Just-in-time delivered planning intervention to reduce stress at the workplace among apprentices

Submission date	Recruitment status	[X] Prospectively registered
03/08/2017	No longer recruiting	[_] Protocol
Registration date	Overall study status	[] Statistical analysis plan
08/08/2017	Completed	[_] Results
Last Edited	Condition category	[_] Individual participant data
23/06/2021	Mental and Behavioural Disorders	[_] Record updated in last year

Plain English summary of protocol

Background and study aims

Interventions to reduce stress include several elements from models of health behaviour change, such as motivation, self-efficacy, and planning processes. However, the effectiveness of these single components within comprehensive programs has not been addressed so far, but could give valuable insights for the development of future digital health behaviour change interventions. Just-in-time interventions provided via mobile devices (i.e., text messages) are intended to help people to make healthy decisions "in the moment", and thus have a near-future impact. Implementation intentions (i.e. if-then-plans) are a promising intervention component within digital interventions to reduce stress at the workplace. However, the effectiveness of this single element within a comprehensive life skills program has not been addressed so far, but could give valuable insights for the development of future interventions. The aim of this study is to test the impact of such just-in-time delivered interventions on stress reduction at the workplace among apprentices.

Who can participate?

Adolescents aged 16 or over who attend vocational training and feel stressed at workplace

What does the study involve?

On six working days, 1 hour before apprentices are on their way to work, participants are randomly allocated to receive either an intervention or no intervention. The intervention includes two text messages: one text message where they choose one of two predetermined ifthen plans to reduce stress at the workplace, and another text message prompt to visualize the chosen plan. Perceived stress at the workplace is assessed 11 hours later in both groups.

What are the possible benefits and risks of participating?

Stress may be lower after receiving the stress-reducing text message. No risks of participation are expected.

Where is the study run from?

1. Swiss Research Institute for Public Health and Addiction (Switzerland)

2. University of Zurich, Applied Social and Health Psychology (Switzerland)

When is the study starting and how long is it expected to run for? August 2017 to December 2018

Who is funding the study? 1. Swiss Research Institute for Public Health and Addiction (Switzerland) 2. University of Zurich, Applied Social and Health Psychology (Switzerland)

Who is the main contact? Dr Theda Radtke theda.radtke@psychologie.uzh.ch

Contact information

Type(s) Scientific

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers 16.6.2

Study information

Scientific Title

Efficacy of a just-in-time delivered planning intervention to reduce stress at the workplace among apprentices: a micro-randomized controlled trial

Acronym

MRCT Stress

Study objectives

Current study hypothesis as of 07/07/2020:

1. On days adolescents receive the just-in time delivered planning intervention, adolescents report lower levels of stress during vocational training compared to days without the just-in time delivered planning intervention

2. Adolescents with lower levels of work-related vigor will benefit from just-in-time delivered planning intervention to a higher degree compared to adolescents with higher levels of work-related vigor

3. Adolescents with higher levels of work-related exhaustion will benefit from just-in-time delivered planning intervention to a higher degree compared to adolescents with lower levels of work-related exhaustion

Previous study hypothesis:

1. On days adolescents receive the just-in time delivered planning intervention, adolescents report lower levels of stress during vocational training compared to days without the just-in time delivered planning intervention

2. Adolescents with higher levels of work-related vigor will benefit from just-in-time delivered planning intervention to a higher degree compared to adolescents with lower levels of work-related vigor

3. Adolescents with higher levels of work-related exhaustion will benefit from just-in-time delivered planning intervention to a higher degree compared to adolescents with lower levels of work-related exhaustion

Ethics approval required

Old ethics approval format

Ethics approval(s)

Ethics committee of the Faculty of Philosophy at the University of Zurich, 26/09/2016, ref: 16.6.2

Study design Micro-randomized controlled trial

Primary study design Interventional

Secondary study design Randomised cross over trial

Study setting(s) Other

Study type(s) Prevention

Participant information sheet

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

Health condition(s) or problem(s) studied

Stress

Interventions

Participants receive the just-in-time delivered planning intervention to reduce stress on their typically indicated most stressful working day (or a randomly chosen working day in case no most stressful day can be identified) during a week. The intervention is delivered 1 hour before apprentices are on their way to work. In case of shift work the intervention is delivered at 6am. The study has an AB/BA crossover design, in which each participant receives the intervention and the control in a randomized order. The randomization sequence will be created using computerized random numbers. There is a period of at least 2 weeks between the intervention and control.

Intervention points in time include:

1. Assessment of state of receptivity via SMS text message question ("Are you working today?") on one of their typically indicated working days, one hour before apprentices are on their way to work (or at 6am).

2. Confirmation of receptivity by a text message reply ("Yes") from the participant.

3. The digital micro intervention where participants can choose one of two predetermined ifthen plans to reduce stress at the workplace via SMS text messaging and another text message prompt to visualize the chosen plan.

Control points in time only include 1 and 2.

Follow-up assessments will be conducted in both intervention and control points in time 11 hours after the assessment of state of receptivity and the random allocation to one of the two intervention conditions.

Intervention Type

Behavioural

Primary outcome measure

Perceived stress at the workplace, assessed with one item measure 11 hours after the assessment of state of receptivity and the random allocation to one of the two intervention conditions

Secondary outcome measures

No secondary outcome measures

Overall study start date 01/05/2017

Completion date 31/12/2018

Eligibility

Key inclusion criteria

 Ownership of a mobile phone
A perceived stress level at the workplace that is above 3, measured on a Likert scale ranging from 1 (not stressful) to 5 (extremely stressful)
Aged 16 or over

Participant type(s)

Healthy volunteer

Age group

Mixed

Sex Both

Target number of participants 130 per condition (including a dropout rate of 30%)

Total final enrolment

3759

Key exclusion criteria

A perceived stress level at the workplace that is below 3, measured on a Likert scale ranging from 1 (not stressful) to 5 (extremely stressful)
Age < 16
No vocational training at intervention day

Date of first enrolment

09/08/2017

Date of final enrolment 31/12/2017

Locations

Countries of recruitment Switzerland

Study participating centre Swiss Research Institute for Public Health and Addiction Konradstrasse 32 Zurich Switzerland 8031

Sponsor information

Organisation Swiss Research Institute for Public Health and Addiction

Sponsor details

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Sponsor type University/education

Website www.isgf.ch

Organisation University of Zurich

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Sponsor type University/education

Website http://www.psychologie.uzh.ch/de/fachrichtungen/angsoz.html

ROR https://ror.org/02crff812

Funder(s)

Funder type University/education

Funder Name

Swiss Research Institute for Public Health and Addiction

Funder Name Universität Zürich

Alternative Name(s) University of Zurich, Switzerland, University of Zurich, UZH

Funding Body Type Government organisation

Funding Body Subtype Universities (academic only)

Location Switzerland

Results and Publications

Publication and dissemination plan

Planned publication in a psychological or medical peer-reviewed journal around one year after the overall trial end date. No other documents will be available.

Intention to publish date

01/08/2022

Individual participant data (IPD) sharing plan

The datasets generated during and/or analyzed during the current study are/will be available upon request from Dr Severin Haug (severin.haug@isgf.uzh.ch). Individual participant data will be available (including data dictionaries). Individual participant data that underlie the results reported in our article, after deidentification (text, tables, figures, and appendices) will be shared. Data will be available beginning 9 months and ending 36 months following article publication. Researchers who provide a methodologically sound proposal will be able to get access to the data. Data will be provided for analyses to achieve aims in the approved proposal and for individual participant data meta-analysis. To gain access, data requestors will need to sign a data access agreement.

IPD sharing plan summary

Available on request