Clinical Trial Protocol
Iranian Registry of Clinical Trials

09 Nov 2026

The effectiveness of combined exercises (resistance and endurance) on body image shame and body management in overweight women.

Protocol summary

Study aim
Determining the effectiveness of combined exercises (resistance and endurance) on body image shame and body management in overweight women in Izeh city.

Design
This study is a randomized, double-blind, parallel-group clinical trial conducted on 30 overweight women (15 in the combined exercise intervention group and 15 in the control group). The sample allocation is done by simple randomization using a random number generator (such as the RAND function in Excel or specialized statistical software); first, each participant receives an identification code and is sorted based on the generated random number, and then divided into two groups of 15.

Settings and conduct
In this study, a field experimental method with a pretest-posttest design is used in one of the sports centers in Izeh city. In order to maintain confidentiality, the participants' information will be recorded anonymously and with an abbreviated code. Also, the exercise instructors, evaluators, and statistical analysts will be unaware of the group allocation to prevent bias in the interpretation of data and results.

Participants/Inclusion and exclusion criteria
Inclusion Criteria Be between 18 and 35 years old. Be overweight. Provide informed consent for participation in the study. Exclusion Criteria Having a physical illness that interferes with the treatment process. Use of psychiatric medications. History of substance or drug abuse.

Intervention groups
Intervention group (combined exercises): The combined exercise intervention (resistance and endurance) will be performed in groups based on the protocol of Sobhanipour et al. (2019) in 8 90-minute sessions, one session per week. Control group: Participants in this group will not receive any intervention.

Main outcome variables
Body image shame; body management.

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20260729070428N1**
Registration date: **2026-09-04, 1405/06/13**
Registration timing: **prospective**

Last update: **2026-09-04, 1405/06/13**
Update count: **0**

Registration date
2026-09-04, 1405/06/13

Registrant information

Name
arezou zamzam

Name of organization / entity
Daneshgah azad eslami vahad izeh

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-09-20, 1405/06/29

Expected recruitment end date
2026-10-06, 1405/07/14

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effectiveness of combined exercises (resistance and endurance) on body image shame and body management in overweight women.

Public title
Effectiveness of combined exercises (resistance and endurance)

Purpose
Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:
Be between 18 and 35 years old. Be overweight. Provide informed consent for participation in the study.

Exclusion criteria:
Having a physical illness that interferes with the treatment process. Use of psychiatric medications. History of substance or drug abuse.

Age
From **18 years** old to **35 years** old

Gender
Female

Phase
N/A

Groups that have been masked

- Care provider
- Outcome assessor
- Data analyser

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
In this study, a simple randomization method is used to assign participants to two experimental groups (combined resistance and endurance exercises) and control. The randomization unit in this study is overweight women eligible for the study in Izeh County. First, a complete list of volunteers who have been selected based on the study entry and exit criteria is prepared. Then, each participant is assigned a unique numerical identification code. These codes are entered into the Random Number Generator software and a random number is generated for each individual. After generating these numbers, the participants are sorted in ascending order based on the value of the random number. Then, the individuals are assigned to two groups; sequentially, the first 15 people on the list are assigned to the experimental group (combined exercise intervention) and the next 15 people are assigned to the control group. With this method, the order of entry into the study and the researcher's knowledge of the participants will not play any role in determining the group. To conceal allocation, the person responsible for entering data and performing the randomization process in the software will be independent of the trainers implementing the exercise protocol and the evaluators of the research variables (body image shame and body management) and will not have the opportunity to know the process of implementing the sessions or changes in the allocation of individuals. Also, the identification codes of the participants will be kept confidential and separate from their other personal information. Therefore, it will not be possible to predict the assigned group for each participant before the randomization process.

Blinding (investigator's opinion)
Double blinded

Blinding description
In order to control bias and improve internal validity of the study, this study was designed with a double-blind protocol; in this way, the outcome assessor and data analyst will be kept unaware of the allocation of overweight women to the experimental (combined exercise) and control groups. In this process, the outcome assessor will collect data related to body image shame and body management at all stages of the pre-test and post-test, without knowing the assigned group of the participants, in order to prevent bias in the measurement; also, all raw data will be provided to the statistical analyst with anonymous codes (such as groups 1 and 2), and the true nature of the groups will not be revealed until the end of the data analysis process. All allocation steps will be performed by an independent person from the research team, and decoding of allocation codes will be done only after the final completion of the statistical analyses.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Behbahan Islamic Azad University Ethics Committee

Street address
Shahid Bayani St., Amir Kabir Blvd.

City
بهبهان

Province
Khouzestan

Postal code
6361713198

Approval date
2026-06-30, 1405/04/09

Ethics committee reference number
IR.IAU.BEHBAHAN.REC.1405.173

Health conditions studied

1

Description of health condition studied
Psychological problems caused by obesity

ICD-10 code

E66.9

ICD-10 code description

Obesity, unspecified

Primary outcomes

1

Description

Shame on the picture.

Timepoint

before performing the intervention and two weeks after completion of the intervention

Method of measurement

Kesh and Pruzinski Body Image Questionnaire (1983)

2

Description

Body management

Timepoint

before performing the intervention and two weeks after completion of the intervention

Method of measurement

Manakhani and Rakibi Body Management Questionnaire (2019)

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Combined training sessions (resistance and endurance) will be implemented based on the standard protocol designed by Sobhanipour et al. (2016; 2019). This intervention will be conducted in the form of 90-minute group sessions for the experimental group. Combined training is an approach designed to improve functional capabilities and body composition, reduce body image shame, and strengthen body management strategies. It helps overweight women rebuild their body evaluation patterns by promoting the perception of physical competence, reducing negative body sensitivities, and increasing self-efficacy resulting from physiological adaptations. The structure of the sessions of this intervention has main implementation axes; each session begins with a 10-minute general warm-up and preparation of the musculoskeletal system and ends with a 10-minute cool-down and return to the initial state, and the main body of the exercise includes two parts: endurance and resistance training; The endurance part includes continuous running on a treadmill with an initial intensity of 40% of maximum oxygen consumption for 35 minutes, the intensity and duration of which are increased according to the progress of the subjects every week to an intensity of 75% and a duration of 60 minutes, and the resistance part includes leg press, chest press, front thigh, butterfly, back thigh, shoulder, lateral pull (lat from behind) and bicep curl movements, which are performed in 3 sets of 12 repetitions in an interval manner (with a rest of 2 to 3 minutes between sets and 1 minute between movements) and with an initial training load of 30% of one repetition maximum, and 5% of the overload is added every two weeks to reach 60% of maximum strength. The main emphasis of these exercises is homogenization and control of training pressure based on the Borg Pressure Perception Index (Borg Scale) and gradual progression of workload in order to reduce negative evaluations of the body and improve control and management of physical dimensions.

Category

N/A

2

Description

Control group: They do not receive any intervention or treatment.

Category

N/A

Recruitment centers

1

Recruitment center

Name of recruitment center

Shahin Sports House

Full name of responsible person

Arezo Zamzam

Street address

South Hafez Street, No. 79.

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Behrang Mohammad Salehi

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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
Islamic Azad University

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
Islamic Azad University

Full name of responsible person
Arezou Zamzam

Position
Master's student

Latest degree
Bachelor

Other areas of specialty/work
Psychology

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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
rticipant data is completely confidential and I do not intend to publish it.

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

Statistical Analysis Plan
No - There is not 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
Undecided - It is not yet known if there will be 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