Does an app based short intervention improve quality of sleep?

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
05/04/2019		☐ Protocol		
Registration date 08/04/2019	Overall study status Completed	Statistical analysis plan		
		[X] Results		
Last Edited	Condition category	Individual participant data		
24/03/2023	Nervous System Diseases			

Plain English summary of protocol

Background and study aims

Two out of three adults in Germany have trouble sleeping at least occasionally, among employees the numbers rise up to 80%. Poor sleep quality can result in daytime fatigue and reduce performance, and is also associated with irritability and depressed mood. Only a few people with poor sleep quality seek professional help. Therefore, researchers have developed an app-based training to help people implement behaviour changes and improve sleep quality. The aim of this study is to find out whether this training helps improve sleep.

Who can participate? German-speaking adults

What does the study involve?

Participants are randomly allocated to either receive access to the app-based training immediately or to wait for 6 months. The training is self-paced, but the recommended duration is 8 weeks (1 chapter per week). There are three assessments (start of the study, 8 weeks, 26 weeks).

What are the possible benefits and risks of participating? Participants may improve their sleep quality. For some participants, thinking about their thoughts and feelings may be upsetting.

Where is the study run from?

Technische Universität Dresden, Institute of Clinical Psychology and Psychotherapy (Germany)

When is the study starting and how long is it expected to run for? March 2019 to October 2020

Who is funding the study?
There is no external funding for the study

Who is the main contact? Bianka Vollert

bianka.vollert@tu-dresden.de (updated 03/07/2019, previously: Dr Ina Beintner ina.beintner@tu-dresden.de)

Study website

https://tu-dresden.de/mn/psychologie/ikpp/e-mental-health/forschung/refresh

Contact information

Type(s)

Public

Contact name

Ms Bianka Vollert

Contact details

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Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

1

Study information

Scientific Title

Refresh - Does an app based short intervention improve quality of sleep? A randomised controlled feasibility study

Acronym

REFRESH

Study objectives

The current study seeks to examine the acceptability and efficacy of an app-based short intervention (Refresh) to improve sleep quality compared to a waitlist control group in the general population. The hypothesis is that Refresh will be efficacious, with significant improvements of sleep quality within the intervention group and differences at post intervention and follow-up between the intervention group and the waitlist control group.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approved 29/03/2019, Ethikkommission (IRB) an der TU Dresden (Fetscherstraße 74, 01307 Dresden, Germany; Tel: +49 (0)351 458 2992; Email: ethikkommission@mailbox.tu-dresden.de), ref: EK 111032019

Study design

Single-center unblinded randomised controlled trial

Primary study design

Interventional

Secondary study design

Randomised controlled trial

Study setting(s)

Internet/virtual

Study type(s)

Quality of life

Participant information sheet

Not available in English

Health condition(s) or problem(s) studied

Poor sleep quality

Interventions

Method of randomisation: stratified block randomization (strata: gender, sleep quality (RIS total score <12 vs >=12), use of sleep medication).

- 1. Refresh: an app-based short intervention to improve sleep quality
- 2. Waitlist control

The intervention is self-paced, but the recommended duration is 8 weeks (1 chapter per week). There are three assessments (baseline, post-intervention (+8 weeks), follow-up (+26 weeks).

Intervention Type

Behavioural

Primary outcome measure

Sleep quality is measured using the Regensburg Insomnia Scale (RIS) Total Score at baseline and post-Intervention (8 weeks)

Secondary outcome measures

- 1. Sleep quality is measured using the Regensburg Insomnia Scale Total Score at baseline and follow-up (26 weeks)
- 2. Depression symptoms are measured using the depression scale from the Patient Health

Questionnaire (PHQ-9) Total Score at baseline, post intervention (8 weeks) and follow-up (26 weeks)

3. Acceptance of the training is measured using the Working Alliance Scale adapted for Online Interventions at Post Intervention (8 weeks) and usage of the intervention (during intervention period)

Overall study start date

01/03/2019

Completion date

31/10/2020

Eligibility

Key inclusion criteria

- 1. Over 18 years of age
- 2. Fluent in German
- 3. Access to the Internet during the intervention period

Participant type(s)

Healthy volunteer

Age group

Adult

Lower age limit

18 Years

Sex

Both

Target number of participants

586

Total final enrolment

371

Key exclusion criteria

- 1. Current treatment for depression
- 2. History of psychotic or bipolar disorder
- 3. Suicidal ideation

Date of first enrolment

15/04/2019

Date of final enrolment

31/03/2020

Locations

Countries of recruitment

Austria

Germany

Luxembourg

Switzerland

Study participating centre

Technische Universität Dresden, Institute for Clinical Psychology and Psychotherapy

Chemnitzer Straße 46 Dresden Germany 01187

Sponsor information

Organisation

Technical University Dresden (Technische Universität Dresden)

Sponsor details

Institut für Klinische Psychologie und Psychotherapie Chemnitzer Str. 46 Dresden Germany 01187 +49(0)351-463-0 bianka.vollert@tu-dresden.de

Sponsor type

University/education

ROR

https://ror.org/042aqky30

Funder(s)

Funder type

Other

Funder Name

Results and Publications

Publication and dissemination plan

Planned publication of results in a high-impact peer reviewed journal. No additional documents will be publicly available.

Intention to publish date

31/03/2021

Individual participant data (IPD) sharing plan

After the main results of the study have been published, anonymised participant level data can be shared for individual patient data meta-analyses upon request to Dr Ina Beintner (Ina. Beintner@tu-dresden.de), stating the purpose and methods of the planned project. ICMJE authorship recommendations apply. Participants give consent that their anonymised data can be used in research cooperation projects.

IPD sharing plan summary

Available on request

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	outcome measure results	21/03/2023	24/03/2023	Yes	No