

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

18 Jun 2026

### design and evaluation of a Mobile application based on the protection motivation theory on the preventive behaviors of harmful effects of sunshine in girl and boy students

#### Protocol summary

##### Study aim

Determining the effect of a Mobile application based on the protection motivation theory on the preventive behaviors of harmful effects of sunshine in girl and boy students

##### Design

Clinical trial with control group, with parallel groups, Not blinded , randomized, phase zero on 320 male and female students

##### Settings and conduct

The place of study in Zahedan and how to implement it by installing an educational application on a mobile phone

##### Participants/Inclusion and exclusion criteria

Male and female students in the fourth to sixth grades of elementary school in Zahedan in the year 1399-1400

##### Intervention groups

. We will provide a 3D mobile application for aging the face that allows the user (target group students) to take a 3D selfie and then offers the person two categories of classification 1. Daily protection Sun exposure 2- Lack of daily protection from the sun and then the changed face of a person during the next 5 to 25 years when exposed to prolonged and frequent exposure to ultraviolet light of the sun. All effects by type. The skin is the person that the user can choose at the beginning of the program. The app also shows the most common skin cancers caused by ultraviolet light through additional buttons and calculates how the odds ratio increases with different behaviors. In addition, the program advises on sun protection, explains facial changes, and examines the skin using ABCDE (asymmetry), border irregularity, color variation. encourages variety, diameter, and evolution. The control group is a group that does not intervene in order to satisfy the maximum internal validity. But at the end of the study and after collecting the data, we do the same intervention that we did in the intervention group

in the control group.

##### Main outcome variables

The effect of education on the behavior and structures of protection motivation theory

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200924048825N1**

Registration date: **2021-02-08, 1399/11/20**

Registration timing: **prospective**

Last update: **2021-02-08, 1399/11/20**

Update count: **0**

##### Registration date

2021-02-08, 1399/11/20

##### Registrant information

##### Name

ESMAT-TOSADAT HOSSEINI

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 54 3344 0098

##### Email address

e.hosseini@stu.ssu.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2021-06-22, 1400/04/01

##### Expected recruitment end date

2021-12-22, 1400/10/01

##### Actual recruitment start date

empty  
**Actual recruitment end date**  
empty  
**Trial completion date**  
empty

**Scientific title**  
design and evaluation of a Mobile application based on the protection motivation theory on the preventive behaviors of harmful effects of sunshine in girl and boy students

**Public title**  
The effect of education Mobile application on the preventive behaviors of harmful effects of sunshine

**Purpose**  
Prevention

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Male and female students in the fourth to sixth grades of elementary school in Zahedan in the year 1399-1400  
**Exclusion criteria:**  
Reluctance and satisfaction to participate in the study  
Absence of students

**Age**  
No age limit

**Gender**  
Both

**Phase**  
0

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **320**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
Randomization method: Limited randomization because we want the sample size to be equal in both intervention and control groups, so we will choose this limited randomization as a block randomization with 5 blocks and in each block one school in the intervention group and one school in the group Control is placed.  
Randomization unit: Multi-stage cluster  
Randomization tool: statistical software  
Random allocation concealment: using opaque envelopes sealed with random sequence  
In this way, based on the volume of the research sample, a number of envelopes with aluminum wrappers (in order not to clarify the contents of the envelopes) are prepared and each of the random assignments created is recorded on a card And the cards are placed in the mail envelopes in order . In order to maintain a random sequence, envelopes are numbered in the same way on the outer surface. Finally, the lids of the letter envelopes are glued and placed inside the boxes, respectively. At the beginning of the registration of participants, based on the order of entry of eligible participants to study, one of the envelopes of the letter is opened in order and the assigned group of the participant is revealed.

