

Efficacy of a web-based competitive intervention to promote physical activity

Submission date 05/10/2012	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 12/10/2012	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 27/04/2018	Condition category Other	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims:

This study aims to assess how well two web-based treatments promote physical activity compared to a group who are not provided the web-based treatments (control group). Physical activity will be measured using pedometers (an instrument that records the number of steps taken by an individual).

Who can participate?

Low-active people living and/or working in the Leeds area. Participants will be male or female, aged between 18 - 65 years and have access to the internet at home.

What does the study involve?

The study will test the effect of competition and self-monitoring on physical activity (pedometer steps). At the first session, all participants will be fitted with a pedometer which they will wear throughout the study. In a second session they will complete a questionnaire before being randomly allocated to one of three conditions: control, self-monitoring, competition.

In the control condition, participants will be asked to try to walk 10,000 steps per day and wear a pedometer. They will also be asked to log-on to the study website at least once every 7 days to answer a question regarding how much activity they have done while not wearing their pedometer.

In the self-monitoring condition, participants will receive the same instructions as those in the control but they will be asked to log onto a study website at least once every 7 days to record their number of pedometer steps. Participants in this condition will also be able to track changes in their pedometer steps over the course of the study using graphs and tables that are generated on the website.

In the competition condition, participants will receive the same instructions as those in the self-monitoring condition. They will also receive feedback relating to how their pedometer steps compare to other participants in their condition. Their position relative to other participants, in terms of pedometer steps, will be presented in the form of a league table.

At the final session, all participants will complete the questionnaire completed in the second session.

What are the possible benefits and risks of participating?

Participants will be motivated to engage in more physical activity. As the treatments are relatively simple to give and of a web-based nature they could provide a scalable, cost-effective way to promote physical activity.

Only participants that are able to increase their physical activity are able to participate to ensure their safety.

Where is the study run from?

University of Leeds

When is study starting and how long is it expected to run for?

Recruitment and testing of participants will run from October to December 2012 (phase 1) and from January to March 2013 (phase 2).

Who is funding the study?

Unilever Research

Who is the main contact?

Dr Andrew Prestwich

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Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

N/A

Study information

Scientific Title

Efficacy of a web-based competitive intervention to promote physical activity in adults: a randomized controlled trial

Study objectives

1. The participants in the self-monitoring condition will increase the average number of pedometer steps per day more than participants in the control group.
2. The participants in the competition condition will increase the average number of pedometer steps per day more than participants in the self-monitoring and control groups
3. The effect of the competition manipulation on pedometer steps will be mediated by greater motivation to achieve more steps.
4. The effect of the competition manipulation on pedometer steps will be greater for individuals who are:
 - 4.1. competitive
 - 4.2. more often compare themselves to others

Ethics approval required

Old ethics approval format

Ethics approval(s)

University of Leeds Research Ethics Committee, 03 October, 2012, ref: 12-0160

Study design

Randomized controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Other

Study type(s)

Quality of life

Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Physical activity promotion

Interventions

There are three conditions: competition; self-monitoring and control.

In the control condition, participants will be asked to try to walk 10,000 steps per day and wear a pedometer. They will also be asked to log-on to a study web-site at least once every 7 days to answer a question regarding how much activity they have done while not wearing their pedometer.

In the self-monitoring condition, participants will receive the same instructions as those in the control but they will be asked to log onto a study website at least once every 7 days to record their number of pedometer steps. Participants in this condition will also be able to track changes in their pedometer steps over the course of the study via graphical and tabular feedback.

In the competition condition, participants will receive the same instructions and be asked to self-monitor their pedometer steps and receive the same graphical and tabular feedback. In addition, they will also receive feedback relating to how their pedometer steps compare to other participants in their condition. Their position relative to other participants, in terms of pedometer steps, will be presented in the form of a league table.

Intervention Type

Other

Phase

Not Applicable

Primary outcome measure

Average number of pedometer steps per day. This will be assessed before (from week 0 to week 1) and after (from week 1 to week 5) the intervention begins.

Our objective measure of steps will be obtained using a Yamax CW-300 pedometer.

Secondary outcome measures

1. Frequency of visiting the study website.
2. Self-reported intention to do at least 10,000 steps per day will be assessed using two items on scales ranging from 1 (strongly disagree) to 7 (strongly agree):
I intend to do at least 10,000 steps per day over the next 4 weeks
I will try to do at least 10,000 steps per day over the next 4 weeks

We will also assess in relation to doing at least 10,000 steps per day:

3. planning, effort and commitment using single items;
4. perceived behavioural control using two items;
5. self-efficacy using four items;
6. goal difficulty, goal importance and goal conflict using single items.
7. Type of motivation will be assessed using the BREQ-2 (Markland & Tobin, 2004; Mullan, Markland & Ingledew, 1997).
8. Self-monitoring using a single item

Overall study start date

03/01/2011

Completion date

28/04/2015

Eligibility

Key inclusion criteria

1. Aged 18-65
2. Live and/or work in Leeds
3. Have access to the internet at home
4. Have sufficient English language skills in order to complete questionnaires

Participant type(s)

Patient

Age group

Adult

Lower age limit

18 Years

Upper age limit

65 Years

Sex

Both

Target number of participants

300

Key exclusion criteria

1. Any indication that they are not ready to be physically active (assessed through Physical Activity Readiness Questionnaire)
2. Taking part in any other studies
3. Categorised as moderate (category 2) or high (category 3) on the International Physical Activity Questionnaire

Date of first enrolment

11/10/2012

Date of final enrolment

07/11/2014

Locations**Countries of recruitment**

England

United Kingdom

Study participating centre

University of Leeds

Institute of Psychological Sciences
Leeds

United Kingdom
LS2 9JT

Sponsor information

Organisation

University of Leeds (UK)

Sponsor details

Governance & Ethics

Leeds

England

United Kingdom

LS2 9JT

Sponsor type

University/education

Website

<http://www.leeds.ac.uk/>

ROR

<https://ror.org/024mrxd33>

Funder(s)

Funder type

Industry

Funder Name

Unilever Research (UK) ref: CH-2010-0904

Results and Publications

Publication and dissemination plan

Planned publication in a peer reviewed journal.

Intention to publish date

03/06/2017

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	01/03/2017		Yes	No