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Workplace physical activity program

Submission date
21/03/2018

Recruitment status
No longer recruiting

Registration date
15/05/2018

Overall study status
Completed

Last Edited
02/09/2019

Condition category
Mental and Behavioural Disorders

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Physical activities have been identified as an efficient way to promote work-related well-being and to protect employees from stress consequences. However, current research did not compare physical activities with other leisure activities, did not investigate the additional effect of the climate created by the instructor, and did not investigate mechanisms explaining this effect. This study examines whether a 10-weeks physical activity intervention, compared to expressive activities, improves work-related well-being and which psychological mechanisms explain this relationship.

Who can participate?
Any employees from 18 to 65, male or female, without contraindications to physical activity can participate.

What does the study involve?
Interventions of physical activity (i.e. nordic walking) and expressive activities (i.e. drama) will be compared between them and to the control group.

What are the possible benefits and risks of participating?
Participants should improve their work-related well-being.

Where is the study run from?
This study will be run on the campus of the Grenoble Alpes University.

When is the study starting and how long is it expected to run for?
The interventional part of the trial should start on 09/04/2018 and stop on 22/06/2018, and last follow-up will stop on 22/12/2018.

How long will the trial be recruiting participants for?
This study will be funded by the Sport and Social Environment (SENS) lab.

Who is the main contact?
The main contact for this study is Sandrine Isoard-Gautheur, sandrine.isoard-gautheur@univ-grenoble-alpes.fr.

Contact information

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Scientific

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Study information

Scientific Title
WOrkplace Physical Activity Program (WOPAP): a four-arm randomised controlled trial intended to prevent burnout and promote vigour with physical activity among employees in the workplace

Acronym
WOPAP

Study objectives
Hypothesis 1a: the physical activity (PA) intervention is effective to reduce burnout and improve vigour at work
Hypothesis 1b: the drama intervention is effective to reduce burnout and improve vigour at work
Hypothesis 2: PA is more effective than drama to reduce burnout and improve vigour at work
Hypothesis 3: the positive effect of PA on burnout and vigour will be more pronounced when instructors use a need-supportive style rather than a “standard” style.
Hypothesis 5: the PA intervention is effective to improve job satisfaction (H5a), autonomous work motivation (H5b), work ability (H5c), work performance (H5d), and to reduce absenteeism (H5e).
Hypothesis 6: The effects of PA intervention on vigour/burnout are mediated by psychological detachment from work (6a), autonomy need satisfaction (6b), competence need satisfaction (6c), relatedness need satisfaction (6d), and physical fitness (6e).

Ethics approval required
Old ethics approval format

Ethics approval(s)
3rd South Mediterranean Protection of Persons Ethics Committee, 05/04/2017, 2017-03-02bis

Primary study design
Interventional

Study design
Randomised controlled parallel-arm trial

An interventional study with a four-armed individually randomized controlled trial (RCT) will compare employees attending PA sessions supervised by a need supportive trained instructor (PA-NS), employees attending PA sessions supervised by a standard instructor (PA), employees attending expressive activity (drama) sessions supervised by a standard instructor (EA), and employees in a waiting list control group.

Study type(s)
Prevention

Health condition(s) or problem(s) studied
Physical activity and drama to improve well-being at work

Interventions
Experimental: Physical activity + needs supportive climate (PA+NS)
The PA+NS group will attend 2 sessions per week of physical activity supervised by an instructor trained to support psychological basics needs.
All sessions will be held at the same time of day (during lunch break or after workday) and on the same two days of the week. Sessions will consist of Nordic walking. The PA+NS group will be supervised by a physical activity instructor trained to support psychological basics needs of participants, according to self-determination theory (Deci & Ryan, 2000).
Active Comparator: Physical activity (PA)
The PA group will attend 2 sessions per week of physical activity supervised by an instructor. All sessions will be held at the same time of day (during lunch break or after workday) and on the same two days of the week. The PA group will be supervised by a standard physical activity instructor.

