

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jul 2026

Investigating the Effect of Web-Based Education on Weight Loss in Overweight and Obese Adolescents Using Planned Behavior Theory

Protocol summary

Study aim

Investigating the Effect of Web-Based Education on weight Loss in Overweight and Obese Adolescents Based on the Theory of Planned Behavior

Design

Randomized, controlled, parallel-group, open-label clinical trial on 182 adolescents (91 in each group) without blinding

Settings and conduct

Eligible adolescents in Tonekabon city are identified through the (SIB) system and after obtaining informed consent, a pre-test and initial measurement of body mass index (with a calibrated scale by a single person) is performed. Then, individuals are randomly assigned to two groups. The intervention group receives educational videos via the web. Three months after the intervention, a post-test and re-measurement of body mass index is performed for both groups.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Overweight and obese adolescents aged 13 to 19 years, and adolescents with access to mobile phones and the Internet. Exclusion criteria: Normal weight adolescents and those who do not wish to participate in the study.

Intervention groups

Intervention group: Received 6 20-minute training sessions via the web (videos recorded by the researcher) with the following titles: Introduction and positive attitude towards weight loss, mental norms and social support, perceived behavioral control and goal setting. Healthy eating and meal management, physical activity and craving management, self-monitoring, feedback and sustained motivation. Control group: Received the usual training provided by health care providers in comprehensive health centers.

Main outcome variables

Body Mass Index (BMI); Attitude toward the behavior; Subjective norms; Perceived behavioral control; Behavioral intention; Behavior (performance); Knowledge

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230112057116N5**

Registration date: **2026-06-30, 1405/04/09**

Registration timing: **prospective**

Last update: **2026-06-30, 1405/04/09**

Update count: **0**

Registration date

2026-06-30, 1405/04/09

Registrant information

Name

Peigham Heidarpour

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 21 2207 4156

Email address

pheidarpoomd@sbmu.ac.ir

Recruitment status

Not yet recruiting

Funding source

Expected recruitment start date

2026-08-23, 1405/06/01

Expected recruitment end date

2026-11-22, 1405/09/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the Effect of Web-Based Education on Weight Loss in Overweight and Obese Adolescents Using Planned Behavior Theory	
Public title	The Effect of Web-Based Education on weight Loss in Adolescents"
Purpose	Prevention
Inclusion/Exclusion criteria	
Inclusion criteria:	People who have access to the internet and mobile phones." "Overweight and obese Adolescents
Exclusion criteria:	Adolescents with normal weight
Age	From 13 years old to 18 years old
Gender	Both
Phase	N/A
Groups that have been masked	No information
Sample size	Target sample size: 182
Randomization (investigator's opinion)	Randomized
Randomization description	This study is an open-label randomized controlled trial; therefore, participants and researchers will be aware of the assigned intervention type. However, to maintain allocation concealment, a stratified block randomization method with Sequentially Numbered, Opaque, Sealed Envelopes (SNOSE) will be used. The study strata include four subgroups: 1) obese girls, 2) overweight girls, 3) obese boys, and 4) overweight boys. Within each stratum, participants will be allocated to intervention groups A and B in a 1:1 ratio. The block size is fixed at 4, such that in each block, 2 participants are assigned to one group and 2 to the other group. Random sequences will be generated separately for each stratum using SAS software version 9.4. These sequences will then be recorded on cards, and each card will be placed inside an opaque envelope. The envelopes will be prepared in advance, completely opaque, sealed, and non-transparent from the outside, with only the sequence number written on the outer surface. After placing the card inside, the envelope flaps will be glued and sealed to prevent any view of the contents. The envelopes will be kept in a box based on sequential numbering. Upon enrollment of each eligible participant, the envelope corresponding to the order of entry will be opened, and the allocated group will be revealed. In this way, prediction or manipulation of the allocation process will not be possible.
Blinding (investigator's opinion)	Not blinded
Blinding description	
Placebo	Not used
Assignment	Parallel
Other design features	
Secondary Ids	empty
Ethics committees	
<u>1</u>	
Ethics committee	
Name of ethics committee	Ethics Committee of Shahid Beheshti University of Medical Sciences
Street address	Toraj Alley, Valiasr Street,
City	Tehran
Province	Tehran
Postal code	1985717443
Approval date	2026-04-22, 1405/02/02
Ethics committee reference number	IR.SBMU.SME.REC.1405.001
Health conditions studied	
<u>1</u>	
Description of health condition studied	Obesity
ICD-10 code	
ICD-10 code description	
Primary outcomes	
<u>1</u>	
Description	Mean change in Body Mass Index (BMI)
Timepoint	Before and three months after the educational intervention.
Method of measurement	Weight (calibrated scale, 0.1 kg precision) and height (stadiometer, 0.1 cm precision) are measured by a single trained assessor. BMI is calculated as weight (kg) divided by height squared (m ²). Measurements are taken at baseline and 3 months post-intervention.
Secondary outcomes	
<u>1</u>	
Description	Mean change in knowledge
Timepoint	Before and three months after the intervention
Method of measurement	

Mazloumi & Navabi questionnaire (based on the Theory of Planned Behavior

2

Description

Mean change in attitude

Timepoint

Before and three months after the intervention

Method of measurement

Mazloumi & Navabi questionnaire (based on the Theory of Planned Behavior

3

Description

Mean change in subjective norms

Timepoint

Before and three months after the intervention

Method of measurement

Mazloumi & Navabi questionnaire (based on the Theory of Planned Behavior

4

Description

Mean change in perceived behavioral control

Timepoint

Before and three months after the intervention

Method of measurement

Mazloumi & Navabi questionnaire (based on the Theory of Planned Behavior

5

Description

Mean change in behavioral intention

Timepoint

Before and three months after the intervention

Method of measurement

Mazloumi & Navabi questionnaire (based on the Theory of Planned Behavior

6

Description

Mean change in behavior (performance)

Timepoint

Before and three months after the intervention

Method of measurement

Mazloumi & Navabi questionnaire (based on the Theory of Planned Behavior

Intervention groups

1

Description

Intervention group: Receives 6 sessions of 20-minute web-based education (pre-recorded videos by the researcher) with the following titles: Introduction and positive attitude toward weight loss Subjective norms and social support Perceived behavioral control and goal

setting Healthy nutrition and meal management Physical activity and craving management Self-monitoring, feedback, and sustained motivation

Category

Lifestyle

2

Description

Control group: Receives routine education provided by healthcare providers at comprehensive health centers.

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

Tonekabon Health center

Full name of responsible person

Peigham Heidarpour

Street address

Between Shahid Bakhshi and Mojtahedzad Streets, Allameh Tonekaboni Street, Imam Khomeini Street

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Mazandaran

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peigham.heidarpour@yahoo.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Afshin Zarghi

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7th Floor, Daneshjoo Blvd, Velenjak.

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Grant name

Grant code / Reference number

Is the source of funding the same sponsor organization/entity?

Yes
Title of funding source
Shahid Beheshti 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
Shahid Beheshti University of Medical Sciences
Full name of responsible person
Peigham Heidarpour
Position
Associate Professor
Latest degree
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Other areas of specialty/work
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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

Individual participant data will not be shared publicly to protect confidentiality and ethical standards.

Study Protocol

No - There is not a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

No - There is not a plan to make this available

Analytic Code

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available