**Blinding (investigator's opinion)**  
Not blinded

**Blinding description**

**Placebo**  
Not used  
**Assignment**  
Parallel  
**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

##### Name of ethics committee

دانشگاه علوم پزشکی شهید صدوقی یزد

##### Street address

Sarollah Boulevard 7

##### City

zahedan

##### Province

Sistan-va-Balouchestan

##### Postal code

9817765377

#### Approval date

2020-10-21, 1399/07/30

#### Ethics committee reference number

IR.SSU.SPH.REC.1399.135

## Health conditions studied

### 1

#### Description of health condition studied

skin cancer

#### ICD-10 code

#### ICD-10 code description

## Primary outcomes

### 1

#### Description

knowledge and behavior and structures of protection motivation

#### Timepoint

pretest and posttest

#### Method of measurement

questionnaire

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: The intervention in the school under evaluation, which includes a educational session of

approximately 25 to 30 minutes, including the installation and download time of 45 minutes, will be performed in the virtual classroom environment of Shad software using a photography application. For the first 10 minutes, the student takes a three-dimensional selfie, then offers two categories of classification. . In 15 to 20 minutes, the student interacts with the remaining functions of the program, including facial changes, ABCDE rules, and sun protection instructions. In the last 5 to 10 minutes. After the intervention, the participants are sent instructions to remove the application from their phone and immediately after the intervention, students are asked to assess the understanding of the intervention immediately after the intervention. Complete (posttest) and send to the executor. Again, 3 and 6 months after the intervention, an invitation will be sent to the students' knowledge, who will be asked to receive a post-test questionnaire and send it to the project manager after completion.

**Category**

Prevention

**2****Description**

Control group: There is no intervention and at the end of the work, educational materials will be provided to them.

**Category**

Other

**Recruitment centers****1****Recruitment center****Name of recruitment center**

مدارس ابتدایی دخترانه و پسرانه شهر زاهدان

**Full name of responsible person**

عصمت السادات حسینی

**Street address**

Boulevard saralah 7

**City**

zahedan

**Province**

Sistan-va-Balouchestan

**Postal code**

9817765377

**Phone**

+98 54 3344 0098

**Email**

hosini.esmat@gmail.com

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Yazd University of Medical Sciences

**Full name of responsible person**

esmat sadat hosseini

**Street address**

Yazd-Alam Square Boulevard shohaday gomnam

**City**

yazd

**Province**

Yazd

**Postal code**

۸۹۱۵۱۷۳۱۶۰

**Phone**

+98 35 3820 9100

**Email**

hosini.esmat@gmail.com

**Grant name****Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

**Title of funding source**

Yazd 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**

Yazd University of Medical Sciences

**Full name of responsible person**

esmat sadat hosseini

**Position**

student phd

**Latest degree**

Master

**Other areas of specialty/work**

Health Promotion

**Street address**

bolvare saralah 7

**City**

zahedan

**Province**

Sistan-va-Balouchestan

**Postal code**

9817765377

**Phone**

+98 54 3344 0098

**Fax****Email**

hosini.esmat@gmail .com

**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Yazd University of Medical Sciences

**Full name of responsible person**

esmat sadat hosseini

**Position**

student phd

**Latest degree**

Master

**Other areas of specialty/work**

Health Promotion

**Street address**

bolvare saralah 7

**City**

zahedan

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Sistan-va-Balouchestan

**Postal code**

9817765377

**Phone**

+98 54 3344 0098

**Email**

e.hosseini@stu.ssu.ac.ir

**Person responsible for updating data**

**Contact**

**Name of organization / entity**

Yazd University of Medical Sciences

**Full name of responsible person**

esmat sadat hosseini

**Position**

student phd

**Latest degree**

Master

**Other areas of specialty/work**

Health Promotion

**Street address**

bolvare saralah 7

**City**

zahedan

**Province**

Sistan-va-Balouchestan

**Postal code**

9817765377

**Phone**

+98 54 3344 0098

**Email**

hosini.esmat@gmail.com

**Sharing plan**

**Deidentified Individual Participant Data Set (IPD)**

Undecided - It is not yet known if there will be a plan to make this available

**Study Protocol**

Undecided - It is not yet known if there will be a plan to make this available

**Statistical Analysis Plan**

Not applicable

**Informed Consent Form**

Undecided - It is not yet known if there will be a plan to make this available

**Clinical Study Report**

Undecided - It is not yet known if there will be a plan to make this available

**Analytic Code**

Not applicable

**Data Dictionary**

Not applicable