Clinical Trial Protocol
Iranian Registry of Clinical Trials

19 Sep 2026

The Effect of Perceptual Motor Exercises on Motor Performance, Social Adaptation, and Self-Efficacy of Mentally Retarded Children in Bukan City

Protocol summary

Study aim

Assessing the impact of a perceptual-motor exercise program on the motor performance, social adaptation and self-efficacy of children with intellectual disabilities in Bukan city

Design

This is a single-blind, randomized clinical trial with a control group and parallel groups, involving 26 participants. Randomization will be conducted using the RAND function in Exce

Settings and conduct

After examination of several education centers for these children, in terms of the number of people, an exceptional school will be selected due to the large number of participants. Among the children of that primary school, children who meet the entry and exit criteria will be selected. Sample size will be determined 26 people from this community. These people will be randomly divided into two groups of perceptual-motor exercises and control. The present study will be conducted in the sports hall of the selected school Then the groups will be measured in the pre-test and after recording the scores of the pre-test, the perceptual-motor exercises group will be under the special exercises of their group and the control group will not be exposed to any intervention. The experimental group will participate in their exercise program for eight weeks, 3 sessions per week and each session is 45 minutes,

Participants/Inclusion and exclusion criteria

Inclusion criteria: Students with mild intellectual disability, age range between 10 and 12 years; Exclusion criteria: unwillingness to cooperate

Intervention groups

Group of perceptual-motor exercises:This group underwent underwent a training program spanning eight weeks, with three sessions per week, resulting in a total of 24 sessions. Each session lasted 45 minutes Control group: the control group followed their normal daily schedule.

Main outcome variables

motor performance, Social adjustment, self-efficacy

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20190908044722N4**
Registration date: **2024-02-26, 1402/12/07**
Registration timing: **registered_while_recruiting**

Last update: **2024-02-26, 1402/12/07**
Update count: **0**

Registration date

2024-02-26, 1402/12/07

Registrant information

Name

Razieh Khanmohamadi

Name of organization / entity

The university of Urmia

Country

Iran (Islamic Republic of)

Phone

+98 86 3221 4311

Email address

r.khanmohamadi@ut.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2024-01-21, 1402/11/01

Expected recruitment end date

2024-03-15, 1402/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

The Effect of Perceptual Motor Exercises on Motor Performance, Social Adaptation, and Self-Efficacy of Mentally Retarded Children in Bukan City

Public title

The Effect of Perceptual Motor Exercises on Motor Performance, Social Adaptation, and Self-Efficacy of Mentally Retarded Children in Bukan City

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

1- Diagnosis of mild intellectual disability (IQ 50-70) with the capacity for learning; ; 2- Age range of 10-12 years old 3- Completion of an informed consent form by parents for their children’s participation in research practice sessions;

Exclusion criteria:

Presence of specific conditions such as epilepsy, seizures, cerebral palsy, and impairments in vision, hearing, and heart function, among other specific diseases Concurrent participation in other clinical interventions during the research period Presence of significant psychiatric symptoms in the child, such as autism or attention deficit hyperactivity disorder

Age

From **10 years** old to **12 years** old

Gender

Female

Phase

N/A

Groups that have been masked

- Outcome assessor

Sample size

Target sample size: **26**

Randomization (investigator's opinion)

Randomized

Randomization description

Participants will be randomly assigned to two groups: the perceptual-motor exercises group and the control group. The randomization process will be conducted using the RAND function in Excel

Blinding (investigator's opinion)

Single blinded

Blinding description

“Evaluations in this research will be conducted by an individual who is blind to the group assignments of the children

Placebo

Not used

Assignment

Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research Ethics Committees of Urmia University

