

Can financial and charitable incentives motivate people to adopt an active lifestyle?

Submission date 24/02/2016	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 29/02/2016	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
Last Edited 17/12/2018	Condition category Circulatory System	<input type="checkbox"/> Individual participant data

Plain English summary of protocol

Background and study aims

This study examines whether a financial incentive (gaining money) or a charitable incentive (a donation to a charitable organization) can motivate people to increase their daily physical activity. Daily physical activity has proven to be beneficial to prevent different chronic diseases such as obesity or diabetes. We used a step counter (pedometer) to measure physical activity.

Who can participate?

Customers of a large Swiss health insurance company registered in a complementary insurance program. They should be healthy and at least 18 years old.

What does the study involve?

Participants are randomly allocated to one of three different groups, according to their canton (state of residence), i.e. all participants living in a particular canton are placed in the same group. They are all given a pedometer and are instructed to achieve 10.000 steps per day on average each month. Participants in group 1 receive money if they reach their goal. Participants in group 2 also receive money but have the option of donating if they wish. Participants in group 3 receive no incentive.

What are the possible benefits and risks of participating?

By taking part in the study participants can benefit from all positive effects associated with physical activity such as prevention of chronic diseases, improved health and well-being. Depending on the state of their health, participants might eventually encounter negative effects due to increased physical activity. However, people who are at risk of being negatively affected by physical activity do not fulfil the eligibility requirements of the study.

Where is the study run from?

Health-IS lab of the University of St. Gallen, Switzerland and the ETH Zurich, Switzerland.

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

July 2015 to December 2015

Who is funding the study?

1. CSS Insurance (Switzerland)
2. Federal Institute of Technology Zurich (Switzerland)
3. University of St. Gallen (Switzerland)

Who is the main contact?

Tobias Kowatsch

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

Study information

Scientific Title

Financial and Charity Incentives to Encourage Participation in a Physical Activity Promotion Program Offered by a Health Insurer: A Cluster-Randomized Controlled Trial

Study objectives

The following research questions are addressed in our study:

1. Do financial and/or charitable incentives enhance the acceptance of and adherence to a pedometer based health intervention compared to a non-incentive control group?
2. Does a pedometer-based health intervention improve participants' subjective and objective measures of health status?
3. How does the participation in a pedometer-based health intervention affect the participants' perception of the provider of the intervention?
4. How do financial and charitable incentives affect the participants' perception of the provider of the intervention?

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics Committee of the University of St. Gallen, St. Gallen, Switzerland, 17/02/2016, ref: HSG-EC-2015-04-22-A

Study design

Longitudinal three arm cluster-randomized controlled trial

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Non-communicable diseases that can be affected by physical activity (for example, cardiovascular diseases or diabetes)

Interventions

Participants used a pedometer to track their daily physical activity. Two different incentive strategies are compared with a control-group that receives no incentives.

In the financial incentive condition, participants receive a financial reward each month they achieve a physical activity goal that is associated with a health promoting lifestyle (10,000 steps per day on average) and a smaller reward if they achieve a physical activity goal that is associated with the physical activity minimum for a health promoting lifestyle (7,500 steps per day on average).

Participants in the charitable condition receive the same reward but can decide whether to keep the money or donate it to a charitable organization.

Participants in the control condition receive no incentives over the first half of the intervention. In the second half they get the opportunity to receive a financial reward that is twice the size of the reward in the financial incentive condition. That way, participants of all three groups have the chance to receive the same amount of money over the course of the intervention.

Intervention Type

Behavioural

Primary outcome(s)

Participation rate (method: number of registered participants; timepoint: beginning of the intervention)

Key secondary outcome(s)

1. Adherence to the intervention, assessed as number of days participants shared their number of steps, continuously measured over the course of the intervention
2. Participants' performance, assessed by number of steps walked per day, amount of money earned / donated, continuously measured over the course of the intervention
3. Subjective health status, assessed by questionnaire, at the beginning and at the end of the intervention
4. Objective health status, assessed by service billing of the participants insurance company over the period of the intervention and over three months after the intervention
5. Perception of the provider of the intervention, assessed by questionnaire at the beginning and at the end of the intervention

Completion date

31/12/2015

Eligibility

Key inclusion criteria

1. Participants have to be at least 18 years of age
2. Registered in a complementary insurance program
3. Acceptance of data security and participation conditions
4. Declaration of adequate health status for participation

Participant type(s)

Healthy volunteer

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

All

Key exclusion criteria

1. Under 18 years of age
2. Not registered in a complementary insurance program
3. No acceptance of data security and participation conditions
4. No declaration of adequate health status for participation

Date of first enrolment

04/06/2015

Date of final enrolment

30/06/2015

Locations

Countries of recruitment

Switzerland

Study participating centre

Health IS Lab, University of St. Gallen

St. Gallen

Switzerland

9000

Study participating centre

ETH Zurich
Zurich
Switzerland

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Sponsor information**Organisation**

Health IS Lab

ROR

<https://ror.org/0561a3s31>

Funder(s)**Funder type**

Not defined

Funder Name

CSS Insurance

Funder Name

Eidgenössische Technische Hochschule Zürich

Alternative Name(s)

ETH Zurich, ETH Zürich, Federal Institute of Technology Zurich, ETH Zürich (Eidgenössische Technische Hochschule Zürich), Eidgenössische Technische Hochschule Zürich (Switzerland), Eidgenössische Technische Hochschule Zürich (ETH), ethzurich, ETH

Funding Body Type

Private sector organisation

Funding Body Subtype

Universities (academic only)

Location

Switzerland

Funder Name

Universität St. Gallen

Alternative Name(s)

University of St. Gallen, The University of St. Gallen, Die Universität St.Gallen, HSG, UG

Funding Body Type

Government organisation

Funding Body Subtype

Universities (academic only)

Location

Switzerland

Results and Publications

Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available as no consent to share data from this study (anonymized or not) was obtained from participants. Participant data are stored in a locked room at the University of St.Gallen, Switzerland. Data access is protected by a password which is only known to the responsible researchers.

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	results	01/02/2019		Yes	No