

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 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

Country

Iran (Islamic Republic of)

Phone

+98 71 3234 0774

Email address

stud2420262816@sums.ac.ir

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

۷۱۳۳۶ - 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

Street address

Almas Building, Allay 29, Qasrodasht Av

City

Shiraz

Province

Fars

Postal code

۷۱۳۳۶۵۴۳۶۱

Phone

+98 71 3224 0778

Email

fkhademian90@yahoo.com

Web page address

<https://mgsch.sums.ac.ir/>

2

Recruitment center

Name of recruitment center

School of Health

Full name of responsible person

Fatemeh Khademian

Street address

School of Health, Al-Zahra Street

City

Shiraz

Province

Fars

Postal code

۱۴۳۳۶ - ۷۱۳۴۸

Phone

+98 71 3725 1001

Email

fkhademian90@yahoo.com

Web page address

<https://schealth.sums.ac.ir/>

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

Full name of responsible person

Dr. Younes Ghasemi

Street address

Zand Av, The Central Building of Shiraz University of Medical Sciences

City

Shiraz

Province

Fars

Postal code

۱۴۳۳۶ - ۷۱۳۴۸

Phone

+98 71 3235 7282

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

Ph.D.

Other areas of specialty/work

Health Services Management

Street address

Almas Building, Allay 29, Qasrodasht Av

City

Shiraz

Province

Fars

Postal code

۷۱۳۳۶۵۴۳۶۱

Phone

+98 71 3234 0778

Email

ra_ravangard@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

National Agency of Strategic Research in Medical Education

Full name of responsible person

Azam Aslani

Position

Assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

Medical Informatics

Street addressNo. 65, Saeedi St, after Ayatollah Hashemi Rafsanjani
Crossroads, Valiasr St, Tehran**City**

Tehran

Province

Tehran

Postal code

۱۴۳۳۶۷۱۳۴۸

Phone

+98 21 2629 2464

Email

azamaslani@gmail.com

Web page address<http://nasrme.ac.ir/>

+98 71 3234 0778

Email

fkhademian90@yahoo.com

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 obtainableMailing 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.

Person responsible for updating data**Contact****Name of organization / entity**

Shiraz University of Medical Sciences

Full name of responsible person

Fatemeh Khademian

Position

PhD student

Latest degree

Master

Other areas of specialty/work

Health Information Management

Street address

Almas Building, Allay 29, Qasrodasht Av

City

Shiraz

Province

Fars

Postal code

۷۱۳۳۶۵۴۳۶۱

Phone