Street address

Urmia University, Kilometer 11 of Cypress Road, Urmia, West Azarbaijan Province

City

Urmia

Province

West Azarbaijan

Postal code

5756151818

Approval date

2024-01-06, 1402/10/16

Ethics committee reference number

IR.URMIA.REC.1402.025

Health conditions studied

1

Description of health condition studied

Mental retardation

ICD-10 code

F70-F79

ICD-10 code description

Mental retardation

Primary outcomes

1

Description

Motor Performance

Timepoint

Before and after the intervention

Method of measurement

Test of Gross Motor Development

2

Description

Social Adaptation

Timepoint

Before and after the intervention

Method of measurement

. Adjustment Inventory Sinha and Sing

3

Description

Self-Efficacy

Timepoint

Before and after the intervention

Method of measurement
Wheeler and Weld children's self-efficacy scale

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Perceptual Motor Exercises The Intervention group underwent a training program spanning eight weeks, with three sessions per week, resulting in a total of 24 sessions. Each session lasted 45 minutes and was divided into three phases.The first phase, a 10-minute warm-up, incorporated stretching exercises targeting major muscle groups and joints, supplemented by slow-paced walking and jogging.The second phase, lasting 30 minutes, was dedicated to motor perception exercises. The exercise protocol implemented during this phase was adapted from the protocol established by Jafari et al. (1400).The final phase, a 5-minute cool-down, aimed to return the body to its initial state. This phase included light stretching exercises, slow walking, and deep breathing.
Category
Rehabilitation

2

Description
Control group: During this period, the control group did not have any perceptual motor training program and followed their normal daily schedule.
Category
Other

Recruitment centers

1

Recruitment center
Name of recruitment center
Lale Primary School
Full name of responsible person
Razieh Khanmohammadi
Street address
Urmia University, Kilometer 11 of Cypress Road, Urmia, West Azarbaijan Province
City
Urmia
Province
West Azarbaijan
Postal code
5756151818
Phone
+98 918 624 2003
Email
r.khanmohamadi65@yahoo.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
The university of urmia
Full name of responsible person
Razieh Khanmohammadi
Street address
Urmia University, Kilometer 11 of Cypress Road, Urmia, West Azarbaijan Province
City
Urmia
Province
West Azarbaijan
Postal code
5756151818
Phone
+98 918 624 2003
Email
r.khanmohamadi@urmia.ac.ir
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
The university of urmia
Proportion provided by this source
1
Public or private sector
Private
Domestic or foreign origin
Domestic
Category of foreign source of funding
empty
Country of origin
Type of organization providing the funding
Other

Person responsible for general inquiries

Contact
Name of organization / entity
The university of urmia
Full name of responsible person
Razieh Khanmohammadi
Position
assistant professor
Latest degree
Ph.D.
Other areas of specialty/work
motor behavior
Street address
Urmia University, Kilometer 11 of Cypress Road, Urmia, West Azarbaijan Province
City
Urmia
Province
West Azarbaijan
Postal code

5756151818

Phone

43-32752741-044

Email

r.khanmoamadi65@yahoo.com

Person responsible for scientific inquiries

Contact

Name of organization / entity

The university of urmia

Full name of responsible person

Razieh Khanmohammadi

Position

assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

motor behavior

Street address

Urmia University, Kilometer 11 of Cypress Road, Urmia, West Azarbaijan Province

City

Urmia

Province

West Azarbaijan

Postal code

5756151818

Phone

43-32752741-044

Email

r.kanmohamadi65@yahoo.com

Person responsible for updating data

Contact

Name of organization / entity

The university of urmia

Full name of responsible person

Razieh Khanmohammadi

Position

assistant professor

Latest degree

Ph.D.

Other areas of specialty/work

motor behavior

Street address

Urmia University, Kilometer 11 of Cypress Road, Urmia, West Azarbaijan Province

City

Urmia

Province

West Azarbaijan

Postal code

5756151818

Phone

43-32752741-044

Email

r.khanmohamadi65@yahoo.com

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

It is mentioned in the consent form that the information remains with the researcher

Study Protocol

Yes - There is a plan to make this available

Statistical Analysis Plan

Not applicable

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

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The analysis of information obtained from the results of the interventions on motor performance can be published

When the data will become available and for how long

From the time the article was published until a year later

To whom data/document is available

All researchers

Under which criteria data/document could be used

Provided Someone wants to do a similar research project

From where data/document is obtainable

r.khanmohamadi65@yahoo.com

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

Sending requests via email, review by the author and contacting him and providing requested items

Comments