



THE UNIVERSITY OF
SYDNEY

Matilda Centre



Health4Life

Physical and mental wellbeing in adolescence and beyond

THE HEALTH4LIFE INITIATIVE

Evaluation of an eHealth school-based program targeting multiple chronic disease risk factors among young Australians

INFORMATION PACK

The Health4Life study is led by researchers from The Matilda Centre at the University of Sydney, Australia in partnership with the Paul Ramsay Foundation.



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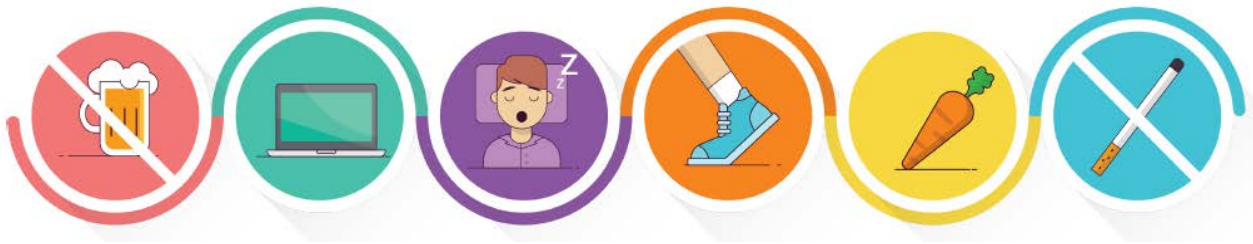


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What is the background and aim of the research?

Chronic diseases, such as cardiovascular diseases, mental disorders and cancers, are the leading cause of death in Australia. **Physical inactivity, unhealthy eating, risky alcohol use, smoking, sedentary recreational screen time and poor sleep** are the “Big 6” risk factors associated with chronic disease. Alarming, these behaviours are high among young Australians (aged 12-17yrs):



Not only can these behaviours lead to chronic disease and mortality in the long-term, in the short-term they are associated with increased risk for obesity, mental health problems and alcohol-related harms. To reduce these harms and interrupt the long-term trajectory towards chronic disease, comprehensive and timely prevention is critical.

To date, no evidence-based program has concurrently targeted the Big 6 risk factors among adolescents, despite evidence that these unhealthy habits commonly co-occur. This study bridges this gap by employing a Multiple Health Behaviour Change (MHBC) approach.

This study will evaluate the effectiveness of a new digital intervention, known as Health4Life, in preventing and reducing the Big 6 risk factors for chronic disease among secondary school students.

What is Health4Life?

Developed with input from students, teachers and health professionals across Australia, the *Health4Life* program aims to empower adolescents to improve their health and wellbeing and reduce the risk of chronic disease later in life. Based on the latest evidence and aligned with the Australian Health and Physical Education and NSW Personal Development, Health and Physical Education curriculums, *Health4Life* represents the first eHealth program to concurrently target the Big 6 lifestyle risk factors among adolescents. Health4Life is delivered online, with no teacher training required. Adopting a strengths-based approach, *Health4Life* encourages students to eat healthily, be physically active, limit sedentary recreational screen time, adopt healthy sleep habits, and teaches them how to resist peer pressure to drink alcohol and smoke cigarettes.

Health4Life consists of three components:

1. Health4Life School-based Program (Year 7, 2019)

Accessed online via the study website, no teacher training is required to implement the program. Teachers will be provided with implementation guidelines, links to the syllabus, and lesson summaries and class activities.

I. Part one: 6 x 20-minute web-based lessons

Delivered during HPE classes, students will spend the first 20 minutes individually completing a web-based cartoon lesson. Based on our team's successful *Climate Schools* prevention model (www.climateschools.com.au), the cartoons depict a storyline about a group of teenagers while at the same time imparting evidence-based information about the Big 6.

II. Part two: Activities

The second part of the lesson consists of up to 20 minutes of online and teacher-delivered activities (e.g., online worksheets, class discussions, role plays and homework assignments), designed to reinforce content and to encourage discussion.



2. Health4Life smartphone app (Year 7, 2019)

To encourage uptake of healthy behaviours, a smartphone app will be implemented alongside the web-based lessons. Students will be asked to use the app to track their health behaviours, set goals and monitor their progress against national guidelines and norms for up to 12-months.

