

Clinical Trial Protocol

Iranian Registry of Clinical Trials

26 Jun 2026

The effect of different music rhythms in physiological responses of health young male after an exhaustive exercise session during recovery period

Protocol summary

Summary

The purpose of this study is to analyze the influence of different musical rhythms on some physiological responses in healthy young males in recovery period after a session of exhaustive exercise. Healthy male subjects participated in this study voluntarily. Through the Bruce test, subjects exercised in three consecutive sessions with an interval of 72 hours between every step until exhaustion stage. Then the participants return to the initial state with fast and slow beat of music and without music via counterbalanced format. The variables (heart rate, cardiac output, stroke volume, minute ventilation, tidal volume, respiratory rate, oxygen consumption and blood pressure) were measured at 30, 60, 90 and 120 seconds during recovery period. Participants listen to pop music with the loudness of 65 dB.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2012091810869N1**

Registration date: **2013-01-03, 1391/10/14**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2013-01-03, 1391/10/14

Registrant information

Name

Hamed Barzegar

Name of organization / entity

Tehran University

Country

Iran (Islamic Republic of)

Phone

+98 21 5551 3569

Email address

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Recruitment status

Recruitment complete

Funding source

Private

Expected recruitment start date

2011-03-11, 1389/12/20

Expected recruitment end date

2011-04-09, 1390/01/20

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The effect of different music rhythms in physiological responses of health young male after an exhaustive exercise session during recovery period

Public title

effect of music on exercise

Purpose

Basic science

Inclusion/Exclusion criteria

Inclusion criteria included healthy young male subjects. Age range 19 to 22 years without cardiovascular and respiratory disease. Exclusion criteria: use of ergogenic substances such as vitamins, supplements, herbs or drugs that affect the immune system, smoking and alcohol for 48 hours prior to the test run, participation in athletic exertion; placed in unfavorable conditions, temperature, disease and viral infection during the plan period.

Age

From **19 years** old to **22 years** old

Gender

Male

Phase

2

Groups that have been masked*No information***Sample size**

Target sample size: 17

Randomization (investigator's opinion)

N/A

Randomization description**Blinding (investigator's opinion)**

Not blinded

Blinding description**Placebo**

Not used

Assignment

Other

Other design features**Secondary Ids**

empty

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

Ethics Committee of Tehran University

Street addressFaculty of Physical Education and Sports Science,
North Amir Abad, Tehran**City**

Tehran

Postal code

1818685384

Approval date

2010-09-18, 1389/06/27

Ethics committee reference number

53/1389/ف

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

Healthy individuals without any disease

ICD-10 code

Z00.8

ICD-10 code description

Medical examination in population surveys

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

Heart rate

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

gas analyser set

2**Description**

cardiac output

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

gas analyzer set

3**Description**

stroke volume

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

gas analyzer set

4**Description**

ventilation

Timepoint

Three sessions with 72 hours between each stage

Method of measurement

gas analyser set

5**Description**

tidal volume

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

gas analyser set

6**Description**

respiratory rate

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

gas analyzer set

7**Description**

oxygen consumption

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

gas analyzer set

8**Description**

blood pressure

Timepoint

3 sessions with an interval of 72 hours

Method of measurement

Blood pressure measurement device Yagmy model

Secondary outcomes

empty

Intervention groups**1****Description**

Listen to slow music after exercise Pop music with 70 dB loudness through the recovery period at 3 minutes in three times, participants are listening to their with MP3 players set.

Category

Treatment - Other

2**Description**

Listen to fast music after exercise Pop music with 70 dB loudness through the recovery period at 3 minutes in three times, participants are listening to their with MP3 players set.

Category

Other

Recruitment centers**1****Recruitment center****Name of recruitment center**

Tehran University

Full name of responsible person

Hamed barzegar

Street address**City**

Tehran

Sponsors / Funding sources**1****Sponsor****Name of organization / entity**

Vice chancellor for research, Tehran University.

Full name of responsible person

Dr. Fazlollah Bagherzade

Street address

North Amir Abad.Tehran University. Faculty of physical education and sport science.

City

Tehran

Grant name**Grant code / Reference number****Is the source of funding the same sponsor organization/entity?**

Yes

Title of funding source

Vice chancellor for research, Tehran University.

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**

Tehran University

Full name of responsible person

Hamed Barzegar

Position

MSc of Exercise physiology

Other areas of specialty/work**Street address**

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Full name of responsible person

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Person responsible for updating data

Contact

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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