

Evaluation of the LifeLab Sydney 2.0 adolescent health education program with Year 8 science students from Sydney government schools: a quasi-experimental study

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Background:

LifeLab Sydney endeavours to improve adolescent health by providing a one-day excursion to the University of Sydney and six in-class lessons taught by science teachers. The aim of this study was to deliver a health education initiative to local schools and assess (1) the acceptability and feasibility of the LifeLab program and (2) the effect on student's health literacy, diet quality and attitudes to health behaviours.

Methods:

A quasi-experimental study was conducted across six schools with 1057 students from 42 science classes, with 21 control and 21 intervention classes, between October 2023 and December 2024. A mixed-methods design used student pre- and post-surveys (n=475), excursion process evaluation surveys (n=354), and teacher interviews (n=11).

Difference-in-differences regression modelling analysed changes in the students' standardised theoretical health literacy scores (THLS) and prudent diet scores (PDS). Prevalence rate ratios assessed changes in response rates to individual THLS questions and understanding of health behaviour (UoHB) questions. Post-excursion surveys were analysed using basic descriptive analysis. Teacher interviews were analysed using reflexive thematic analysis.

Results:

The change in standardised THLS scores were significantly higher in the intervention group compared to the control group, after the intervention (0.19 vs. -0.31, $p < 0.001$). No significant effects of students' UoHB or PDS were observed. Most students (90.6%, n=353) rated their excursion experience as excellent or good, and 92.4% (n=342) would recommend LifeLab Sydney to others.

The participating schools valued the opportunity to engage in authentic, real-world learning, with the excursion identified as the central element increasing motivation and excitement. Refinement of teaching resources were recommended.

Conclusion:

LifeLab Sydney is a highly successful and feasible community focussed adolescent health education initiative. Findings indicate the program was acceptable to teachers and students and has a positive impact on the health literacy of students. Future research is needed to explore program adaptations and sustainability.

Disclosure of Interest Statement:

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