., & Allen, N. B. (2013). Early Intervention in the Real World: Pilot study of a mindfulness-based multi-component, in-school group sleep intervention in adolescent girls. *Early Intervention in Psychiatry*, 7, 213-220.
26. Sibinga, E.M., Webb, L., Ghazarian, S.R. & Ellen, J.M. (2016). *Pediatrics*, 137 (1), 1-8.
27. Gawrysiak, M.J, Leong, S.H., Grasseti, S.N., Wai, M., Shorey, R.C. & Baime, .M.J. (2015). Dimensions of distress tolerance and the moderating effects on mindfulness-based stress reduction. *Anxiety, Stress and Coping*, September, 1-9.
28. Carmody, J., & Baer, R. A. (2009). How long does a mindfulness-based stress reduction program need to be? A review of class contact hours and effect sizes for psychological distress. *Journal of Clinical Psychology*, 65 (6), 627-638.

**Smiling Mind is modern
meditation. It gives a sense of
calm, clarity and contentment.**

Visit us online or download
the free app to get started.

