Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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

h.barzegar@ut.ac.ir

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 scienece

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 address
Faculty 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
Faculty of Physical Education and Sports Science, Amir Abad North, Tehran.
City
Tehran
Postal code
Phone
+98 21 5551 3569
Fax
Email
h.barzegar@ut.ac.ir
Web page address

Person responsible for scientific 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
Faculty of Physical Education and Sports Science, Amir Abad North, Tehran.
City
Tehran
Postal code
1818685384
Phone
+98 21 5551 3569
Fax
Email
h.barzegar.ut.ac.ir
Web page address
www.ut.ac.ir

Person responsible for updating data

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
Faculty of Physical Education and Sports Science, Amir Abad North, Tehran.

City
Tehran

Postal code
1818685384

Phone
+98 21 5551 3569

Fax
+98 21 5551 3569

Email
H.barzegar@ut.ac.ir

Web page address
www.ut.ac.ir

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