

Clinical Trial Protocol

Iranian Registry of Clinical Trials

29 Jun 2026

Comparing the effect of perceptual-motor training and mindfulness on attention networks, Spatial working memory and throwing task in children hyperactive

Protocol summary

Study aim

The effect of mindfulness on some of cognitive factors of children with attention deficit hyperactivity disorder (ADHD).

Design

The study is consisted of two experimental and one control groups with similar groups. The sample size will be 30 that will be randomly divided into three groups. Participants will be children with attention deficit hyperactivity disorder

Settings and conduct

The present study will be conducted at Shahid Beheshti University in Tehran.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age 7-12 years; ADHD disorder based on psychiatrist diagnosis; History of treatment. Non-inclusion criteria: Participation in occupational therapy for children and parent parenting simultaneously with research; Participation in physical activities and other sports concurrently with research; Participation in other active psychological intervention concurrently with research; anxiety disorder; learning disability; obsession and any motor dysfunction.

Intervention groups

Intervention group 1: Cognitive-motor training- Eight training sessions including identifying different aspects of static and dynamic equilibrium; coordination movements; throwing balls; receiving and sending balls; targeted movements. Intervention group 2: Mindfulness Practice- An 8-session training program based on the Kabat-Zain model including body monitoring exercise, mindful sitting, mindful breathing. Control group: No exercise.

Main outcome variables

Score from the following three tests: The attention networks test score; Throw task test score; Corsi Black for spatial-visual memory test score

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200125046251N1**

Registration date: **2020-04-27, 1399/02/08**

Registration timing: **prospective**

Last update: **2020-04-27, 1399/02/08**

Update count: **0**

Registration date

2020-04-27, 1399/02/08

Registrant information

Name

Fatemeh Pirian

Name of organization / entity

Shahid Beheshti university

Country

Iran (Islamic Republic of)

Phone

+98 66 3272 9240

Email address

fatemeh.piryan1369@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-05-08, 1399/02/19

Expected recruitment end date

2020-08-31, 1399/06/10

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the effect of perceptual-motor training and mindfulness on attention networks, Spatial working memory and throwing task in children hyperactive

Public title

The effect of perceptual-motor training and mindfulness in hyperactive children

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

Having ADHD disorder based on a psychiatrist diagnosis
Having a history of treatment

Exclusion criteria:

Diagnosis of physician for non-inclusion in the study

Age

From **7 years** old to **12 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

Randomized

Randomization description

Simple random allocation. Randomization unit: individual. Once the participants have been identified, people will be coded from the highest score to the lowest score, depending on the pre-test score. Then the top two scores will be randomly assigned to one of the two groups, and this process will continue until the lowest score.

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Ethics committee in biological research, Shahid Beheshti University of Medical Sciences

Street address

Yaman street; Shahid Shahriyari square

City

Tehran

Province

Tehran

Postal code

1983969411

Approval date

2019-03-13, 1397/12/22

Ethics committee reference number

IR.SBU.REC.1399.009

Health conditions studied

1

Description of health condition studied

Attention Deficit Hyperactivity Disorder

ICD-10 code

F90

ICD-10 code description

Attention-deficit hyperactivity disorders

Primary outcomes

1

Description

Score of attention networks test

Timepoint

Before intervention (pre-test) and after intervention (post-test)

Method of measurement

Computer Software Test for Attention Network

2

Description

Score points by throwing the ball towards the goal

Timepoint

Before intervention (pre-test) and after intervention (post-test)

Method of measurement

Throw task test. Throw the ball into 10 concentric circles, each circle having unique points

3

Description

The individual's ability to repeat the sequence shown by visual-spatial memory measurement software

Timepoint

Before intervention (pre-test) and after intervention (post-test)

Method of measurement

Corsi Black Test

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1: In the pre-test, the Attention Network Test will be taken. After that, mindfulness exercises, derived from a training program, based on the Kabat-Zain model will be done. The exercise includes body monitoring exercises, mindful sitting and mindful breathing. It will be performed through a one-hour session, two sessions per week for four weeks. Then the post-test will be similar to the pre-test.est.

Category

Behavior

2

Description

Intervention group 2: In the pre-test, the Attention Network Test will be taken. Thereafter perceptual motor exercises consisted of identifying different aspects of static and dynamic balance, coordination movements, throwing the ball, receiving and sending the ball, and deliberate motions will be done through a one hour session; two sessions per week for four weeks. Then the post-test will be similar to the pre-test.

Category

Behavior

3

Description

Control group: no training

Category

Behavior

Recruitment centers

1

Recruitment center

Name of recruitment center

Emam Hossein clinic

Full name of responsible person

Dr Mojgan Khademi

Street address

Shahid Madani street

City

Tehran

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Postal code

7361973975

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+98 21 7725 1023

Fax

+98 21 7755 1023

Email

ar.farsi@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Alireza Farsi

Street address

Shahid Shahriyari square; Yaman street

City

tehran

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Phone

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Email

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Grant name

Grant code / Reference number

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

Yes

Title of funding source

Shahid Beheshti University of Medical Sciences

Proportion provided by this source

80

Public or private sector

Public

Domestic or foreign origin

Domestic

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

Academic

Person responsible for general inquiries

Contact

Name of organization / entity

Shahid Beheshti University of Medical Sciences

Full name of responsible person

Alireza Farsi

Position

faculty member

Latest degree

Ph.D.

Other areas of specialty/work

Behavioral and cognitive sciences in sport

Street address

Daneshjoo boulevard, Shahid Shahriyari Square,
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Person responsible for scientific inquiries

Contact

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Person responsible for updating data

Contact

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Sharing plan

Deidentified Individual Participant Data Set (IPD)

No - There is not a plan to make this available

Justification/reason for indecision/not sharing IPD

because if confidentiality of personal information

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Yes - There is a plan to make this available

Informed Consent Form

No - There is not a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Yes - There is a plan to make this available

Data Dictionary

No - There is not a plan to make this available

Title and more details about the data/document

no

When the data will become available and for how long

no

To whom data/document is available

no

Under which criteria data/document could be used

no

From where data/document is obtainable

no

What processes are involved for a request to access data/document

no

Comments