Drøn på Skolegården (The Activating Schoolyard Study)

Submission date	Recruitment status No longer recruiting	Prospectively registered		
17/05/2018		[X] Protocol		
Registration date	Overall study status	Statistical analysis plan		
18/05/2018	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
19/06/2023	Other			

Plain English summary of protocol

Background and study aims

The aim of the Activating Schoolyards Study is to develop, implement, document and assess a comprehensive schoolyard intervention to promote physical activity during school recess for primary school children (grade 4-8). The intervention involves making organizational and structural changes in the schoolyard environment.

Who can participate? Students grade 4-8 from 7 schools in Denmark

What does the study involve?

The schoolyard interventions are developed involving students in the process. It was up to the schools to decide how the students participate in the process. Therefore, the intervention components vary widely reflecting the local challenges and needs. At some of the schools the interventions take place in the existing schoolyard whereas other schools expand their outdoor area by including adjacent spaces (e.g., woodland area and parking ground). However, some features are present at several schools such as climbing walls, balance bars, theatre/dancing stages, skating areas, trampolines, hills, ball game facilities and outdoor eating areas. There are also similarities in the organisational changes, for example a policy obliging the children to stay outdoors for parts of their recess is implemented at several schools. The interventions take place during 2015 and the total budget for each of the schools ranged from 120,000 to 900,000 USD. Children representing the target group (grade 4-8) for the schoolyard intervention at each of the seven schools participate at two timepoints, April to June 2014 and in the same months in 2016 (after the intervention). The intervention is during the whole year of 2015. In April to June 2018 a late follow-up is conducted in grade 4 and 6. The effect of the interventions is assessed by students wearing an accelerometer and GPS to determine where they are in the schoolyard and how active they are.

What are the possible benefits and risks of participating?

The class with the most participants receives a prize (sports equipment). There are no risks of participating.

Where is the study run from? University of Southern Denmark

When is the study starting and how long is it expected to run for? January 2013 to April 2019

Who is funding the study?

- 1. Danish Cancer Society
- 2. Realdania
- 3. Lokale og anlægsfonden

Who is the main contact? Charlotte Skau Pawlowski cspawlowski@health.sdu.dk

Study website

www.droen.dk

Contact information

Type(s)

Scientific

Contact name

Mrs Charlotte Skau Pawlowski

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

2013-41-1900

Study information

Scientific Title

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Study objectives

The trialists hypothesize that a high degree of user involvement, tailored inventive schoolyard interventions and organisational recess changes would lead to increased recess PA among students.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Data management and security with regards to this study was approved by the Danish Data Protection Agency (2013-41-1900). According to the Danish National Committee on Health Research Ethics, formal ethical approval was not required as the project was not a biomedical research project.

Study design

A quasi-experimental schoolyard intervention study using a mixed method approach including: 1) an exploratory study aimed at providing input for the developing process; 2) an evaluation of the effect of the interventions using a combination of accelerometer and GPS at baseline and follow-up to determine where and how active the students are in the schoolyard, before and after the intervention; 3) a post-intervention end-user evaluation aimed at exploring who uses the schoolyards and how the schoolyards are used.

Primary study design

Interventional

Secondary study design

Non randomised study

Study setting(s)

School

Study type(s)

Prevention

Participant information sheet

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

Health condition(s) or problem(s) studied

Physical activity

Interventions

The schoolyard interventions were developed using a participatory bottom-up approach involving students in the development process. It was up to the schools to decide how the students participated in the process. Therefore, the design and dimension of the intervention components varied widely reflecting the local challenges and needs. At some of the schools the interventions took place in the existing schoolyard whereas other schools expanded their outdoor area by including adjacent spaces (e.g., woodland area and parking ground). However,

some features were presented at several schools such as climbing walls, balance bars, theatre /dancing stages, skating areas, trampolines, hills, ball game facilities and outdoor eating areas. There were also similarities in the organisational changes, e.g., a policy obliging the children to stay outdoors parts of their recess was implemented at several schools. The interventions took place during 2015 and the total budget for each of the schools ranged from 120,000 to 900,000 USD.

Children representing the target group (grade 4-8) for the schoolyard intervention at each of the seven schools participated at two timepoints, April to June 2014 (baseline) and in the same months in 2016 (post-intervention). The intervention was during the whole year of 2015. In April to June 2018 a late follow-up was conducted in grade 4 and 6. Children were not followed over time avoiding the age-dependent decline in physical activity.

Intervention Type

Behavioural

Primary outcome measure

Physical activity level, measured by wearing accelerometer and GPS for one week at two timepoints, between April to June 2014 (baseline) and in the same months in 2016 (post-intervention)

Secondary outcome measures

Where the students are e.g., indoors/outdoors, measured by wearing accelerometer and GPS for one week at two timepoints, between April to June 2014 (baseline) and in the same months in 2016 (post-intervention)

Overall study start date

01/01/2013

Completion date

01/04/2019

Eligibility

Key inclusion criteria

Students grade 4-8 from 7 schools in Denmark

Participant type(s)

Other

Age group

Child

Sex

Both

Target number of participants

1200

Key exclusion criteria

- 1. Unhealthy students
- 2. Students from grade 0-3

Date of first enrolment 01/04/2013

Date of final enrolment 01/07/2018

Locations

Countries of recruitmentDenmark

Study participating centre University of Southern Denmark Campusvej 55 Odense M Denmark 5230

Sponsor information

Organisation

Danish Cancer Society

Sponsor details

Strandboulevarden 49 Copenhagen Ø Denmark 2100 +45 (0)35 25 75 00 info@cancer.dk

Sponsor type

Charity

Website

http://www.cancer.dk

ROR

https://ror.org/03ytt7k16

Organisation

Realdania

Sponsor details

Jarmers Plads 2 Copenhagen V Denmark 1551 +45 (0)70 11 66 66 realdania@realdania.dk

Sponsor type

Charity

Website

http://www.realdania.org

Organisation

The Danish foundation for Culture and Sport Facilities

Sponsor details

Kanonbådsvej 4 A Copenhagen K Denmark 1437 +45 (0)3283 0330 fonden@loa-fonden.dk

Sponsor type

Charity

Website

https://www.loa-fonden.dk

Funder(s)

Funder type

Charity

Funder Name

Kræftens Bekæmpelse

Alternative Name(s)

Danish Cancer Society, The Danish Cancer Society, DCS

Funding Body Type

Government organisation

Funding Body Subtype

Associations and societies (private and public)

Location

Denmark

Funder Name

Realdania

Alternative Name(s)

Funding Body Type

Private sector organisation

Funding Body Subtype

Associations and societies (private and public)

Location

Denmark

Funder Name

Lokale og anlægsfonden

Results and Publications

Publication and dissemination plan

The protocol is already published and is available online: https://www.ncbi.nlm.nih.gov/pubmed /26026650. Planned publication of approximately seven papers in high-impact peer reviewed journals before 01/01/2020.

Intention to publish date

01/01/2020

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are/will be available upon request from Henriette Bondo Andersen (hbandersen@health.sdu.dk).

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	focus group results	23/06/2014		Yes	No
Results article	results	10/12/2014		Yes	No
Protocol article	protocol	31/05/2015		Yes	No
Results article		01/12/2015		Yes	No
Results article	results	06/01/2016		Yes	No
Results article	results	09/02/2016		Yes	No
Results article	results	01/09/2016		Yes	No
Results article	Nested sub study	20/09/2019	19/06/2023	Yes	No