

Clinical Trial Protocol

Iranian Registry of Clinical Trials

11 Sep 2026

Effects of Sensory Motor Plays in Virtual Environment on Eye Hand Coordination in Children with Cerebral Palsy

Protocol summary

Summary

The aim of the present study is to determine the effects of virtual reality in eye-hand coordination of children with hemiplegic cerebral palsy. In a cross sectional, randomized, double blind study, 15 children with hemiplegic cerebral palsy are allocated into the following 3 groups. The patients in the first group receive visual motor practices in virtual environment and the in the second group, visual motor practices in virtual environment with immobilization of less affected upper limb. The patients in the control group don't receive any treatment. Eye hand coordination is measured by subtest visual motor coordination of Bruininks-Oseretsky test of Motor Proficiency, Pediatrics Motor Activity Log and Reiven Colored Progressive Matrix and compared between groups.

+98 61 1374 3101

Email address

rostamih@ajums.ac.ir

Recruitment status

Recruitment complete

Funding source

Ahvaz Jundishapur University of Medical Sciences

Expected recruitment start date

2010-09-29, 1389/07/07

Expected recruitment end date

2011-03-16, 1389/12/25

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201101244945N2**

Registration date: **2011-04-03, 1390/01/14**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-04-03, 1390/01/14

Registrant information

Name

Hamid Reza Rostami

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Country

Iran (Islamic Republic of)

Phone

Scientific title

Effects of Sensory Motor Plays in Virtual Environment on Eye Hand Coordination in Children with Cerebral Palsy

Public title

Effects of Sensory Motor Plays in Virtual Environment on Eye Hand Coordination in Children with Cerebral Palsy

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: Children with Cerebral Palsy hemiplegia, age between 3 and 10 year, range of motion: 20 degrees in wrist joint and 10 degrees in MP and IP Joints from full flexion, good cognitive and awareness state Exclusion Criteria: seizure in past 6 months, visual problems intervening in the activities, upper limb orthopedic surgery in past 6 months, botulinum toxin therapy in past 6 months, severe balance problems, muscle tone higher than 3 in Modified Ashworth Scale

Age

From **3 years** old to **10 years** old

Gender	Both	Subtest Visual Motor Coordination of Bruininks-Oseretsky Test of Motor Proficiency, Pediatrics Motor Activity Log, Reiven Colored Progressive Matrix
Phase	N/A	
Groups that have been masked	No information	
Sample size	Target sample size: 15	
Randomization (investigator's opinion)	Randomized	
Randomization description		
Blinding (investigator's opinion)	Double blinded	
Blinding description		
Placebo	Not used	
Assignment	Parallel	
Other design features		
Secondary Ids	empty	
Ethics committees		
<u>1</u>		
Ethics committee		
Name of ethics committee	Ahvaz Jundishapur University of Medical Sciences	
Street address	Faculty of Rehabilitation Sciences, Ahvaz Jundishapur University of Medical Sciences	
City	Ahvaz	
Postal code		
Approval date	2011-01-03, 1389/10/13	
Ethics committee reference number	ETH-041	
Health conditions studied		
<u>1</u>		
Description of health condition studied	Hemiplegic Cerebral palsy	
ICD-10 code	G80, G83	
ICD-10 code description		
Primary outcomes		
<u>1</u>		
Description	Eye Hand Coordination	
Timepoint	1 and 3 Months after Baseline Measurement	
Method of measurement		
		Secondary outcomes
		empty
		Intervention groups
		<u>1</u>
		Description
		Visual Motor Practice in Virtual Environment with Restraint of Less affected Upper Extremity. 10 Treatment sessions, every other day, each session lasts for 1.5 hours, in 3 weeks. Practices in virtual environment are provided by upper limb exerciser of E-Link System.
		Category
		Rehabilitation
		<u>2</u>
		Description
		Control group: without any treatment
		Category
		Rehabilitation
		<u>3</u>
		Description
		Visual Motor Practices in Virtual Environment. 10 Treatment sessions, every other day each session lasts for 1.5 hours, in 3 weeks. Practices in virtual environment are provided by upper limb exerciser of E- Link System.
		Category
		Rehabilitation
		Recruitment centers
		<u>1</u>
		Recruitment center
		Name of recruitment center
		Hospitals and Rehabilitation Clinics of Ahvaz City
		Full name of responsible person
		Street address
		City
		Ahvaz
		Sponsors / Funding sources
		<u>1</u>
		Sponsor
		Name of organization / entity
		Vice-Chancelors for research Affairs, Ahvaz Jundishapur University of Medical Sciences
		Full name of responsible person
		Dr. Mohammad Reza Abbaspoor
		Street address

Vice-Chancellors for research Affairs, Ahvaz
Jundishapur University of Medical Sciences

City

Ahvaz

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Vice-Chancellors for research Affairs, Ahvaz Jundishapur
University of Medical Sciences

Proportion provided by this source

100

Public or private sector

empty

Domestic or foreign origin

empty

Category of foreign source of funding

empty

Country of origin

Type of organization providing the funding

empty

Person responsible for general inquiries

Contact

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Hamid Reza Rostami

Position

MSc. in Occupational Therapy, Faculty Member of
Ahvaz Jundishapur University of Medical Sciences

Other areas of specialty/work

Street address

Faculty of Rehabilitation Sciences, Ahvaz Jundishapur
University of Medical Sciences,

City

Ahvaz

Postal code

Phone

+98 935 525 5800

Fax

Email

rostamihr@ajums.ac.ir - rostamihr88@gmail.com

Web page address

**Person responsible for scientific
inquiries**

Contact

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Hamid Reza Rostami

Position

Msc. in Occupational Therapy, Faculty Member of
Ahvaz Jundishapur University of Medical Sciences

Other areas of specialty/work

Street address

Faculty of Rehabilitation Sciences, Ahvaz Jundishapur
University of Medical Sciences

City

Ahvaz

Postal code

Phone

+98 935 525 5800

Fax

Email

rostamihr@ajums.ac.ir - rostamihr88@gmail.com

Web page address

Person responsible for updating data

Contact

Name of organization / entity

Ahvaz Jundishapur University of Medical Sciences

Full name of responsible person

Hamid Reza Rostami

Position

Other areas of specialty/work

Street address

City

Ahvaz

Postal code

Phone

+98 935 525 5800

Fax

Email

rostamihr@ajums.ac.ir

Web page address

Sharing plan

Deidentified Individual Participant Data Set (IPD)

empty

Study Protocol

empty

Statistical Analysis Plan

empty

Informed Consent Form

empty

Clinical Study Report

empty

Analytic Code

empty

Data Dictionary

empty