Booster Breaks: health promoting work breaks

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

Plain English summary of protocol

Background and study aims

The workplace is an important potential setting for physical activity (PA) interventions (i.e. programmes). However, few workplace PA interventions take full advantage of work breaks and result in limited-to-modest success. Booster Breaks are organized work breaks that are designed to improve employees physical and psychological health, increase job satisfaction and improve work productivity. Booster Breaks have been developed to alleviate work-related stress and encourage more PA behavior in employees that may otherwise have sedentary jobs. Examples of Booster Breaks include short exercise or meditation sessions. The aim of this study is to test whether Booster Breaks increase PA among sedentary employees, compared with individualized PA work breaks and typical work breaks.

Who can participate?

Employees with sedentary office jobs from four workplaces in a large, urban southwestern U.S. city.

What does the study involve?

Participants are randomly allocated into one of three groups. Those in group 1 are assigned to the Usual Break (control) group. Those in group 2 are assigned to the Computer Prompt (individualized PA work breaks) group. Those in group 3 are assigned to the Booster Break group. The Usual Break condition includes usual or typical work break practices and behaviors. The two interventions are developed to be consistent with the WHO Healthy Workplace Framework and Model. The individualized Computer Prompt condition is designed to interrupt prolonged sitting time by introducing 3-minute breaks, 5 times per day. The group-based Booster Break condition is a peer-led, once-a-day, 15-minute PA session that guides employees through a series of stretching, strengthening, and aerobic movements followed by a brief meditation. Based on a participation rate threshold of 70%, workplaces were classified either as consistent or inconsistent implementers of the intervention. A number of physiological and behavioral measures are assessed before the study starts and 6 months later.

What are the possible benefits and risks of participating? Not provided at time of registration

Where is the study run from?

Four different work places in a large, urban southwestern U.S. city

When is the study starting and how long is it expected to run for? January 2009 to January 2013

Who is funding the study? National Institutes of Health (USA)

Who is the main contact? Dr Wendell Taylor

Contact information

Type(s)

Scientific

Contact name

Dr Wendell Taylor

Contact details

The University of Texas Health Science Center at Houston School of Public Health CHPPR 7000 Fannin Street Suite 2670 Houston United States of America TX 77030

Additional identifiers

Protocol serial number

NIH (Grant No. R03 NR010291)

Study information

Scientific Title

Impact of Booster Breaks on physical activity among sedentary employees: a cluster randomized controlled trial

Study objectives

It was hypothesized that, compared with non-Booster Break participants, Booster Break participants will have significant improvements in:

- 1. Physiological measures (i.e., blood pressure, fasting lipids, triglycerides, and anthropometrics)
- 2. PA (increase) and sedentary behavior (decrease)
- 3. PA mediators
- 4. Employee and organizational psychosocial constructs

Ethics approval required

Old ethics approval format

Ethics approval(s)

This study was approved by the appropriate IRBs and the University Committee for the Protection of Human Subjects

Study design

Randomized controlled trial

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Physical inactivity, sedentary behavior, obesity

Interventions

Participants were randomized to the Usual Break (control group), Computer Prompt, or Booster Break condition. The Usual Break condition included usual or typical work break practices and behaviors. The two interventions were developed to be consistent with the WHO Healthy Workplace Framework and Model. The individualized Computer Prompt condition was designed to interrupt prolonged sitting time by introducing 3-minute breaks, 5 times per day. The group-based Booster Break condition was a peer-led, once-a-day, 15-minute PA session that guides employees through a series of stretching, strengthening, and aerobic movements followed by a brief meditation.

Intervention Type

Behavioural

Primary outcome(s)

- 1. Lipid profile
- 2. Blood pressure
- 3. Height
- 4. Weight
- 5. International Physical Activity Questionnaire (IPAQ)
- 6. Pedometer readings

Measures were taken at baseline and immediately after the intervention (i.e after 6 months)

Key secondary outcome(s))

Physical activity mediators and employee and organizational psychosocial constructs: self-report assessments at baseline and immediately after the intervention (i.e after 6 months)

Completion date

09/01/2013

Eligibility

Key inclusion criteria

- 1. Participants' jobs required sitting for at least 5 hours per day
- 2. English proficiency
- 3. Full-time employment [35–40 hours/week]
- 4. Age >17 years
- 5. No physician-limited physical activity

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Adult

Sex

Αll

Key exclusion criteria

- 1. Physician prohibited physical activity
- 2. Part-time employees

Date of first enrolment

09/01/2009

Date of final enrolment

09/01/2012

Locations

Countries of recruitment

United States of America

Study participating centre

The University of Texas Health Science Center at Houston

School of Public Health CHPPR 7000 Fannin Street Suite 2670 Houston United States of America TX 77030

Sponsor information

Organisation

The University of Texas Health Science Center at Houston

ROR

https://ror.org/03gds6c39

Funder(s)

Funder type

Government

Funder Name

National Institutes of Health

Alternative Name(s)

US National Institutes of Health, Institutos Nacionales de la Salud, NIH, USNIH

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United States of America

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not expected to be made available

Study outputs

Output type	Details	Date created Date added	Peer reviewed?	Patient-facing?
Results article	feasibility study results	01/08/2010	Yes	No
Results article	results	17/11/2016	Yes	No
Other publications	participants' perspectives	01/06/2013	Yes	No
Participant information sheet	Participant information sheet	11/11/2025 11/11/2025	No	Yes