

Clinical Trial Protocol

Iranian Registry of Clinical Trials

17 Sep 2026

Investigating the effect of virtual sports training on self-concept and self-esteem of obese girls

Protocol summary

Study aim

Determining the effect of virtual exercise on self-concept and self-esteem of obese girls

Design

This study includes 7-10-year-old girls suffering from obesity in Khorramabad city, who are divided into two intervention and control groups by a simple random method.

Settings and conduct

By referring to the primary schools of Khorram Abad city, 104 girls with obesity will be selected based on the study entry criteria, and then the samples will be randomly divided into two intervention and control groups.

Participants/Inclusion and exclusion criteria

Entry criteria: being in the age range of 7 to 10 years, interest and motivation to exercise, not having diseases that lead to obesity. Obesity Exclusion criteria: lack of consent of mother and child to participate in the study, lack of interest and motivation to exercise, having diseases that lead to obesity, having pain for any reason in the process of conducting the study, single parenthood, addiction of divorced parents, loss Education in recent years or the presence of neuromuscular disorders and cerebral palsy.

Intervention groups

The intervention includes the implementation of sports exercises based on sports instructions. The sports training protocol (clip recorded by the researcher) includes eight weeks of training. There are three training sessions per week and each session consists of 30 minutes of training. After the intervention, the self-esteem and self-concept questionnaire is filled by the parents. Control group: This group does not do sports exercises.

Main outcome variables

Behavior and self-respect, mental status and school, physical characteristics and appearance, anxiety, popularity Happiness and satisfaction, general self-esteem, social self-esteem, family self-esteem, academic

self-esteem

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20231103059944N1**

Registration date: **2023-11-08, 1402/08/17**

Registration timing: **prospective**

Last update: **2023-11-08, 1402/08/17**

Update count: **0**

Registration date

2023-11-08, 1402/08/17

Registrant information

Name

Fatemeh Sadeghi

Name of organization / entity

Lorestan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 66 3272 7617

Email address

fa.sadeghi1995@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2023-12-23, 1402/10/02

Expected recruitment end date

2024-02-19, 1402/11/30

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigating the effect of virtual sports training on self-concept and self-esteem of obese girls

Public title

Investigating the effect of virtual sports training on self-concept and self-esteem of obese girls

Purpose

Other

Inclusion/Exclusion criteria**Inclusion criteria:**

Being in the age range of 7 to 10 years Interest and motivation to exercise Not having diseases that lead to obesity Not mentally retarded Obesity

Exclusion criteria:

Lack of consent of mother and child to participate in the study Lack of interest and motivation to exercise Having diseases that lead to obesity Having pain for any reason during the study implementation process being a single parent Parental addiction divorce Academic decline in recent years Presence of neuromuscular disorders and cerebral palsy

Age

From **7 years** old to **10 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Participant
- Investigator

Sample size

Target sample size: **104**

Randomization (investigator's opinion)

Randomized

Randomization description

Block randomization in order to randomly assign people in two test and control groups

Blinding (investigator's opinion)

Double blinded

Blinding description

The people participating in the study are not aware of which group (intervention or control) they are placed in, and the researcher places the participants in two groups based on a random method.

Placebo

Not used

Assignment

Parallel

Other design features**Secondary Ids**

empty

Ethics committees**1****Ethics committee****Name of ethics committee**

Ethics Committee of Khorramabad University of Medical Sciences

Street address

Kamalvand - Khorram Abad University of Medical Sciences

City

Khorramabad

Province

Lorestan

Postal code

6813833946

Approval date

2022-04-22, 1401/02/02

Ethics committee reference number

IR-lums.rce.1401.196

Health conditions studied**1****Description of health condition studied**

obesity

ICD-10 code

E66.0

ICD-10 code description

Obesity due to excess calories

Primary outcomes**1****Description**

Self-esteem score and self-concept

Timepoint

before the start of the intervention and eight weeks after the intervention

Method of measurement

Pirez Children's Self-Concept Questionnaire and Cooper Smith Self-Esteem Questionnaire

Secondary outcomes**1****Description**

The score of behavior and self-respect

Timepoint

before the start of the intervention and eight weeks after the intervention

Method of measurement

Self-concept questionnaire of older children

2**Description**

Mental status score and school

Timepoint

before the start of the intervention and eight weeks after

	the intervention
Method of measurement	Self-concept questionnaire of older children
3	
Description	Score of features and physical appearance
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Self-concept questionnaire of older children
4	
Description	Anxiety score
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Self-concept questionnaire of older children
5	
Description	Popularity score
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Self-concept questionnaire of older children
6	
Description	Happiness and satisfaction score
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Questionnaire of self-concept of older children
7	
Description	overall self-esteem,
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Cooper Smith self-esteem questionnaire
8	
Description	social self-esteem
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Cooper Smith self-esteem questionnaire

9	
Description	family self-esteem
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Cooper Smith self-esteem questionnaire
10	
Description	Academic self-esteem
Timepoint	before the start of the intervention and eight weeks after the intervention
Method of measurement	Cooper Smith self-esteem questionnaire

Intervention groups

1	
Description	Control group: This group does not do sports exercises
Category	Lifestyle
2	
Description	Intervention group: This group performs sports exercises according to the training video sent by the researcher
Category	Lifestyle

Recruitment centers

1	
Recruitment center	
Name of recruitment center	Primary schools for girls in Khorramabad city
Full name of responsible person	Kimia karami
Street address	Primary schools for girls in Khorramabad city
City	Khorramabad
Province	Lorestan
Postal code	6813833946
Phone	+98 66 3372 7084
Email	lorestan .lums@ gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Khoram-Abad University of Medical Sciences

Full name of responsible person

Bahram Rasolian

Street address

Moalem St., Anoushirvan Rezaei Square, Lorestan
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Email

Rasolian.Bahram@gmail.com

Grant name

Grant code / Reference number

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

No

Title of funding source

Lorestan 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

Khoram-Abad University of Medical Sciences

Full name of responsible person

Kimia Karami

Position

Faculty member

Latest degree

Ph.D.

Other areas of specialty/work

Medical Education

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Person responsible for scientific inquiries

Contact

Name of organization / entity

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Full name of responsible person

Kimia Karmi

Position

Faculty member

Latest degree

Ph.D.

Other areas of specialty/work

Nursery

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Person responsible for updating data

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

Informed Consent Form
Yes - There is 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
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
I have not decided yet

When the data will become available and for how long
I have not decided yet

To whom data/document is available
I have not decided yet

Under which criteria data/document could be used
I have not decided yet

From where data/document is obtainable
I have not decided yet

What processes are involved for a request to access data/document
I have not decided yet

Comments
I have not decided yet