# An intervention to train teachers to promote secondary school students' motivation toward, and participation in physical activities outside of school

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
19/07/2018		[X] Protocol		
Registration date 24/07/2018	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	[] Individual participant data		
23/08/2023	Other			

## Plain English summary of protocol

Background and study aims

Physical activity in the early adolescent years is a priority for health promotion, and promoting school students' participation of physical activity in school and outside of school is a core aim of the physical education curriculum. Nevertheless, there is relatively little research outlining how physical education can be utilized to promote participation in regular leisure-time physical activity for school students outside of school. The aim of the current study is to use and evaluate theory-based intervention delivered by physical education teachers to promote secondary school students' motivation toward, and actual participation in, out-of-school physical activity.

#### Who can participate?

Study participants will be physical education teachers and their students.

Teachers must be full-time, qualified PE teachers, teaching regular PE lessons at lower secondary schools.

Students must be aged 13-15 years old, attend secondary school and be able to participate in regular physical education classes.

#### What does the study involve?

Participating physical education teachers and their students will be allocated to one of two groups. Physical education teachers assigned to the intervention group receive a two-week training program comprising basic information on how to promote physical activity outside of school, along with training on strategies to promote students' own motivations toward physical activity. At the same time, teachers assigned to the control group will receive basic information on the application of a monitoring system to assess physical functional capacity in children with special needs. After the first round of data collection the control group teachers will also receive the same training program as the intervention group to ensure that all participating teachers and students benefit from the study.

What are the possible benefits and risks of participating?

The possible benefit of participating for teachers is further development of their teaching skills. The possible benefit of participating for students is that it may increase their own motivation towards and participation in physical activity outside of school. There are no known risks to teachers or students taking part in this study.

Where is the study run from? University of Jyvaskyla, Finland and participating secondary schools in Finland.

When is the study starting and how long is it expected to run for? May 2017 to December 2019

Who is funding the study? Finnish Ministry of Education (Finland)

Who is the main contact? Prof. Martin S. Hagger martin.s.hagger@jyu.fi

# Contact information

# Type(s)

Scientific

#### Contact name

Prof Martin Hagger

#### **ORCID ID**

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

# Secondary identifying numbers

Grant no. OKM/34/626/2015

# Study information

#### Scientific Title

Physical Education Teacher Training to Promote Autonomous Motivation Toward Leisure-Time Physical Activity in Secondary School Students (PETALS) – A Randomized Controlled Trial

#### Acronym

**PETALS** 

## **Study objectives**

Secondary school students receiving a theory-based intervention to promote autonomous motivation toward physical activity will exhibit greater participation in physical activities in their leisure time outside of school relative to students that do not receive the intervention.

# Ethics approval required

Old ethics approval format

## Ethics approval(s)

Research Ethics Committee of the University of Jyvaskyla, 22/01/2018 (no reference number available)

# Study design

The PETALS trial will adopt a cluster-randomized wait list control design with a 6-month followup period and participants randomized to intervention groups by school.

Interventional cluster-randomised wait list control design

# Primary study design

Interventional

# Secondary study design

Cluster randomised trial

# Study setting(s)

School

# Study type(s)

Prevention

# Participant information sheet

Not available in web format, please use contact details to request a participant information sheet

# Health condition(s) or problem(s) studied

Inactivity

#### Interventions

Participants will be randomised into either the intervention group or the control group by school by a researcher independent of the core research time and blind to the study purpose using a random number generator.

Schools in the intervention group will receive a autonomy-support teacher training program, which will train PE teachers to use autonomy-supportive teaching techniques in their regular

lessons. The autonomy-supportive training involves training teachers to take students' perspective, use non-controlling and informational language, provide a rationale for in-class and out-of-school physical activities, display patience, provide choices, and accept negative emotions and feelings. The program comprises of 6 2 hour interactive sessions administered over a 2 week period. The training will be delivered in a classroom setting by 2 teacher trainers with extensive experience in PE teacher education, who have received training on the delivery of the specific program content. Physical education teachers will apply the intervention program to students in physical education classes for 4 weeks.

Schools in the control group receive a training program consisting of a 4 hour education seminar on how to apply a monitoring system to assess physical functional capacity in children with special needs delivered by 2 teacher trainers with experience in PE teacher education. After the first round of data collection the control group teachers will also receive the same autonomy support training program to ensure that all participating teachers and students benefit from the study.

## **Intervention Type**

Behavioural

# Primary outcome measure

School students' participation in out-of-school activity, assessed using the International Physical Activity Questionnaire short form (expressed as the total PA score) immediately after the trial and at the 3 follow-up time points (1 month, 3 months and 6 months post-trial). Group differences in post-trial physical activity scores will be controlled for baseline measures.

## Secondary outcome measures

The following will be assessed immediately after the trial and at the 3 follow-up time points (1 month, 3 months and 6 months post-trial):

- 1. Post-trial physical activity behaviour, assessed using accelerometers in a sub-group of the main sample.
- 2. Students' post-trial perceived autonomy support, autonomous motivation towards PA in school and PA out-of-school, attitudes, subjective norms, perceived behavioural control, and intention towards physical activity assessed using previously-validated self-reported questionnaires

Group differences in post-trial secondary variables will be controlled for baseline measures.

Overall study start date

01/05/2017

Completion date

31/12/2019

# Eligibility

# Key inclusion criteria

1. Informed consent

#### Teachers:

2. Physical education teachers

#### Students:

- 3. Eligible to participate in regular school physical education classes
- 4. No ongoing illness or injury preventing participation in study

# Participant type(s)

Healthy volunteer

#### Age group

Mixed

#### Sex

Both

# Target number of participants

Target number of physical education teachers: 24 Target number of physical education students: 476

#### Total final enrolment

502

## Key exclusion criteria

N/A

#### Date of first enrolment

15/08/2018

#### Date of final enrolment

31/08/2018

# Locations

#### Countries of recruitment

Finland

# Study participating centre

# Faculty of Sport and Health Sciences, University of Jyvaskyla, Jyvaskyla, Finland

Faculty of Sport and Health Sciences PO Box 35 University of Jyvaskyla Jyvaskyla Finland 40014

# Sponsor information

## Organisation

Finnish Ministry of Education and Culture

## Sponsor details

Ministry of Education and Culture PO Box 29 Helsinki Finland FI - 00023 GOVERNMENT +358 (0)295 16001 (Switchboard) kirjaamo@minedu.fi

# Sponsor type

Government

#### Website

http://minedu.fi/en/ministry

#### **ROR**

https://ror.org/02w52zt87

# Funder(s)

# Funder type

Government

#### **Funder Name**

Opetus- ja Kulttuuriministeriö

# Alternative Name(s)

Ministry of Education and Culture, Finland

# **Funding Body Type**

Government organisation

#### **Funding Body Subtype**

National government

#### Location

Finland

# **Results and Publications**

Publication and dissemination plan

Results will be reported in manuscripts submitted for publication in peer-reviewed open access journals. In addition, research will be presented to the wider research community at scientific and professional congresses. Results will also be communicated through media for the public. Moreover, results will be disseminated to practitioners by making the guidelines, manual, and training program available to teacher trainers, and the Finnish Ministry of Education, so that they can be implemented as part of physical education teacher development training. Finally, the training program will be made open access to the scientific and practitioner community.

# Intention to publish date

31/12/2020

# Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

# IPD sharing plan summary

Data sharing statement to be made available at a later date

# **Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	22/09/2020	24/09/2020	Yes	No
Protocol article		06/02/2019	23/08/2023	Yes	No