

# Drøn på Skolegården (The Activating Schoolyard Study)

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

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

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Mrs Charlotte Skau Pawlowski

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## 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

Realdania

### 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?
<a href="#">Results article</a>	focus group results	23/06/2014		Yes	No
<a href="#">Results article</a>	results	10/12/2014		Yes	No
<a href="#">Results article</a>		01/12/2015		Yes	No
<a href="#">Results article</a>	results	06/01/2016		Yes	No
<a href="#">Results article</a>	results	09/02/2016		Yes	No
<a href="#">Results article</a>	results	01/09/2016		Yes	No
<a href="#">Results article</a>	Nested sub study	20/09/2019	19/06/2023	Yes	No
<a href="#">Protocol article</a>	protocol	31/05/2015		Yes	No
<a href="#">Study website</a>	Study website	11/11/2025	11/11/2025	No	Yes