

Drøn på Skolegården (The Activating Schoolyard Study)

Submission date 17/05/2018	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 18/05/2018	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 19/06/2023	Condition category Other	<input type="checkbox"/> Individual participant data

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 anlægssonden

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

Contact information

Type(s)
Scientific

Contact name
Mrs Charlotte Skau Pawlowski

ORCID ID
<https://orcid.org/0000-0003-1407-613X>

Contact details
Campusvej 55
Odense M
Denmark
5230
+45 (0)61665006
cspawlowski@health.sdu.dk

Additional identifiers

Protocol serial number
2013-41-1900

Study information

Scientific Title
Drøn på Skolegården (The Activating Schoolyard Study)

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

Study type(s)

Prevention

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(s)

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)

Key secondary outcome(s)

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)

Completion date

01/04/2019

Eligibility

Key inclusion criteria

Students grade 4-8 from 7 schools in Denmark

Participant type(s)

Other

Healthy volunteers allowed

No

Age group

Child

Sex

All

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 recruitment

Denmark

Study participating centre

University of Southern Denmark
Campusvej 55

Odense M
Denmark
5230

Sponsor information

Organisation

Danish Cancer Society

ROR

<https://ror.org/03ytt7k16>

Organisation

Realдания

Organisation

The Danish foundation for Culture and Sport Facilities

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

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
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
Protocol article	protocol	31/05/2015		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes