Clinical Trial Protocol
Iranian Registry of Clinical Trials

07 Nov 2026

The effect of Functionally Oriented Music Therapy on motor and cognitive skills in children with specific learning disability

Protocol summary

Study aim
Evaluating the effect of the Functionally Oriented Music Therapy on motor and cognitive skills in children with specific learning disability.

Design
Randomized clinical trial with a with blinded outcome assessment

Settings and conduct
Through interview with parents whose children has been registered in learning disability centers , samples with inclusion criteria and a letter of consent will be selected. Using random digit tables, samples will be divided into experimental and control group. Assessments includes Clinical Observation of Motor and Postural Skills, Bruininks-Oseretsky Test of Motor Proficiency, Wechsler Memory Scale and Continuous Performance Test will be taken from 26 participants. Behavior Rating Inventory of Executive Function will be answered by parents. The assessments is conducted by blinded/trained elevators.

Participants/Inclusion and exclusion criteria
Inclusion criteria: Specific learning disability diagnosed by experts, Age 7- 11 years, Education at least fifth grade and ability of reading, writing and speaking in Persian for respondent parent. Exclusion criteria: Untreated physical, visual and auditory impairments, Co-morbidity of attention deficit-hyper activity disorder, Co-morbidity of problem behaviors

Intervention groups
The experimental group will receive the Functionally Oriented Music Therapy (FMT) in which specific melody structures are played on a piano by the therapist and the client plays on certain drums and cymbals. Treatment will be implemented individually and there is no oral instruction. The sessions will take 4 months, 16 sessions and 1 day per week for 20 minutes per session. The control group will not receive any intervention.

Main outcome variables
attention, memory, executive function, motor-postural skills

General information

Reason for update

Acronym
FMT

IRCT registration information
IRCT registration number: **IRCT20100224003419N5**
Registration date: **2020-04-05, 1399/01/17**
Registration timing: **registered_while_recruiting**

Last update: **2020-04-05, 1399/01/17**
Update count: **0**

Registration date
2020-04-05, 1399/01/17

Registrant information

Name
Mitra Khalafbeigi

Name of organization / entity

Country
Iran (Islamic Republic of)

Phone
+98 21 2222 7124

Email address
khalafbeigi.m@iums.ac.ir

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2019-12-17, 1398/09/26

Expected recruitment end date
2020-09-20, 1399/06/30

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effect of Functionally Oriented Music Therapy on motor and cognitive skills in children with specific learning disability

Public title
Functionally Oriented Music Therapy in Learning disability

Purpose
Treatment

Inclusion/Exclusion criteria

Inclusion criteria:
Specific learning disability diagnosed by expert Age 7- 11 years Education at least fifth grade and ability of reading, writing and speaking in Persian for respondent parent

Exclusion criteria:
Untreated physical, visual and auditory impairments Co-morbidity of attention deficit-hyper activity disorder Co-morbidity of problem behaviors

Age
From **7 years** old to **11 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Outcome assessor

Sample size
Target sample size: **26**

Randomization (investigator's opinion)
Randomized

Randomization description
Sampling is convenience and based on inclusion criteria. Then samples are assigned randomly into two groups of experimental and control through random number table.

Blinding (investigator's opinion)
Single blinded

Blinding description
Assessors who are allocated to gather data.

Placebo
Not used

Assignment
Parallel

Other design features
Functionally Oriented Music Therapy, FMT, belongs to Sweden. It will be utilized with the permission of its developers and by providing the maximum principles of original version out of Sweden.

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Iran University of Medical Sceinces

Street address
School of Rehabilitation Sciences, Iran University of Medical Sciences, Maddadkaran St., Shahid Nazari St., Mother Square, Mirdamad Blvd, Tehran, Iran.

City
Tehran

Province
Tehran

Postal code
15459-13487

Approval date
2019-12-16, 1398/09/25

Ethics committee reference number
IR.IUMS.REC.1398.974

Health conditions studied

1

Description of health condition studied
Specific Learning Disability

ICD-10 code
R48

ICD-10 code description
Dyslexia and other symbolic dysfunctions, not elsewhere classified

Primary outcomes

1

Description
Changes in sustained attention, ability to maintain consistent behavioral response during a repetitive or continues task.

Timepoint
Before and after the intervention

Method of measurement
Continuous performance Test (CPT), software version

2

Description
Changes in memory capacity (7+/-2)

Timepoint
Before and after the intervention

Method of measurement
Wechsler Working Memory Scale (WMS)

3

Description
Changes in executive function

Timepoint
Before and after the intervention

Method of measurement
Behavior Rating Inventory of Executive Function(BRIEF)

4

Description
Changes in motor- postural skills

Timepoint
Before and after the intervention
Method of measurement
Clinical Observation of Motor and Postural Skills (COMPS)

5

Description
Changes in gross and fine motor skills
Timepoint
Before and after the intervention
Method of measurement
Bruininks-Oseretsky Test of Motor Proficiency (BOT), Sub scale of gross and fine motor skills

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: This group will receive FMT approach in which specific melody structures are played on acoustic piano by the therapist to stimulate the overall natural development of fundamental function in the body of the client. Treatment is implemented individually and thr client will be developed in motor, cognitive, perception and emotion areas by playing on certain drums and cymbals. The approach has no oral instruction at all, instead melody structures are used to stimulate the client's natural development. The length of each session is 20 minutes which will be done for 16 sessions weekly.
Category
Treatment - Other

2

Description
Control group: This group will not receive any specific intervention
Category
Treatment - Other

Recruitment centers

1

Recruitment center
Name of recruitment center
The center of education and rehabilitation for specific learning disabilities 1, Due to the SNEO
Full name of responsible person
Mrs. Khazraei
Street address
No. 289, Farhang Square, Sayed Jamal al-Din Street, Tehran, Iran
City
Tehran
Province
Tehran
Postal code
ناموجود
Phone
+98 21 8806 0329
Email
seo@medu.ir

2

Recruitment center
Name of recruitment center
The center of education and rehabilitation for specific learning disabilities 2, Due to the SNEO
Full name of responsible person
Mrs. Afshar
Street address
No. 3, Rose Alley, South Golestan, Movahed St, Artesh Square, Tehran, Iran
City
Tehran
Province
Tehran
Postal code
ناموجود
Phone
+98 21 2228 3888
Email
seo@medu.ir

3

Recruitment center
Name of recruitment center
The center of education and rehabilitation for specific learning disabilities 3, Due to the SNEO
Full name of responsible person
Mrs. Abedini
Street address
No. 12, Oji Alley, Azizi Street, Piroozi Street, Tehran, Iran
City
Tehran
Province
Tehran
Postal code
ناموجود
Phone
+98 21 3325 0021
Email
seo@medu.ir

4

Recruitment center
Name of recruitment center
The center of education and rehabilitation for specific learning disabilities 4, Due to the SNEO
Full name of responsible person
Mrs. Soleymani
Street address
No. 369, West Yadgar Street, Takhti St, Moallem Blvd,

Yaft Abad, Tehran, Iran

City
Tehran

Province
Tehran

Postal code
ناموجود

Phone
+98 21 6610 2055

Email
seo@medu.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Vice-chancellor for Research

Street address
School of Rehabilitation Sciences, Iran University of Medical Sciences, Maddadkaran St., Shahid Nazari St., Mother Square, Mirdamad Blvd, Tehran, Iran.

City
Tehran

Province
Tehran

Postal code
15459-13487

Phone
+98 21 2222 7124

Email
kamyab.m@iums.ac.ir

Grant name

Grant code / Reference number

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

Title of funding source
Iran 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
Iran University of Medical Sciences

Full name of responsible person
Samaneh Karamali Esmaili

Position
Assistant professor

Latest degree
Ph.D.

Other areas of specialty/work
Occupational Therapy

Street address
School of Rehabilitation Sciences, Iran University of Medical Sciences, Maddadkaran St., Shahid Nazari St., Mother Square, Mirdamad Blvd, Tehran, Iran

City
Tehran

Province
Tehran

Postal code
15459-13487

Phone
+98 21 2222 7124

Email
esmaeili.s@iums.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Mitra Khalafbeigi

Position
Assistant professor

Latest degree
Ph.D.

Other areas of specialty/work
Occupational Therapy

Street address
School of Rehabilitation Sciences, Iran University of Medical Sciences, Maddadkaran St., Shahid Nazari St., Mother Square, Mirdamad Blvd, Tehran, Iran

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Province
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Postal code
15459-13487

Phone
+98 21 2222 7124

Email
khalafbeigi.m@iums.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Iran University of Medical Sciences

Full name of responsible person
Mitra Khalafbeigi

Position
Assistant professor

Latest degree
Ph.D.

Other areas of specialty/work
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Email
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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
Yes - There is a plan to make this available
Statistical Analysis Plan
Yes - There is a plan to make this available
Informed Consent Form
No - There is not a plan to make this available
Clinical Study Report
Yes - There is a plan to make this available
Analytic Code
Yes - There is 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
The data that are related to primary outcome will be available.
When the data will become available and for how long
Immediately after publication.
To whom data/document is available
Researchers working in academic institutions.
Under which criteria data/document could be used
With permission of developers of approach in Sweden.
From where data/document is obtainable
The head director of FMT education center. Elin Svanström info@fmtutbildning.se
What processes are involved for a request to access data/document
Sending e-mail
Comments