

Clinical Trial Protocol

Iranian Registry of Clinical Trials

27 Jun 2026

Investigation the effects of combined exposure to harmful and non-harmful levels of noise, heat and lighting on performance indices such as attention & working memory and physiological indices such as body temperature, blood pressure & heart rate of human, 2013.

Protocol summary

Summary

Physical factors such as noise, heat and light along side other environmental factors can cause changes in occupational performance and social behavior (increased errors, accident and reduced product quality). The aim of This study is Investigation the effects of combined exposure to harmful and non-harmful levels of noise, heat and lighting on performance indices such as attention & working memory and physiological indices such as body temperature, blood pressure & heart rate of human, 2013. This study is an interventional. student with having the general health, hearing, vision, No consumption of Narcotics and full satisfaction will participate in the study. Noise, heat and lighting at two levels harmful and non harmful together are combined, and the 8 combination conditions are created. Each group exposed to one of 8 conditions placed. Attention, working memory and physiological parameters (pulse, blood pressure and temperature) of each person is measured.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT2013101415016N1**

Registration date: **2014-04-23, 1393/02/03**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2014-04-23, 1393/02/03

Registrant information

Name

Zahra Zamanian

Name of organization / entity

Shiraz University of Medical Sciences, School of Public Health

Country

Iran (Islamic Republic of)

Phone

+98 71 1725 1001

Email address

zamanianz@sums.ac.ir

Recruitment status

Recruitment complete

Funding source

Vice chancellor for research, Shiraz University of Medical Sciences

Expected recruitment start date

2013-11-22, 1392/09/01

Expected recruitment end date

2014-03-21, 1393/01/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Investigation the effects of combined exposure to harmful and non-harmful levels of noise, heat and lighting on performance indices such as attention & working memory and physiological indices such as body temperature, blood pressure & heart rate of human, 2013.

Public title

Investigation the effects of combined exposure to

harmful and non-harmful levels of noise, heat and lighting on performance indices such as attention & working memory and physiological indices such as body temperature, blood pressure & heart rate of human, 2013.

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria: having the general health, hearing, vision, and no consumption of Narcotics and full satisfaction for participation in the study.

Age

From **18 years** old to **26 years** old

Gender

Both

Phase

0

Groups that have been masked

No information

Sample size

Target sample size: **128**

Randomization (investigator's opinion)

Not randomized

Randomization description

Blinding (investigator's opinion)

Double blinded

Blinding description

Placebo

Used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Shiraz University of Medical Sciences

Street address

zand st,shiraz

City

shiraz

Postal code

Approval date

2013-10-08, 1392/07/16

Ethics committee reference number

CT-92-6710

Health conditions studied

1

Description of health condition studied

Attention

ICD-10 code

F73

ICD-10 code description

Profound mental retardation

2

Description of health condition studied

Memory

ICD-10 code

R41

ICD-10 code description

Other symptoms and signs involving cognitive functions and awareness

3

Description of health condition studied

Blood pressure

ICD-10 code

Z01.3

ICD-10 code description

Examination of blood pressure

4

Description of health condition studied

Body temperature

ICD-10 code

ICD-10 code description

5

Description of health condition studied

Heart rate

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

reaction time

Timepoint

during exposure

Method of measurement

Continuous Performance Test

2

Description

commission error

Timepoint

during exposure

Method of measurement

Continuous Performance Test

3

Description

omission error

Timepoint

during exposure

Method of measurement

Continuous Performance Test

4

Description

working memory

Timepoint

during exposure

Method of measurement

pasat test

5

Description

blood pressure

Timepoint

before, during & after exposure

Method of measurement

digital manometer

6

Description

heart rate

Timepoint

before, during & after exposure

Method of measurement

digital manometer

7

Description

body temperature

Timepoint

before, during & after exposure

Method of measurement

mercury thermometer

Secondary outcomes

1

Description

Personality Type

Timepoint

before exposure

Method of measurement

NEO Questionnaire

Intervention groups

1

Description

combined exposure to noise, temperature and lighting(8 different conditions).

Category

Other

2

Description

group1:exposure to noise(55 db),lighting(500lux),heat(24°C) for 40 min.

Category

Other

3

Description

group2:exposure to noise(55 db),lighting(20lux),heat(24°C) for 40 min.

Category

Other

4

Description

group3:exposure to noise(55 db),lighting(500lux),heat(32°C) for 40 min.

Category

Other

5

Description

group4:exposure to noise(55 db),lighting(20lux),heat(32°C) for 40 min.

Category

Other

6

Description

group5:exposure to noise(95 db),lighting(500lux),heat(24°C) for 40 min.

Category

Other

7

Description

group6:exposure to noise(95 db),lighting(20lux),heat(24°C) for 40 min.

Category

Other

8

Description

group7:exposure to noise(95 db),lighting(500lux),heat(32°C) for 40 min.

Category

Other

9

Description

group5:exposure to noise(95 db),lighting(20lux),heat(32°C) for 40 min.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Laboratory of occupational health, School Public Health

Full name of responsible person

Fateme Amiri

Street address

School Public Health, Koi Zahra

City

Shiraz

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shiraz University of Medical Sciences

Full name of responsible person

Dr. Syyed Basir Hashemi

Street address

Shiraz University of Medical Sciences ,zand st,shiraz

City

Shiraz

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

Yes

Title of funding source

Shiraz University of Medical Sciences

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

School of Public Health, Shiraz

Full name of responsible person

Zahra Zamanian

Position

PhD, Shiraz University of Medical Sciences

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Web page address

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