Second Active Comparator: Expressive activity (EA)
The EA group will attend 2 sessions per week of expressive activity supervised by an instructor. All sessions will be held at the same time of day (during lunch break or after workday) and on the same two days of the week. The EA group will be supervised by a standard drama instructor
Control Group: Waiting List (WL)
The WL group will received the exercise intervention after 10 weeks of waiting, when the participants in the other groups will have completed the intervention.
In a four-arm parallel trial, 100 participants will be randomized in two PA groups, an expressive activity group, and a waiting-list group. The experimental phase will last 10 weeks, followed by a six months' follow-up. Interventions groups will contain PA or expressive activity sessions; in addition, one of PA groups will benefit from a psychological basic needs-supportive climate. Each week, two sessions will be headed by instructors, during lunch or after-work periods. Primary outcomes are burnout and vigour, secondary outcomes are work motivation, job satisfaction, work ability and work performance. These variables will be assessed before and after the intervention, and at 3 and 6 months after the intervention. Moreover, burnout, vigour, needs satisfaction at work, and activity experiences will be assessed weekly through the intervention period.

Intervention Type
Behavioural

Primary outcome(s)
1. Burnout assessed using the French version of the Shirom Melamed Burnout Measure (Sassi & Neveu, 2010)
2. Vigour assessed with an adapted version of the Shirom Melamed Vigor Measure (Shirom et al., 2006). Time Frame: From April 2018 to June 2018, the measures will be assessed every week during the intervention and at 3 and 6 months after the intervention. Participants will fill in a paper survey each week. They will provide their answers using a 10-cm visual analog scale, with higher scores indicating higher burnout or vigour levels.

Key secondary outcome(s)
1. Work motivation assessed with the French version of the Motivation at Work Scale (Gagné et al., 2010)
2. Work ability assessed with a single item (Ahlstrom et al., 2010)
3. Job satisfaction assessed with the French Job Satisfaction Scale (Fouquereau, 2002)
4. Work performance assessed with a French version of the World Health Organisation Health and Work Performance Questionnaire (WHO HPQ; Kessler et al., 2003).
Time Frame: April and June 2018, measures will be assessed at the start and the end of the intervention, and 3 and 6 months after. Participants will answer an online survey. They will provide their answers using a 7-point Likert scale, with higher scores indicating higher levels of observed variables.

Completion date
01/02/2019

Eligibility

Key inclusion criteria
1. Aged 18-65 years
2. In full-time employment

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 Years

Upper age limit
65 Years

Sex
All

Key exclusion criteria
1. Practicing more than 150 minutes of vigorous to very vigorous PA per week
2. Reporting a light burnout (i.e. scoring below "1,50" on the burnout measure)
3. Reporting a high vigour (i.e. scoring above "5,11" on the vigour measure)
4. Currently or in the last 6 months receiving pharmacological treatment for mental health disorders
5. Contraindications to exercise
6. Not agreeing the terms of the informed consent

Date of first enrolment
26/02/2018

Date of final enrolment
09/04/2018

Locations

Countries of recruitment
France

Study participating centre
University Grenoble Alpes
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Sponsor information

Organisation
Sport and Social Environment Lab

ROR
https://ror.org/02rx3b187

Funder(s)

Funder type
Not defined

Funder Name
Sport and Social Environment Lab

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 : Sandrine Isoard-Gautheur, sandrine.isoard-gautheur@univ-grenoble-alpes.fr. All of the individual participant data collected during the trial, after de-identification will be available. Data will be available from 01/04/2019 to 01/04/2029, to anyone who wishes to access the data for any purpose of analyses. Proposals should be directed to sandrine.isoard-gautheur@univ-grenoble-alpes.fr. To gain access, data requestors will need to sign a data access agreement. Consent from participants were obtained and will be kept 10 years at the lab, Participants will receive an individual anonymous number for all data collection.

IPD sharing plan summary
Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	12/03/2019	28/08/2019	Yes	No
Basic results		02/09/2019	02/09/2019	No	No