

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 Jul 2026

Comparing impact of effect of aerobic and anaerobic exercise on Quality of sleep and psychological factors of non-athlete male students

Protocol summary

Summary

Current study aims at comparing impact of effect of aerobic and anaerobic exercise on Quality of sleep and psychological factors of non-athlete male students of Islamic Azad University Zahedan branch. In the present quasi-experimental study, participants are selected through purposeful sampling and are randomly assigned to three groups: aerobic exercise, anaerobic exercise and control group. The main inclusion criteria are lack of regular or professional activity in a sport field and lack of specific diseases. Main exclusion criteria include lack of student's regular attendance at exercise sessions and exercise intolerance. The sample consisted of 90 people who are placed in three groups of 30. Sports groups work for 10 weeks and 3 sessions per week for 60 minutes, depending on the group where they are. Aerobic exercise involves slow and fast continuous running, chasing games, slow and fast walking and jogging to fit physical condition and anaerobic exercise includes sprint training, running on the stairs, walking and jogging on the spot, come-back starts and periodic exercises. During this period, the control group does not exercise. Rates of depression, anxiety, stress are investigated using DASS questionnaire, happiness of students is assessed using Oxford questionnaire and Quality of sleep is assessed using Pittsburgh sleep quality index before and after intervention with students by participants in three groups by self-report.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2017011526858N5**

Registration date: **2017-01-26, 1395/11/07**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2017-01-26, 1395/11/07

Registrant information

Name

Toktam Kianian

Name of organization / entity

Zahedan University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

+98 54 3344 1415

Email address

drnm@zaums.ac.ir

Recruitment status

Recruitment complete

Funding source

Islamic Azad University Kerman Branch

Expected recruitment start date

2014-09-23, 1393/07/01

Expected recruitment end date

2014-12-22, 1393/10/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing impact of effect of aerobic and anaerobic exercise on Quality of sleep and psychological factors of non-athlete male students

Public title

Comparing impact of effect of aerobic and anaerobic exercise on Quality of sleep and psychological factors

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria: not use of doping; not having a history of regular or professional activity in a sport field; not having a specific disease; no use of specific drugs, and no use of any tobacco. Exclusion criteria: lack of student's regular attendance at exercise sessions; exercise intolerance

Age

From **17 years** old to **30 years** old

Gender

Male

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **90**

Randomization (investigator's opinion)

Randomized

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

1

Registry name

-

Secondary trial Id

-

Registration date

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Islamic Azad University Kerman Branch

Street address

Islamic Azad University Kerman Branch, Blvd Emam Ali, Kerman, Iran

City

Kerman

Postal code

7635131167

Approval date

2014-05-27, 1393/03/06

Ethics committee reference number

93121

Health conditions studied

1

Description of health condition studied

Sleep quality disorders

ICD-10 code

G47.0

ICD-10 code description

Disorders of initiating and maintaining sleep

2

Description of health condition studied

Depression, Anxiety, Stress

ICD-10 code

F43.2

ICD-10 code description

adjustment disorders

3

Description of health condition studied

happiness

ICD-10 code

f30, f31,

ICD-10 code description

Mood [affective] disorders

Primary outcomes

1

Description

Happiness

Timepoint

Before and after intervention

Method of measurement

Oxford happiness questionnaire

2

Description

Depression

Timepoint

Before and after intervention

Method of measurement

DASS-21

3

Description

Anxiety

Timepoint

Before and after intervention

Method of measurement

DASS-21

4

Description

Stress

Timepoint

Before and after intervention
Method of measurement
DASS-21

5

Description

Sleep quality

Timepoint

Before and after intervention

Method of measurement

Pittsburgh Sleep Quality Index

Secondary outcomes

empty

Intervention groups

1

Description

Aerobic sport group works for 10 weeks and 3 sessions per week for 60 minutes. Aerobic exercise involves slow and fast continuous running, chasing games, slow and fast walking and jogging to fit physical condition of body.

Category

Lifestyle

2

Description

Anaerobic sport group works for 10 weeks and 3 sessions per week for 60 minutes. Anaerobic exercise includes sprint training, running on the stairs, walking and jogging on the spot, come-back starts and periodic exercises.

Category

Lifestyle

3

Description

Control group receives no exercise.

Category

Lifestyle

Recruitment centers

1

Recruitment center

Name of recruitment center

Islamic Azad University Zahedan Branch

Full name of responsible person

Hadi Shahraki

Street address

Islamic Azad University Zahedan Branch, Daneshgah Street, Zahedan, Iran

City

Zahedan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University Kerman Branch

Full name of responsible person

Lida Torkzadetabrizi

Street address

Islamic Azad University Kerman Branch, Blvd Emam Ali, Kerman, Iran

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Kerman

Grant name

1

Grant code / Reference number

1

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

Yes

Title of funding source

Islamic Azad University Kerman Branch

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Islamic Azad University Kerman Branch

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Fahime Aghamohamadi

Position

MSc

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Toktam Kianian

Position

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Other areas of specialty/work

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty