

Motivating Active Learning in Physical education (MALP)

Submission date 01/12/2011	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 20/02/2012	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 15/08/2014	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Many Australian youth are not physically active enough to obtain the associated health benefits. The Australian Government-commissioned Crawford Report (2009) emphasised the central role of school physical education (PE) programs in increasing the physical activity levels of youth. Indeed, PE classes encompass virtually all members of an age cohort. Therefore, promoting physical activity through PE has far-reaching implications for millions of Australian youth. Unfortunately, students physical activity and motivation levels in PE classes are often very low. In this study, we will investigate the effect of three motivational teaching strategies on physical activity during Year 8 PE lessons. We will also investigate the impact of these strategies on students feelings and motivation during lessons.

Who can participate?

Male and female teachers and students from five schools in New South Wales, Australia will participate in the study. Students can participate in the study if they are enrolled in a Year PE 8 class taught by a teacher who has volunteered.

What does the study involve?

Sixteen teachers, and 308 students from one of their Year 8 classes, will be randomly allocated as a class to one of four groups, including three experimental groups and a control group. All students will participate in three PE lessons, and data collection will take place only during the first 20 minutes of each lesson. The purpose of the first lesson is to familiarise students and teachers with the study procedures and data collection equipment. In this lesson, students will wear a small physical activity monitor attached to an elastic strap around their waist. Teachers will wear a wireless microphone to record their verbal interactions with students. In the second lesson, students will again wear the physical activity monitor and teachers will have their voices recorded with the wireless microphone. Immediately following the initial 20 minutes of the second lesson, students will complete a questionnaire designed to measure their feelings of confidence, independence and close relationships during the lesson. They will also answer questions about their motivation and their perceptions of their teachers behavior during the lesson. Before the third lesson, the researchers will provide teachers in the three experimental groups with instructions regarding one motivational teaching strategy. The researchers will ask one group of teachers to make statements to students that explain the rationale behind the

activities in class and make it clear how the activities are relevant to students lives. The researchers will ask the second group of teachers to provide their students with opportunities to make choices from options provided by the teacher. The researchers will ask the third group of teachers to provide the students with complete free choice; meaning that equipment will be provided, but the teacher will not provide any instruction. The researchers will ask teachers allocated to the control group to continue with their usual practice. Data collection procedures for the third lesson will be identical to the second lesson. Comparing data collected during the second and third lessons will allow the researchers to understand the effect of these motivational teaching strategies on students physical activity levels, feelings and motivation, as well as perceptions of their teachers behavior.

What are the possible benefits and risks of participating?

This research will provide us with a greater understanding of the effect of motivational teaching strategies on students physical activity during PE lessons. Students participating in this research will likely experience enhanced motivation and greater physical activity during lessons. Students are unlikely to experience any negative side effects from their participation in this study. Long-term outcomes of future research that builds on the current project could include increased physical activity over a long period of time, leading to improved health.

Where is the study run from?

University of Western Sydney (Australia).

When is the study starting and how long is it expected to run for?

This study will run from October to December 2011.

Who is funding the study?

University of Western Sydney (Australia).

Who is the main contact?

Dr Chris Lonsdale

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Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

Protocol serial number

UWS 20321.80786

Study information

Scientific Title

Increasing Active Learning time in Physical education: an application of self-determination theory

Acronym

MALP

Study objectives

Compared with usual practice, Year 8 physical education (PE) lessons in which teachers provide students with choices and explain the relevance of activities will:

1. Increase the percentage of time students spend in moderate-to-vigorous physical activity during physical education (PE) lessons
2. Decrease the percentage of PE lesson time that students spend in sedentary behaviour
3. Increase students autonomous motivation during lessons
4. Decrease students controlled motivation during lessons
5. Increase students perceptions of autonomy, competence, and relatedness during lessons
6. Increase students and independent raters perceptions of teachers autonomy supportive behaviour

The influence of the choice and relevance on students physical activity will be mediated by increases in students autonomy, competence, relatedness and autonomous motivation.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Human Research Ethics Committee, University of Western Sydney, 12/07/2011, ref: H9171

Study design

Cluster randomised controlled trial

Primary study design

Interventional

Study type(s)

Quality of life

Health condition(s) or problem(s) studied

Physical activity

Interventions

All teachers will meet individually with the lead investigator for 20 minutes. This meeting will take place one to two hours before the follow-up lesson. During this meeting, the investigator will ask the teacher to show him the lesson plan from the baseline class or to describe the

baseline lesson activities, if a lesson plan is not available. The investigator will then ask the teacher to devise a lesson for the follow-up class that is similar in structure to the baseline class. Teachers in the control arm will receive no further information from the investigator.

Teachers in experimental arms will receive instruction regarding a motivational teaching strategy to use in the follow-up lesson. In one study arm, teachers will be asked to make statements that explain the rationale behind the activities in class and to make it clear how the activities are relevant to the students. In a second study arm, teachers will be asked to provide the students with opportunities to make choices from options provided by the teacher. In the third study arm, teachers will be asked to provide the students with complete free choice; meaning that equipment will be provided, but no instruction by the teacher will take place. The structure of the lesson plan for the follow-up lesson in this arm of the trial will likely not be similar to the structure of the baseline lesson plan.

During the intervention meeting, the investigator will explain:

1. The name of the motivational teaching strategy
2. The definition
3. The rationale behind its use
4. Four examples of how the strategy could be implemented in a physical education lesson

Teachers will be encouraged to outline and record their implementation plans for the follow-up lesson. The investigator will provide suggestions and feedback on these plans.

Intervention Type

Other

Phase

Not Applicable

Primary outcome(s)

1. Percent of lesson time spent in moderate-to-vigorous-physical activity: measured at baseline and follow-up using an Actigraph GT3X accelerometer-based monitor
2. Autonomous and controlled motivation: measured at baseline and follow-up using the Situational Motivation Scale

Key secondary outcome(s)

1. Percent of lesson time spent in sedentary behavior: measured at baseline and follow-up using an Actigraph GT3X accelerometer-based monitor
2. Autonomy, competence, and relatedness: measured at baseline and follow-up using Basic Psychological Needs Satisfaction Scales
3. Autonomy support: measured at baseline and follow-up using the Teacher as Social Context Questionnaire

Completion date

09/12/2011

Eligibility

Key inclusion criteria

1. Students enrolled in Year 8 Personal Development, Health and Physical Education classes in private secondary schools in metropolitan Sydney, New South Wales, Australia

2. Signed informed consent provided by parent or guardian
3. Signed assent provided by student

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Sex

All

Key exclusion criteria

Students unable to participate in the practical component of Personal Development, Health, and Physical Education classes

Date of first enrolment

10/10/2011

Date of final enrolment

09/12/2011

Locations**Countries of recruitment**

Australia

Study participating centre

School of Biomedical and Health Sciences

Penrith, NSW

Australia

2751

Sponsor information**Organisation**

University of Western Sydney (Australia)

ROR

<https://ror.org/03t52dk35>

Funder(s)

Funder type

University/education

Funder Name

University of Western Sydney (Australia)

Alternative Name(s)

UWS

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

Australia

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/11/2013		Yes	No
Protocol article	protocol	01/10/2012		Yes	No