Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 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)

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+98 66 3272 9240

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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
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Tehran
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Postal code
7361973975
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Fax
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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
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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, Yaman street
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Contact

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Full name of responsible person

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Position

faculty member

Latest degree

Ph.D.

Other areas of specialty/work

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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