

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Oct 2026

Efficacy of Working Memory Training on Improvement Executive Functions and Academic Performance of Children with Spelling Learning Disability

Protocol summary

Summary

The aim of this research was to investigate the efficacy of working memory training on improving executive functions and academic performance of children with spelling learning disability. Inclusion criteria to include third grade elementary school students, have spelling learning disability, and lack comorbidity disorder. Exclusion criteria is having comorbidity disorder. The statistical population of this study include all third grade elementary school students with spelling learning disability in Isfahan city. Therefore, 30 3rd grade elementary students with spelling learning disability were selected through multistage random sampling. These students were randomly assigned into two groups. Experimental group, received working memory training and control group don't received training. The instruments were NEPSY test for to measure primary outcome and Checklist for Identifying Students with Spelling Learning Disability for to measure secondary outcome.

General information

Acronym

IRCT registration information

IRCT registration number: **IRCT201110057628N2**

Registration date: **2011-12-02, 1390/09/11**

Registration timing: **retrospective**

Last update:

Update count: **0**

Registration date

2011-12-02, 1390/09/11

Registrant information

Name

Sara Aghababaei

Name of organization / entity

Isfahan University

Country

Iran (Islamic Republic of)

Phone

+98 31 1465 8260

Email address

aghababaei.sara@yahoo.com

Recruitment status

Recruitment complete

Funding source

Investigator

Expected recruitment start date

2011-03-21, 1390/01/01

Expected recruitment end date

2011-04-10, 1390/01/21

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Efficacy of Working Memory Training on Improvement Executive Functions and Academic Performance of Children with Spelling Learning Disability

Public title

Efficacy of Working Memory Training on Performance of Children with Spelling Learning Disability

Purpose

Treatment

Inclusion/Exclusion criteria

Inclusion criteria: 3rd grade elementary female students: having learning disabilities: having not comorbidity disorder. Exclusion criteria: having comorbidity disorder

Age

From **9 years** old to **9 years** old

Gender

Female

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **30**

Randomization (investigator's opinion)

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

University of Isfahan

Street address

Isfahan-University of Isfahan

City

Isfahan

Postal code

Approval date

2011-10-05, 1390/07/13

Ethics committee reference number

90/16228/الف

Health conditions studied

1

Description of health condition studied

Spelling Disability

ICD-10 code

F81.1

ICD-10 code description

Specific Spelling Disability

Primary outcomes

1

Description

Executive function

Timepoint

Before and after intervention

Method of measurement

NEPSY Test

Secondary outcomes

1

Description

Academic performance

Timepoint

Before and after intervention

Method of measurement

Checklist for Identifying Students with Spelling Learning

Disability

Intervention groups

1

Description

Experimental group, received working memory training in two month.

Category

Rehabilitation

2

Description

Control group dont receive intervention.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Schools in Isfahan

Full name of responsible person

Street address

City

Isfahan

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Isfahan

Full name of responsible person

University of Isfahan

Street address

University of Isfahan

City

Isfahan

Grant name

Grant code / Reference number

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

Yes
Title of funding source
University of Isfahan
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
University of Isfahan
Full name of responsible person
Sara Aghababaei
Position
Doctoral Student in Psychology
Other areas of specialty/work
Street address
No. 444, Amin Alley, 15 Khordad Street, Kaveh Street,
Isfahan, Iran
City
Isfahan
Postal code
Phone
+98 31 1465 8260
Fax
Email
aghababaei.sara@yahoo.com
Web page address

Person responsible for scientific inquiries

Contact

Name of organization / entity
University of Isfahan
Full name of responsible person
Sara Aghababaei
Position
Doctoral Student in Psychology
Other areas of specialty/work
Street address

No. 444, Amin Alley, 15 Khordad Street, Kaveh Street,
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Fax
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Web page address
Person responsible for updating data

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aghababaei.sara@yahoo.com
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