

# Can an adjustable workstation reduce occupational sedentary time?

<b>Submission date</b> 13/11/2013	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
<b>Registration date</b> 09/12/2013	<b>Overall study status</b> Completed	<input type="checkbox"/> Protocol
<b>Last Edited</b> 22/01/2019	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
		<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Adjustable workstations offer a potential strategy to decrease prolonged sitting time and break long inactivity in sedentary work. The purpose of this study was to examine the effects of sit-stand workstations on occupational sedentary time, health outcomes and work ability, and their usability in visual display unit (VDU) work.

### Who can participate?

Employees of the Faculty of Sport and Health Sciences, University of Jyväskylä, Finland. In September 2012 part of the faculty personnel moved to a renovated building which was furnished with electrically adjustable workstations. Prior to this move, they worked in similarly furnished offices as the faculty members who continued to work in the original buildings, which were equipped with traditional sitting VDU workstations.

### What does the study involve?

All faculty employees (n=170) were invited to fill out a questionnaire between August-September 2012 and again in February 2013. Individuals who moved to the renovated building comprised the intervention group (n=23). They used electrically adjustable workstations (ISKU, Finland) during the 6 month intervention period. No other instructions or counseling were given. Faculty personnel who worked in other buildings formed the control group (n=20) and used their original workstations throughout the study.

### What are the possible benefits and risks of participating?

Adjustable workstations offer a potential strategy to reduce prolonged sitting in sedentary work.

There is a risk that recruiting enough subjects is difficult, but we have made the study simple which makes participation more attractive. Further, to find workplaces that have or are in the process of purchasing electrically adjustable workstations we will approach both workplaces and manufacturers in order to obtain enough subjects for the intervention study.

### Where is the study run from?

This study was carried out at the Faculty of Sport and Health Sciences, University of Jyväskylä, Finland

When is the study starting and how long is it expected to run for?  
August 2012 to February 2013

Who is funding the study?  
University of Jyväskylä (Finland). PhD student is supported by China Scholarship Council (CSC).

Who is the main contact?  
Prof. Taija Juutinen Finni  
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## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Taija Juutinen Finni

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## Additional identifiers

## Study information

**Scientific Title**  
Can an adjustable workstation reduce occupational sedentary time: a controlled intervention study

### Study objectives

1. It is hypothesized that the intervention-induced changes will be positively associated with reduced occupational sedentary time in a real workplace.
2. The sit-stand workstations offer the possibility to improve health indexes and improve work ability.
3. There is a high usability of the sit-stand workstations in visual display unit (VDU) work.

**Ethics approval required**  
Old ethics approval format

**Ethics approval(s)**  
Ethics Committee of University of Jyväskylä, 19/10/2012

**Primary study design**  
Interventional

**Study design**

Controlled intervention with one intervention group and one control group

### **Study type(s)**

Quality of life

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

Ergonomics interventions on sedentary work

### **Interventions**

1. Intervention group: all faculty employees who moved to the renovated building comprised the intervention group. The intervention group used electrically adjustable workstations during the 6-month intervention period. They were given brief verbal instructions on how to operate the workstation without other instructions or counseling.
2. Control group: faculty personnel who worked in other buildings formed the control group and used their original workstations throughout the study.

### **Intervention Type**

Other

### **Phase**

Not Applicable

### **Primary outcome(s)**

Occupational sedentary time in VDU work: values correspond to the percentage of work time spent sitting and standing, the percentage of computer work time spent sitting and standing, and average leisure sitting time. Measured at baseline and at 6 months.

### **Key secondary outcome(s)**

Measured at baseline and at 6 months:

1. Health and work-related outcomes: mean perceived musculoskeletal comfort for different body parts and mean perceived work ability
2. In the intervention group, self-reported usability of the sit-stand workstation including adjustability, satisfaction and usage level of sit-stand function

### **Completion date**

28/02/2013

## **Eligibility**

### **Key inclusion criteria**

1. All faculty employees (researchers, teachers, administrative workers, assistants, professors and technical workers)
2. Ambulatory
3. Non-pregnant
4.  $\geq 0.8$  full-time equivalent

### **Participant type(s)**

Patient

### **Healthy volunteers allowed**

No

**Age group**

Adult

**Sex**

All

**Key exclusion criteria**

1. Self-reported chronic, long-term musculoskeletal disease or progressive neurological disease
2. Diagnosed cardiovascular or metabolic disease with regular medication

**Date of first enrolment**

01/08/2012

**Date of final enrolment**

28/02/2013

## Locations

**Countries of recruitment**

Finland

**Study participating centre**

PO Box 35

Jyväskylä

Finland

40014

## Sponsor information

**Organisation**

University of Jyväskylä (Finland)

**ROR**

<https://ror.org/05n3dz165>

## Funder(s)

**Funder type**

University/education

**Funder Name**

China Scholarship Council (China) (No. 201206320092)

**Alternative Name(s)**

CSC

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

China

**Funder Name**

University of Jyväskylä (Finland) was responsible for expenses of the environmental intervention

## Results and Publications

**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?
<a href="#">Results article</a>	results	01/09/2016	22/01/2019	Yes	No