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

Submission date
03/08/2017

Recruitment status
No longer recruiting

Registration date
08/08/2017

Overall study status
Completed

Last Edited
23/06/2021

Condition category
Mental and Behavioural Disorders

[X] Prospectively registered
[ ] Protocol
[ ] Statistical analysis plan
[ ] Results
[ ] Individual participant data
[ ] 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 if-then 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?
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Contact information

Type(s)
Scientific

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Additional identifiers

Protocol serial number
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

Primary study design
Interventional

Study design
Micro-randomized controlled trial

Study type(s)
Prevention

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 if-then 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(s)
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

Key secondary outcome(s)
No secondary outcome measures

Completion date
31/12/2018

Eligibility

Key inclusion criteria
1. Ownership of a mobile phone
2. 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)
3. Aged 16 or over

Participant type(s)
Healthy volunteer

Healthy volunteers allowed
No

Age group
Mixed

Sex
All

Total final enrolment

3759

Key exclusion criteria
1. 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)
2. Age < 16
3. 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

Organisation
University of Zurich

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, University of Zurich, Switzerland, UZH CH, UZH

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 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