

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

18 Jun 2026

### The effect of task oriented intervention on motor coordination, balance and school function of children with intellectual disability

#### Protocol summary

##### Study aim

Determining the effect of task-oriented interventions on motor coordination, balance and school function of children with intellectual disabilities and comparing it with the effect of routine occupational therapy interventions

##### Design

Clinical trial with control group

##### Settings and conduct

After selecting the samples among the students with intellectual disabilities, they are randomly divided into two groups of control and intervention. Preliminary assessment of balance, motor coordination, and school function is performed by an evaluator who is blind to groupings. The control group performed routine occupational therapy exercises for 8 weeks, two sessions per week, and the intervention group performed task-oriented exercises in addition to routine occupational therapy exercises. The re-evaluation will then be performed by the same initial evaluator.

##### Participants/Inclusion and exclusion criteria

Inclusion criteria : Children with intellectual disabilities 5 to 9 years old IQ 50-70 (teachable group) Has motor and balance problems Exclusion criteria: History of any orthopedic surgery in the last 6 months History of seizures Existence of any musculoskeletal problems Existence of accompanying disabilities Lack of cooperation of the child

##### Intervention groups

Task-oriented exercises include: Walking on the toe in a straight path 4.5 m long and then 4.5 m Walking heel to toe Jumping forward so that the body is in a balanced position after each jump Walking a 50-meter path while holding the ball on a screen in balance with one hand Throwing and receiving the ball with both hands at a distance of two meters Jumping up and touching at the same time

##### Main outcome variables

Task-oriented interventions can be used as a simple, low-

cost, and accessible method to improve balance and coordination problems and functional performance in children with intellectual disabilities.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20200805048311N1**

Registration date: **2020-08-17, 1399/05/27**

Registration timing: **prospective**

Last update: **2020-08-17, 1399/05/27**

Update count: **0**

##### Registration date

2020-08-17, 1399/05/27

##### Registrant information

##### Name

Seyede zeinab Beheshti

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 86 3366 2028

##### Email address

z.beheshti@arakmu.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2020-10-01, 1399/07/10

##### Expected recruitment end date

2021-01-29, 1399/11/10

##### Actual recruitment start date

empty

##### Actual recruitment end date

empty

**Trial completion date**  
empty

**Scientific title**  
The effect of task oriented intervention on motor coordination, balance and school function of children with intellectual disability

**Public title**  
The effect of task oriented intervention on motor coordination, balance and school function of children with intellectual disability

**Purpose**  
Supportive

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Children with intellectual disabilities 5 to 9 years old IQ 50-70 (teachable group) Has motor and balance problems  
**Exclusion criteria:**  
History of any orthopedic surgery in the last 6 months  
History of seizures Existence of any musculoskeletal problems Existence of accompanying disabilities Lack of cooperation of the child

**Age**  
From **5 years** old to **9 years** old

**Gender**  
Both

**Phase**  
N/A

**Groups that have been masked**  
*No information*

**Sample size**  
Target sample size: **60**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
Participants are selected from students with intellectual disabilities in exceptional schools in Arak who are eligible for inclusion in the study, improbably easy (available sampling) and then placed one by one in the intervention and control group.

**Blinding (investigator's opinion)**  
Not blinded

**Blinding description**

**Placebo**  
Not used

**Assignment**  
Factorial

**Other design features**

## Secondary Ids

empty

## Ethics committees

### 1

**Ethics committee**  
**Name of ethics committee**

Ethics committee of Arak University of Medical Sciences  
**Street address**  
School of Rehabilitation, Golestan Street , Arak  
**City**  
Arak  
**Province**  
Markazi  
**Postal code**  
3818146851  
**Approval date**  
2020-08-04, 1399/05/14  
**Ethics committee reference number**  
IR.ARAKMU.REC.1399.151

## Health conditions studied

### 1

**Description of health condition studied**  
intellectual disability  
**ICD-10 code**  
**ICD-10 code description**

## Primary outcomes

### 1

**Description**  
motor coordination  
**Timepoint**  
before intervention and after intervention  
**Method of measurement**  
Bruininks Oseretsky Test of Motor Proficiency 2-edition

### 2

**Description**  
balance  
**Timepoint**  
before intervention and after intervention  
**Method of measurement**  
Bruininks Oseretsky Test of Motor Proficiency 2-edition

### 3

**Description**  
school function  
**Timepoint**  
before intervention and after intervention  
**Method of measurement**  
School Function Assessment scale

## Secondary outcomes

empty

## Intervention groups

### 1

**Description**

Intervention group: 8 weeks Each week, two sessions of task-oriented interventions include 5 motor activities

**Category**

Rehabilitation

**Recruitment centers****1****Recruitment center****Name of recruitment center**

Farjam and Narjesiye spacial school

**Full name of responsible person**

Seyede Zeinab Beheshti

**Street address**

School of rehabilitation, Golestan street, Arak

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arak

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**Postal code**

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**Phone**

+98 86 3366 2028

**Email**

z.beheshti@arakmu.ac.ir

**Sponsors / Funding sources****1****Sponsor****Name of organization / entity**

Arak University of Medical Sciences

**Full name of responsible person**

Dr. Alireza Kamali

**Street address**

Deputy of research and technology, Complex of the Great Prophet, University of Medical Science, Arak

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3848176341

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research@arakmu.ac.ir

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

Yes

**Title of funding source**

Arak University of Medical Sciences

**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**

Arak University of Medical Sciences

**Full name of responsible person**

Seyede Zeinab Beheshti

**Position**

lecturer

**Latest degree**

Master

**Other areas of specialty/work**

Occupational Therapy

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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**

There is no more information

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not a plan to make this available

**Analytic Code**

No - There is not a plan to make this available

**Data Dictionary**

No - There is not a plan to make this available