Clinical Trial Protocol
Iranian Registry of Clinical Trials

17 Sep 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)
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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
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Zahedan

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Islamic Azad University Kerman Branch
Full name of responsible person
Lida Torkzadetabrizi
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Islamic Azad University Kerman Branch, Blvd Emam Ali, Kerman, Iran
City
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
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Person responsible for scientific

inquiries

Contact

Name of organization / entity
Zahedan University of Medical Sciences

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Toktam Kianian

Position
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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