

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

Submission date 03/08/2017	Recruitment status No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
Registration date 08/08/2017	Overall study status Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 23/06/2021	Condition category Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data <input type="checkbox"/> 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

Contact name

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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

Study design

Micro-randomized controlled trial

Primary study design

Interventional

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, Switzerland, University of Zurich, 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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes