Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

The effect of implicit learning versus explicit learning on the bimanual coordination of With High Functioning Autistic

Protocol summary

Study aim
The study of explicit and implicit learning ability in people with autism to understand Which learning method is more useful to these people.

Design
In this study, 24 high-Functional autistic children (12 to 8 years old) are divided into three groups of explicit and implicit learning and control.

Settings and conduct
In this study, explicit and implicit groups, in addition to the implementation of the Autism Center rehabilitation program, practice bimanual coordination skill, while the control group only performs a rehabilitation program.

Participants/Inclusion and exclusion criteria
High-Functional autistic people with an age range of 8-10. Entry requirements for the study. People who are outside the age range or out of the range of autism do not have inside to the study.

Intervention groups
The explicit learning group runs the bimanual coordination skill from the difficult to the easy level. The implicit learning group runs the bimanual coordination skill from the the easy to difficult level. The control group is evaluated only in pre-test and post-test.

Main outcome variables
It will reveal the appropriate training method for these people. It reduces the cost of funding and time by providing a more appropriate learning method. Improves autism indices.

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20171231038156N1**
Registration date: **2018-12-03, 1397/09/12**
Registration timing: **retrospective**
Last update: **2018-12-03, 1397/09/12**
Update count: **0**

Registration date
2018-12-03, 1397/09/12

Registrant information

Name
benyamin ghelichpoor

Name of organization / entity
The Shahid beheshti university of Tehran

Country
Iran (Islamic Republic of)

Phone
+98 17 3323 5121

Email address
beni_ghlichpoor@ut.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2018-05-12, 1397/02/22

Expected recruitment end date
2018-06-12, 1397/03/22

Actual recruitment start date
2018-05-12, 1397/02/22

Actual recruitment end date
2018-06-12, 1397/03/22

Trial completion date
2018-06-12, 1397/03/22

Scientific title
The effect of implicit learning versus explicit learning on the bimanual coordination of With High Functioning Autistic

Public title
Effective learning in autism.

Purpose
Supportive

Inclusion/Exclusion criteria

Inclusion criteria:
High Functioning Autistic
Exclusion criteria:
Age more than 12 years old or less than 8 years old low Functioning Autistic

Age
From **8 years** old to **12 years** old

Gender
Both

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **24**
Actual sample size reached: **24**

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
biological sciences research center shahid beheshti university of Tehran

Street address
vanak sq shahid beheshti university

City
tehran

Province
Tehran

Postal code
4971679843

Approval date
2018-04-28, 1397/02/08

Ethics committee reference number
IR.SBU.ICBS97/1009

Health conditions studied

1

Description of health condition studied
autism

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description
The learning was a bimanual coordination.

Timepoint
Before starting the intervention and after 7 and 9 days after the intervention began

Method of measurement
biannual coordination test device building Padidar Omide Farda

Secondary outcomes

empty

Intervention groups

1

Description
The tool used to interact with the bimanual coordination instrument is the creation of the Padidar Omide Farda Institute.People with autism are classified into three interventional groups.The first intervention group (explicit learning group) performs the skill from easy to difficult (by changing the range of error).The second intervention group (implicit learning group) runs the skill from easy to difficult.The third intervention group (control) does no practice. At first, a pre-test was performed from all subjects, then the first and second intervention groups for 6 days, each day, trained for two-handed coordination skills for 30 minutes each day. At the end of the sixth session, the post-test was performed from all groups.

Category
Other

Recruitment centers

1

Recruitment center

Name of recruitment center
ofoq autism center

Full name of responsible person
benyamin ghelichpoor

Street address
east shohada ave ofoq autsm center

City
gonbad e kavoos

Province
Golestan

Postal code
491679843

Phone
+98 17 3329 2433

Email
benyamin_ghelichpoor@yahoo.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
The University of Shahid Beheshti Tehran
Full name of responsible person
benyamin ghelichpoor
Street address
vanak sq Shahid Beheshti university
City
Tehran
Province
Tehran
Postal code
4971679843
Phone
+98 21 2990
Email
b.ghelichpoor@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
No
Title of funding source
by my own
Proportion provided by this source
100
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
Persons

Person responsible for general inquiries

Contact
Name of organization / entity
Shahid Beheshti university
Full name of responsible person
benyamin ghelolichpoor
Position
Phd student
Latest degree
Master
Other areas of specialty/work
Others
Street address
no 23, west Arash ave
City
gonbade kavoos
Province
Tehran
Postal code
4971679843
Phone
+98 17 3323 5121
Email
b.ghelichpoor@gmail.com

Person responsible for scientific inquiries

Contact
Name of organization / entity
Shahid beheshti university
Full name of responsible person
benyamin ghelichpoor
Position
Phd student
Latest degree
Master
Other areas of specialty/work
Others
Street address
No 23, wast Arash Ave
City
Tehran
Province
Tehran
Postal code
۴۹۷۱۶۷۹۸۴۳
Phone
+98 17 3323 5121
Email
b.ghelichpoor@gmail.com

Person responsible for updating data

Contact
Name of organization / entity
Shahid beheshti university
Full name of responsible person
benyamin ghelichpoor
Position
Phd student
Latest degree
Master
Other areas of specialty/work
Others
Street address
No 23. west Arash Ave
City
gonbade kavoos
Province
Golestan
Postal code
4971679843
Phone
+98 17 3323 5121
Email
beni_ghlichpoor@ut.ac.ir

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

the information study in mean.

Study Protocol

Yes - There is 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

Not applicable

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

In the publishing process, no personal information is released from the subjects. All information is expressed in groups.

When the data will become available and for how long

3 months after printing results.

To whom data/document is available

Medical, academic and scientific institutions

Under which criteria data/document could be used

Improve our knowledge

From where data/document is obtainable

The postal address mentioned in the article was published.

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

Once notified the request and Ensure that there is no abuse.

Comments