3. Health4Life booster app (Year 8, 2020 & Year 9, 2021)

Additional “booster” content will be provided via the Health4Life smartphone app to students who remain at risk of chronic disease in 2020 and 2021. At-risk students will be those who demonstrate underperformance in 2 or more of the health behaviours (according to online follow-up assessments) when they are in Years 8 and 9. The booster provides additional tailored education about the Big 6 and uses cognitive behavioural therapy and motivation enhancement principles to teach coping strategies and encourage adoption of healthy habits. The booster is made available and used outside of the classroom setting so that at-risk students will not be identifiable.

How will we evaluate the Health4Life intervention?

We are conducting a cluster randomised controlled trial of the Health4Life intervention in 72 secondary schools across NSW, WA and QLD, beginning in mid-2019. Schools will be randomly assigned to one of two groups:

Intervention group:

Deliver Health4Life to all Yr 7 students in Term 3 or 4 of 2019 + a booster app for some students in 2020 & 2021.

OR

Control group:

Health education as usual with free access to the Health4Life program at the end of the study.

All students will complete five online questionnaires (30-40 mins) in class over the course of the study (see table below). Teachers will be required to supervise survey completion. Absent students will be contacted by the research team (using details provided upon registration) inviting them to complete the survey at home. The surveys will assess the students' health behaviours, knowledge about the Big 6, self-efficacy, and mental health symptoms. Participants will be assigned a unique code that will be used to link survey data over time while maintaining confidentiality.

At the end of the three-year study period, survey responses will be analysed to compare the intervention group and the control group. Although no benefits can be guaranteed, we hope to find that students who receive the Health4Life intervention will show improvements in the Big 6 health behaviours.

Study Timeline:

	Baseline Survey	Health4Life school-based program + app	Post-Test survey	12-mth Survey	Booster app (at-risk only)	24-mth survey	Booster app (at-risk only)	36mth survey
	Term 3 or 4 2019	Term 3 or 4 2019	Term 3 or 4 2019	Term 3 2020	Term 3 2020	Term 3 2021	Term 3 2021	Term 3 2022
	Year 7	Year 7	Year 7	Year 8	Year 8	Year 9	Year 9	Year 10
Health4Life Group	✓	✓	✓	✓	✓	✓	✓	✓
Control Group	✓	✗	✓	✓	✗	✓	✗	✓

How will schools be randomised into groups?

Randomisation will be conducted by an independent biostatistician to ensure the research remains unbiased. It is therefore not possible to choose the group to which your school is assigned.

What does participation involve for you and your students?

1. Intervention Group

If your school is randomised into the Health4Life **intervention group**, you will be asked to implement the Health4Life program and smartphone app with your students. After randomisation, schools in the intervention group will be provided with a detailed information pack.

2. Control Group

If your school is randomised into the **control group** you will implement your health education classes as usual, as well as the online surveys described above. Your school will be given free access to Health4Life at the conclusion of the study.

Have we done this before?

Our research team has extensive experience in conducting school-based trials and working with young people in our research studies (169 schools, >14,600 students). Here are some comments from teachers involved in previous trials:

'We have enjoyed the lessons and the kids have loved the cartoons!'

'It's something new and different and the boys respond to that'.

'The structure of the program is well set out and it appears to be very interactive which is an effective teaching method'

'The students need to make informed choices regarding behaviour and the package presents this in an informative but non-judgmental way'.

How do parents and students provide consent?

Schools will be given information and withdrawal forms to distribute to parents/guardians of their Year 7 students. Schools may choose to distribute hard-copy forms, sent home with the student, or via an email to the parent/guardian. Those who do not wish for their child to participate will be required to sign and return the withdrawal form to the school.

Students will also be required to consent to the research themselves prior to taking part. Students that do not give consent, or have been withdrawn by their parent/guardian, will not complete the surveys and will need to be provided with alternative activities. However, they will still complete the Health4Life school-based program as it replaces usual Year 7 HPE education and addresses learning outcomes from the WA HPE syllabus. Students without consent will still be able to access the app – their health behaviour tracking data will be excluded from the research.

Will you get a summary of the results?

A summary of the results of this study will be provided to your school on completion of the study. The data in this summary will be collapsed so that it is not possible for any individual or school to be identified.

Students and Teacher reimbursements

After each survey, students will go into the draw to receive a \$100 gift voucher (2 per school per survey). All teachers (intervention and control) will receive a one-off reimbursement of a \$100 gift voucher for the extra administration during the first year.

Thank you for your interest in the Health4Life study. For any questions, feel free to contact the researchers at Jesse.whife@curtin.edu.au or Courtney.stewart@curtin.edu.au