

# A multicentre, single blinded, randomized controlled trial on the (cost) effectiveness of a prevention course on reducing or preventing disabilities from musculoskeletal complaints in music students at Dutch conservatories.

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Primary Objective: Is a prevention program, based on principles of health behavior change, education about playing-related musculoskeletal disorders and postural training, more effective in preventing and/ or reducing disabilities from...

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Musculoskeletal and connective tissue disorders NEC
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON37325

### Source

ToetsingOnline

### Brief title

Presto. Prevention study on physical complaints in conservatory students.

### Condition

- Musculoskeletal and connective tissue disorders NEC

### Synonym

pain, playing-related musculoskeletal disorder

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Universiteit Maastricht

**Source(s) of monetary or material Support:** Ministerie van OC&W, schenking uit Universiteitsfonds Limburg/ SWOL

## Intervention

**Keyword:** musculoskeletal complaints, music students, postural exercise therapy, prevention

## Outcome measures

### Primary outcome

Main study parameter is disability.

### Secondary outcome

Secondary endpoints are pain and quality of life.

A mediator and moderator analysis will be performed. Supposed mediators are self-efficacy, depression/anxiety/stress, coping, pain catastrophizing and perfectionism. Supposed moderators are expectancy & credibility, experiences with musculoskeletal complaints, hypermobility, and physical activity.

Parameters to measure behaviour change are based on awareness of musculoskeletal complaints in musicians, motivation for change, and effect factors such as disability.

## Study description

### Background summary

Up to 87% of professional classical musicians develop work-related complaints of the musculoskeletal system during their career. Previous research has identified several risk factors associated with music playing related

complaints in physical, psychological and behavioral domains. Conservatory students are at specific risk for developing musculoskeletal complaints and disabilities. Specific risk factors in the first study year are stress resulting from a new environment and a sudden increase in playing time. Prevention programs seem to be a promising development, although research on specific programs is insufficient.

## **Study objective**

Primary Objective:

Is a prevention program, based on principles of health behavior change, education about playing-related musculoskeletal disorders and postural training, more effective in preventing and/ or reducing disabilities from musculoskeletal complaints in conservatory students when compared with a physical activity program based on health behavior change?

Secondary Objectives:

1. Is a prevention program, based on principles of health behavior change, education and postural training, more cost effective than a physical activity program?
2. Do credibility & expectation, hypermobility, and physical activity moderate the effect of a prevention program on reducing or preventing disabilities from musculoskeletal complaints in conservatory students?
3. Do self-efficacy, depression/ anxiety/ stress, perfectionism, coping, and pain catastrophizing mediate the effect of a prevention program on reducing or preventing disabilities from musculoskeletal complaints in conservatory students?
4. What are barriers and facilitators (feasibility) of both interventions in Dutch conservatories, as assessed by students, therapists, conservatory staff, and researchers?

## **Study design**

Multicentre, single-blinded, randomized controlled trial.

## **Intervention**

\*Presto-Play\* is a prevention course based on theoretical models of behavior change, which comprises education about music playing-related health problems, evidence-based prevention strategies and postural training. \*Presto-Fit\* is a physical activity program, directed at behavior change regarding physical activity behavior. In the latter program activity monitoring (by pedometry) is used to increase physical activity. Total duration of both programs is 18 hours over 11 lessons in 8 months; lessons will start at beginning of year 1.

## Study burden and risks

Burden is participation in a health program that in total lasts 20 hours over 8 months. \*Presto-Play\* comprises 10 group lessons of 1.5 hours in 20 weeks with in total 1.5 hours homework. \*Presto-Fit\* comprises 3 group lessons of in 1 hour, in a period of 20 weeks. Additionally 15 hours of activity monitoring will be included on an individual basis in order to fulfil physical activity norms according Dutch guideline values.

Both groups receive a refresher course at the end of the first school year.

Measurements are performed using questionnaires. Minors are included in this study because of the group-relatedness to first year conservatory students.

Risks associated with participation are negligible.

## Contacts

### Public

Universiteit Maastricht

Universiteitssingel 40

Maastricht 6229 ER

NL

### Scientific

Universiteit Maastricht

Universiteitssingel 40

Maastricht 6229 ER

NL

## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adolescents (12-15 years)

Adolescents (16-17 years)

Adults (18-64 years)

Elderly (65 years and older)

## Inclusion criteria

1st year conservatory student (bachelor), major classical music, historical music or music teacher

## Exclusion criteria

- Singers
- Jazz/pop/musical students
- Students with a specific comorbidity as: Rheumatoid Arthritis, Ankylosing Spondylitis, Multiple Sclerosis.
- Non Dutch or English speakers

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active
Primary purpose:	Prevention

### Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	26-10-2012
Enrollment:	150
Type:	Actual

## Ethics review

Approved WMO

Date:	28-09-2012
Application type:	First submission
Review commission:	TWOR: Toetsingscommissie Wetenschappelijk Onderzoek Rotterdam e.o. (Rotterdam)

## Study registrations

### Followed up by the following (possibly more current) registration

No registrations found.

### Other (possibly less up-to-date) registrations in this register

No registrations found.

### In other registers

#### Register ID

Other	Het onderzoek is op 7-8 ingediend bij het NTR, nummer is heden nog niet bekend.
CCMO	NL39564.101.12

## Study results

Date completed:	01-07-2016
Results posted:	20-12-2017
Actual enrolment:	170

#### First publication

20-12-2017