

Effects of physical activity breaks in secondary school mathematics lessons

ACTRN12621000838819

Status RECRUITING
Sponsor University of Newcastle
Enrollment 265 participants

Plain Language Summary

Most teenagers do not get enough physical activity, which is linked to obesity, mental health difficulties, and poor academic performance. But fitting exercise into the school day — especially during academic subjects — is a challenge. This study is testing whether short breaks of cognitively demanding physical activity (exercise that also requires thinking, like coordination challenges or memory games) built into Year 10 mathematics lessons can improve students' thinking skills and academic performance.

This approach goes beyond simply getting kids moving — it focuses on the quality and mental engagement of the activity, not just the quantity. Classes are randomly assigned to either have these active breaks built in or to continue with standard lessons, and outcomes like focus, memory, and maths performance are compared.

Students are eligible if they are currently in Year 10 at a participating New South Wales high school, aged 14–17, and do not have any medical condition that prevents physical activity. Parent or guardian consent is required.

Key Eligibility Criteria

Inclusion (1)

- Students participating in the study must be in year 10 at an NSW high school.

Exclusion (2)

- Any acute or chronic condition that would limit the ability of the patient to participate in the study
- Parents have refused to give consent

Locations (1 total)

NSW, Australia