

# Effect of exercise on fatigue among students

No registrations found.

<b>Ethical review</b>	Not applicable
<b>Status</b>	Recruiting
<b>Health condition type</b>	-
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON27301

### Source

Nationaal Trial Register

### Health condition

fatigue and burnout complaints

## Sponsors and support

**Primary sponsor:** Behavioural Science Institute Nijmegen

**Source(s) of monetary or material Support:** Behavioural Science Institute Nijmegen

## Intervention

## Outcome measures

### Primary outcome

Fatigue (UBOS/FAS/Need for Recovery)

### Secondary outcome

Physical fitness (estimated VO2 max; Conconi test)

Health and Well-being (report marks following de Bloom et al., 2010)

Cognitive functioning (2-back, SART, Matching Task, CFQ)

Self-efficacy (General Self-Efficacy Scale)

## Study description

### Background summary

The aim of this study is to assess the effect of an exercise intervention on fatigue and burnout of students. We will use an experimental design in which participants will be randomly allocated to either a 6-week exercise intervention (experimental condition, n=60) or a waitlist (control condition, n=60). The control condition receives the exercise intervention when the experimental condition has completed the exercise intervention. The participants of this study will be university students (Dutch and German) who suffer from fatigue and burnout complaints.

### Study objective

Whereas initially the concept of burn-out was restricted to professions in the human services domain, over time the scope has been broadened to all sorts of professions and occupational groups (Schaufeli et al., 2002). Research indicates that full time students can experience fatigue complaints and burn-out as well (Balogun et al., 1996). According to Mailey et al. (2010) the prevalence of mental health problems among college student is rising. The aim of this study is to find out whether an exercise intervention has positive effects in terms of improved physical fitness [Hypothesis 1], reduced fatigue problems [H2], and improved levels of general health and well-being [H3], cognitive functioning [H4], self-efficacy [H5], and participation in daily life [H6] in a group of university students who suffer from fatigue and burnout complaints.

### Study design

T1: baseline/pre-screening: Fatigue and burnout complaints (UBOS, FAS, Need for Recovery); indicators of health and well-being (report marks following de Bloom et al., 2010); estimated Vo2max (Conconi test); Cognitive functioning (2-back, SART, Matching Task, CFQ); Self-efficacy (General Self-Efficacy Scale); Participation in daily life

T2 to T6 (every week during the 6 week exercise intervention period): Health and Well-being (report marks following de Bloom et al., 2010); exercise experiences

T7: immediately after the intervention: Fatigue and burnout complaints (UBOS, FAS, Need for Recovery); indicators of health and well-being (report marks following de Bloom et al., 2010); estimated Vo2max (Conconi test); Cognitive functioning (2-back, SART, Matching Task, CFQ); Self-efficacy (General Self-Efficacy Scale); Participation in daily life

T8: two weeks after the intervention: Fatigue (UBOS/FAS/Need for Recovery); Health and Well-being (report marks following de Bloom et al., 2010); Self-efficacy (General Self-Efficacy

Scale)

Participation in daily life; exercise

T9: four weeks after the intervention: Fatigue and burnout complaints (UBOS, FAS, Need for Recovery); indicators of health and well-being (report marks following de Bloom et al., 2010); estimated Vo2max (Conconi test); Cognitive functioning (2-back, SART, Matching Task, CFQ); Self-efficacy (General Self-Efficacy Scale); Participation in daily life

T10: 12 weeks after the intervention: Fatigue and burnout complaints (UBOS, FAS, Need for Recovery); indicators of health and well-being (report marks following de Bloom et al., 2010); estimated Vo2max (Conconi test); Cognitive functioning (2-back, SART, Matching Task, CFQ); Self-efficacy (General Self-Efficacy Scale); Participation in daily life; Vo2 max

## **Intervention**

The exercise intervention will cover a 6-week period in which the participant will run under supervision of a licensed running trainer twice a week, and independently once a week. The participants will run at moderate intensity. Each running session lasts one hour and includes warming-up, running, walking and cooling-down.

The participants in the control condition (waiting list) receive the exercise intervention when the participants in the experimental condition have completed the exercise intervention.

## **Contacts**

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## **Eligibility criteria**

## Inclusion criteria

1. Currently registrated as 'student'
2. More than or equal to 2.2 on the UBOS for students (Schaufeli et al., 2002)
3. More than or equal to 22 on the FAS (Michielsen et al., 2003)

## Exclusion criteria

1. Drug dependence
2. Exercising more than 1 hour a week
3. Currently on medication that alter mood
4. Currently/in the past half year/on the waiting list for medical or psychological treatment
5. Physical disease(s) that can cause fatigue
6. Medical contra-indication for exercise (running)

## Study design

### Design

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

### Recruitment

NL	
Recruitment status:	Recruiting
Start date (anticipated):	01-02-2014
Enrollment:	120
Type:	Anticipated

## Ethics review

Not applicable

Application type:

Not applicable

## 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

NTR-new NL4201

NTR-old NTR4412

Other Ethical Commission Social Sciences Radboud University : ECSW2013-1811-142

## Study results