Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The effectiveness of Johnston and Ramon motor perceptual exercises and motor activity with video modeling on motor development and executive function in children with learning disorders

Protocol summary

Study aim
Determining the effectiveness of perceptual-motor exercises of Johnston and Ramon and comparing it with motor activities based on video modeling on the motor development and executive function of children with learning disabilities aged 7-10 in Tehran

Design
A clinical trial with a control group, with a parallel group, randomized, a blind strain on 45 patients

Settings and conduct
This study will be conducted on 7 to 10-year-old students of schools with learning disabilities in Tehran. After checking the entry criteria, the samples will be randomly selected and divided into three groups. participants will not be aware of each other and the protocol of each other's interventions.

Participants/Inclusion and exclusion criteria
entry requirements: diagnosis of learning disorder No history of sports activity in the last 2 months Conditions of non-entry: history of physical and neurological diseases Taking sleeping pills

Intervention groups
The control group will be 15 people, the group with Johnston and Ramon movement perception exercises will be 15 people, and the group with movement exercises with video modeling will be divided into 15 people. From the samples before and after the intervention, the Gross Motor Skills Test (TGMD-2), Brief Executive Function Questionnaire, Wisconsin Test (2000) are taken. The training protocol of both groups is similar to each other and includes bilateral, unilateral, lateral cross and lateral superiority activities. But the execution method is different.

Main outcome variables
motor development (movement, object control) executive function (inhibition, transmission, emotion control, planning, organization, monitoring, working memory, initiation)

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20220718055489N1**
Registration date: **2023-05-06, 1402/02/16**
Registration timing: **retrospective**

Last update: **2023-05-06, 1402/02/16**
Update count: **0**

Registration date
2023-05-06, 1402/02/16

Registrant information

Name
Zeinab Dianatynasab

Name of organization / entity

Country
Iran (Islamic Republic of)

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+98 26 3428 6144

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-05-02, 1402/02/12

Expected recruitment end date
2023-05-06, 1402/02/16

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effectiveness of Johnston and Ramon motor perceptual exercises and motor activity with video modeling on motor development and executive function in children with learning disorders

Public title
The effectiveness of perceptual motor exercises compared to motor activity with video modeling on motor development and executive function of children with learning disorders

Purpose
Education/Guidance

Inclusion/Exclusion criteria
Inclusion criteria:
Children aged 7 to 10 with a diagnosis of learning disorder and obtaining consent from their parents No history of sports training in the last 2 months
Exclusion criteria:
History of physical and neurological diseases Taking sleeping pills and anticonvulsants

Age
From **7 years** old to **10 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **45**

Randomization (investigator's opinion)
Not randomized

Randomization description

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 of Semnan University of medical science
Street address
Basij Blvd., Semnan University of Medical Sciences and Health Services
City
Semnan
Province
Semnan
Postal code
35147-99442

Approval date
2022-07-02, 1401/04/11

Ethics committee reference number
IR.SEMUMS.REC.1401.069

Health conditions studied

1

Description of health condition studied
Learning disorder

ICD-10 code
F81

ICD-10 code description
Specific developmental disorders of scholastic skills

2

Description of health condition studied
motor development disorder

ICD-10 code
F82

ICD-10 code description
Specific developmental disorder of motor function

Primary outcomes

1

Description
Motor development as measured by the Test of Gross Motor Skills - Second Edition

Timepoint
before interventions and after 2 months of intervention

Method of measurement
Test of gross motor skills (TGMD-2)

2

Description
Executive function

Timepoint
before interventions and after 2 months of intervention

Method of measurement
Executive Function Questionnaire (2000) BRIEF and Wisconsin Card Classification Test

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: performing perceptual-motor

exercises 3 days a week for 2 months (each session 45 minutes) written based on the perceptual-motor model and the Johnston and Ramon protocol (promotes bilateral, unilateral, cross-lateral and lateral superiority activities) will be done. the equipment includes: balls, chalk, visual cards, glue, a number of obstacles and ropes

Category

Rehabilitation

2

Description

Intervention group: performing movement activities in the form of video modeling 3 days a week (each session is 45 minutes) for 2 months. Movement activities will be performed with the aim of improving bilateral, unilateral, cross-lateral and lateral superiority activities and body

Category

Rehabilitation

3

Description

Control group: During 2 months, she does not receive any movement exercises, only the Ulrich motor development test, brief executive function questionnaire and Wisconsin card classification test are taken from them before and after 2 months.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Department of Exceptional Education

Full name of responsible person

Alireza Karimiyan

Street address

Shahid Jahormi Street،Ayatollah Kashani Boulevard ،second square of Sadeghieh

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Email

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Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Semnan University of Medical Sciences

Full name of responsible person

Seifullah Saaduddin

Street address

first floor, the central organization of the university,in front of Sokan Park، semnan

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research.VC@semnan.ac.ir

Grant name

Grant code / Reference number

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

No

Title of funding source

semnan university

Proportion provided by this source

100

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

Semnan University of Medical Sciences

Full name of responsible person

Zeinab Dianaty nasab

Position

Master student

Latest degree

Bachelor

Other areas of specialty/work

Occupational Therapy

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Person responsible for scientific inquiries

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Position
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Latest degree
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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available

Study Protocol
Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan
Yes - There is a plan to make this available

Informed Consent Form
Yes - There is a plan to make this available

Clinical Study Report
Undecided - It is not yet known if there will be a plan to make this available

Analytic Code
Undecided - It is not yet known if there will be a plan to make this available

Data Dictionary
Yes - There is a plan to make this available

Title and more details about the data/document
information about the number, age, sex and results of the Ulrich motor development test, the Wisconsin test and the brief executive function questionnaire (Parent form)

When the data will become available and for how long
The access period starts one week after the results are published

To whom data/document is available
The data will be accessible to all researchers in both academic and private sectors

Under which criteria data/document could be used
The data can be used for further research, provided that the reference is respected.

From where data/document is obtainable
Applicants should apply to the responsible email and explain the reason for the need for data dianatynasab.zeinab@yahoo.com Zainab Dianatynasab

What processes are involved for a request to access data/document
A response will be given to the applicant by email one week after sending the application

Comments