

The role of physical activity in improving the well-being of children and youth

Submission date 24/04/2015	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 11/05/2015	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 25/02/2021	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

Taking part in physical activity, such as sports, is known to benefit children's mental health. Physical activity can help build social skills, self-esteem and positive well-being, and is linked to higher achievement at school. Unfortunately, many children and young people do not exercise enough. Physical inactivity is a growing problem in children, and it can affect their well-being, physical and mental health. Various school-based methods to increase physical activity among children have been effective in increasing activity and/or preventing inactivity. However, which aspects of these methods work best is not known, and there is no standard guideline for promoting physical activity in schools. There is also a need to see how best to promote and improve the mental health and well-being of children and adolescents. The aim of this study is to develop a school-based physical activity programme which also works to improve mental health and well-being among schoolchildren aged 9-12.

Who can participate?

Children aged 9-12 (4-6th grade) attending participating schools.

What does the study involve?

Participating schools are randomly allocated into one of two groups. Those in group 1 (intervention group) have physical activity programme training for key staff to deliver to participating children. Those in group 2 (control group) have no physical activity programme training for key staff, but are given the opportunity to have this training at the end of the study. All participating children complete online questionnaires at the beginning and end of the school year.

What are the possible benefits and risks of participating?

Children and young people taking part in the study may benefit from participating in a number of ways. For example, physical activity has been shown to improve the mental health of children. There is a minor risk of sustaining injuries when taking part in the intervention components, such as sports.

Where is the study run from?

University of Southern Denmark (Denmark)

When is the study starting and how long is it expected to run for?
February 2014 to March 2017

Who is funding the study?
TrygFonden (Denmark)

Who is the main contact?
Associate Prof T Skovgaard
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Contact information

Type(s)

Public

Contact name

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Improving the well-being of children and youth: a multicomponent school-based physical activity intervention

Study objectives

A multicomponent school-based physical activity intervention will improve psychosocial well-being among school-aged children and youth (4th to 6th grade, 9-12 years).

Ethics approval required

Old ethics approval format

Ethics approval(s)

Conforming to current legislation, the project was submitted to The Regional Scientific Ethical Committees for Southern Denmark. The committee decided that the project was exempt from the obligation to notify. Notification of this decision was forwarded via email 02/04/2014.

Study design

A four phased intervention:

1. Design phase consolidating the rationale for the intervention, the likely processes of change and further provision of evidence for proposed interventions (February 2014-July 2014).
2. Pilot phase including assessments of how the proposed intervention can be adapted to the school-setting. This entails systematic appraisals of sustainable ways to deliver the intervention as prescribed, and examining the key uncertainties that have been identified during the design phase. In the pilot intervention components will be tested to ensure that they are feasible to implement and deemed effective in relation to short-term and/or final outcomes. 4 schools take part in the pilot test (August 2014-April 2015).
3. Cluster randomized controlled trial in order to rigorously test the effectiveness of the full-scale, piloted intervention. 24 schools located in seven of the 98 Danish municipalities have been recruited as intervention or control units. The intervention period will cover a whole school year (August 2015-June 2016).
4. Program evaluation phase assessing the overall quality of the intervention and aiding decision-making about intervention improvement and potential for scaling-up. The program evaluation will combine qualitative and quantitative methods, and be designed to gather valid information on key processes and outcomes.

Primary study design

Interventional

Secondary study design

Cluster randomised trial

Study setting(s)

School

Study type(s)

Quality of life

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

Well-being and self-concept

Interventions

Participating schools will be randomly allocated to either the intervention group or the control group. The control group will be given the opportunity to implement the intervention one year later. Baseline measurements are conducted in the beginning of a school year, followed by final assessment in the end of the school year for all participating schools. The intervention involves:

1. Establishment of a coordination group: at each participating school a group consisting of key stakeholders (teachers, principals and student representatives) is assembled in order to establish a foundation for the intervention.

2. Competence development program (CDP) for educators: CDP will train enrolled educators to support student motivation and participation in school-based PA. The CDP will also provide attendees with up-to-date knowledge on topics closely related to PA and psychosocial well-being (support proficiencies and motivate colleagues to take part).
3. Activities and materials for PE, recess and other parts of the curricular: initiate activities during the school day. These activities are aimed at all children and conducted during PE, recess and other parts of the curriculum and school day.
4. Targeted program for children with special needs/challenges: informed by the model of school change developed by the World Health Organisation and used in a number of mental health intervention projects. It uses a whole-school approach while being aware of students with special needs.

Intervention Type

Behavioural

Primary outcome measure

Physical self-perception measured using the Children's Physical Self-Perception Profile (C-PSPP) and the Self-Perception Profile for children (SPPC) . Measurements are carried out 08/2015 and 06/2015 by online survey.

Secondary outcome measures

Measured in 08/2015 and 06/2016 by online survey:

1. General well-being (Kidscreen-27)
2. Physical Activity Self-Efficacy Scale (PASES)
3. Physical Activity Enjoyment Scale (S-PACES)

Overall study start date

01/02/2014

Completion date

01/03/2017

Eligibility**Key inclusion criteria**

Children aged 9-12 (4-6th grade) attending public school

Participant type(s)

Healthy volunteer

Age group

Child

Lower age limit

9 Years

Upper age limit

12 Years

Sex

Both

Target number of participants

24 schools with approximately 1600-1800 participants

Key exclusion criteria

Does not meet inclusion criteria

Date of first enrolment

15/12/2014

Date of final enrolment

30/03/2015

Locations

Countries of recruitment

Denmark

Study participating centre**University of Southern Denmark**

Exercise Epidemiology (ExE)/Research in Childhood Health (RICH)/Active Living (AL)

Department of Sports Science and Clinical Biomechanics (ISSCB)

Odense M

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Sponsor information

Organisation

University of Southern Denmark

Sponsor details

Department of Sports Science and Clinical Biomechanics (ISSCB)

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Sponsor type

University/education

Website

http://www.sdu.dk/en/Om_SDU/Institutter_centre/lob_Idraet_og_biomekanik

ROR

<https://ror.org/03yrrjy16>

Funder(s)

Funder type

Charity

Funder Name

TrygFonden (Denmark)

Results and Publications

Publication and dissemination plan

As a scientific research program, results will be published in peerreviewed journals. However, as a program bridging research and practice in real life contexts, other channels of communication are highly relevant. These may include local, national and international journals, newsletters and websites. Scientific and professional organizations in areas related to wellbeing, health promotion, physical activity and/or the school sector will be contacted and joint workshops will be encouraged to include multidisciplinary approaches. The first preliminary dissemination activities include a presentation at a scientific conference (Sport & Society, 2015) in Toronto, Canada July 2015 followed by the first article submission in the same month. In the last part of 2015 2-3 articles are planned to be published in a national popular science magazine.

Intention to publish date

01/07/2015

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?
Protocol article	protocol	28/10/2016		Yes	No
Results article	results	16/11/2017	25/02/2021	Yes	No