Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Nov 2026

Development of a web application and studying its effect on the college students' stress management

Protocol summary

Study aim
The aim of this study is to develop a web application and determine its impact on the college students' stress management.
Design
A randomized clinical trial with a control group, the sample size in each intervention and control groups is 50 students.
Settings and conduct
The study setting will be Shiraz University of Medical Sciences. In this study blinding won't performed.
Participants/Inclusion and exclusion criteria
Students aged between 20-35 years old. BS students (the second semester and higher) and MS students Having a smartphone, computer, laptop or tablet Not suffering from psychological problems known by a physician. Not taking psychiatric drugs. Not be addicted according to the students' self expression. Not having chronic physical illness. Not having physical limitations.
Intervention groups
In the intervention group, students will use the web application developed in this study for 3 months. This application consists of various parts including metaphors based on theory of Acceptance and Commitment Therapy (ACT), 4-7-8 breathing technique, Emotional Freedom Technique, pictures of nature and relaxing music and videos and in control group students will use an application unrelated to the stress management for 3 months.
Main outcome variables
Perceived stress

General information

Reason for update
Acronym
IRCT registration information
IRCT registration number: **IRCT20160427027647N2**
Registration date: **2020-05-14, 1399/02/25**
Registration timing: **prospective**

Last update: **2020-05-14, 1399/02/25**
Update count: **0**
Registration date
2020-05-14, 1399/02/25

Registrant information
Name
Fatemeh Khademian
Name of organization / entity
School of Management and Medical Informatics, Shiraz University of Medical Sciences, Shiraz, Iran
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Recruitment status
Recruitment complete
Funding source

Expected recruitment start date
2020-06-14, 1399/03/25
Expected recruitment end date
2020-09-05, 1399/06/15
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Development of a web application and studying its effect on the college students' stress management

Public title
The impact of using a web application on college

students' stress management

Purpose
Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:
Students aged 20-35 years old. BS students (second and higher semester) and MS students. Having a smartphone, computer, laptop or tablet. Not suffering from known psychological problems Not taking psychiatric drugs. Not be addicted according to the the students' self expression. Not having chronic physical illness. Not having physical disabilities. Willing to participate in the study.

Exclusion criteria:
Unwillingness to continue the study

Age
From **20 years** old to **35 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **100**

Randomization (investigator's opinion)
Randomized

Randomization description
Students in each college will be randomly divided into intervention and control groups using permuted block randomization (5 blocks of size 10). Random Allocation Software will be used to generate the blocks.

Blinding (investigator's opinion)
Not blinded

Blinding description

Placebo
Used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Ethics Committee of Shiraz University of Medical Sciences

Street address
Zand Av, The Central Building of Shiraz University of Medical Sciences, Shiraz, Iran

City
Shiraz

Province
Fars

Postal code
۱۴۳۳۶ - ۷۱۳۴۸

Approval date
2019-07-20, 1398/04/29

Ethics committee reference number
IR.SUMS.REC.1398.664

Health conditions studied

1

Description of health condition studied
Stress

ICD-10 code
Z73.3

ICD-10 code description
Stress, not elsewhere classified

Primary outcomes

1

Description
Perceived stress

Timepoint
Before the intervention, after the intervention (3 months later)

Method of measurement
Perceived stress scale questionnaire

Secondary outcomes

1

Description
Sleep quality

Timepoint
Before the intervention, after the intervention (3 months later)

Method of measurement
Pittsburgh Sleep Quality Index

Intervention groups

1

Description
Intervention group: In the intervention group, students will use the web application developed in this study for 3 months. This application consists of various parts including metaphors based on theory of Acceptance and Commitment Therapy (ACT), 4-7-8 breathing technique, Emotional Freedom Technique, pictures of nature and relaxing music and videos.

Category
Behavior

2

Description
Control group: Students will use an application unrelated to stress management for 3 months.

Category

Behavior

Recruitment centers

1

Recruitment center
Name of recruitment center
School of Management and Medical Informatics
Full name of responsible person
Fatemeh Khademian
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2

Recruitment center
Name of recruitment center
School of Health
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shiraz University of Medical Sciences
Full name of responsible person
Dr. Younes Ghasemi
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Email
vcrdep@sums.ac.ir
Web page address
http://research.sums.ac.ir/fa/index.html
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz University of Medical Sciences
Proportion provided by this source
100
Public or private sector
Public
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Academic

Person responsible for general inquiries

Contact
Name of organization / entity
Shiraz University of Medical Sciences
Full name of responsible person
Ramin Ravangard
Position
Associate Professor
Latest degree
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Other areas of specialty/work
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Person responsible for scientific inquiries

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National Agency of Strategic Research in Medical Education

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
No - There is not a plan to make this available
Justification/reason for indecision/not sharing IPD
After completion of the study, if necessary, the encoded data will be published along with the article.
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Undecided - It is not yet known if there will be a plan to make this available
Informed Consent Form
Undecided - It is not yet known if there will be a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Undecided - It is not yet known if there will be a plan to make this available
Data Dictionary
Undecided - It is not yet known if there will be a plan to make this available
Title and more details about the data/document
Abstract and references
When the data will become available and for how long
6 months after publishing the results
To whom data/document is available
Academic Researchers and Academic Institutes
Under which criteria data/document could be used
When referring to this research, mention the name of the researchers.
From where data/document is obtainable
Mailing address, or email address, and phone number, Fatemeh Khademian
What processes are involved for a request to access data/document
First, the applicant requests via email or telephone. It will be answered on demand within 2 months.
Comments
Please email as much as possible.