

Clinical Trial Protocol

Iranian Registry of Clinical Trials

16 Jul 2026

Compilation Of Effectiveness of Compassionate Mind-Based Cognitive Therapy and Transcranial Direct Electrical Stimulation on Brain-Behavioral Systems, Dark Personality Traits, and the Theory of mind Adolescents with high-risk behaviors.

Protocol summary

Study aim

Comparison of the effectiveness of cognitive therapy based on compassionate mind and direct transcranial electrical stimulation on brain-behavioral systems, dark personality traits and mind theory of adolescents with high-risk behaviors

Design

The present research method was a quasi-experimental and comparative experiment in which a pre-test/post-test design with two experimental groups and one control group was used.

Settings and conduct

This study was performed in Bozorgmehr Counseling Center.

Participants/Inclusion and exclusion criteria

Inclusion criteria: having a high-risk behaviors; willingness to participate in the study; not suffering from other disorders. Non-inclusion criteria: Participate in other intervention programs at the same time.

Intervention groups

The first intervention group was exposed to direct ultrasonic electrical stimulation, and the second experimental group was exposed to Compassionate Mind-Based Cognitive Therapy. The control group did not receive any treatment.

Main outcome variables

Brain-Behavioral Systems, Dark Personality Traits, and the Theory of Mind

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20200209046441N1**

Registration date: **2021-01-25, 1399/11/06**

Registration timing: **retrospective**

Last update: **2021-01-25, 1399/11/06**

Update count: **0**

Registration date

2021-01-25, 1399/11/06

Registrant information

Name

hamidreza Dehghan

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 41 3328 0605

Email address

hamiddehghan313@umz.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2020-09-22, 1399/07/01

Expected recruitment end date

2020-12-30, 1399/10/10

Actual recruitment start date

2020-11-30, 1399/09/10

Actual recruitment end date

2021-01-16, 1399/10/27

Trial completion date

2021-01-17, 1399/10/28

Scientific title

Compilation Of Effectiveness of Compassionate Mind-Based Cognitive Therapy and Transcranial Direct Electrical Stimulation on Brain-Behavioral Systems, Dark Personality Traits, and the Theory of mind Adolescents

with high-risk behaviors.

Public title
Mind-Based Cognitive Therapy and Transcranial Direct Electrical Stimulation on Brain-Behavioral Systems, Dark Personality Traits, and the Theory of mind Adolescents with high-risk behaviors and self-harm behaviors.

Purpose
Treatment

Inclusion/Exclusion criteria
Inclusion criteria:
Having high-risk behaviors based on a screening questionnaire Willingness to participate in the study No other mental disorders
Exclusion criteria:
Participate in other intervention programs at the same time

Age
From **15 years** old to **17 years** old

Gender
Male

Phase
N/A

Groups that have been masked
No information

Sample size
Target sample size: **45**
Actual sample size reached: **45**

Randomization (investigator's opinion)
Randomized

Randomization description
36 students with high-risk behaviors were randomly selected and then completely randomly (based on lottery) were divided two groups of 15 experiments and one group controls. Allocation was done through drawing a code in which every student was given a code and we put the codes in a container. Then 15 people who were taken out first were replaced in the first experimental group, 15 people later in the second experimental group and 18 people later in the control group.

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

Tabriz University of Medical Sciences

Street address

Basmanj Street. Medical School - Second Floor

City

Tabriz

Province

East Azarbaijan

Postal code

5351869012

Approval date

2020-12-30, 1399/10/10

Ethics committee reference number

IR.IAU.TABRIZ.REC.1399.146

Health conditions studied

1

Description of health condition studied

Specific learning disability

ICD-10 code

یادگیری

ICD-10 code description

F81.0

Primary outcomes

1

Description

Behavioral brain systems

Timepoint

Before and after the intervention

Method of measurement

questionnaire

2

Description

Dark personality traits

Timepoint

Before and after the intervention

Method of measurement

questionnaire

3

Description

قبل و بعد از مداخله

Timepoint

Before and after the intervention

Method of measurement

questionnaire

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: Intervention group: Transcranial Direct-Current Stimulation (tDCS) is a technique used to

modify and modify brain function, which is now used as a healthy and effective procedure to treat most neurological conditions and even in medicine. Electrical Stimulation Technique A neural modification method that transmits electric current to a specific point in the skull over a very specific period of time, including an anode electrode that stimulates the nervous system and a cathode electrode that inhibits the nervous system. To stimulate the centers of the prefrontal cortex, this is responsible for controlling the complex movements of the anode electrode on the prefrontal cortex and the cathode electrode on the opposite shoulder (according to the 10-20 EEG system). Participants sit in a comfortable chair in a quiet room with no other sensory stimuli. Electrical stimulation of the brain by tDCS (Canadian-made Mind-Alif brand device) was instilled in students in a steady stream with a constant current of between 1.5 and 2 mA (intensity appropriate for client tolerance). Every other day and for 10 days, using a pair of 5×5 cm rubber electrodes covered with artificial sponge soaked in a normal saline solution and placed in the desired areas.

Category

Treatment - Other

2

Description

Control group: They did not receive any treatment.

Category

Treatment - Other

3

Description

Intervention group: Cognitive therapy based on a compassionate mind: Compassionate mind training is one of the psychotherapy methods in which empathy, empathy, compassion, acceptance and tolerance, responsibility and a sense of worth are taught (Gilbert, 2009). This treatment is designed by the research activities of Gilbert (2005). In the present study, this treatment method will be held in 12 sessions, each session for 90 minutes and in groups once a week.

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Bozorgmehr Counseling Center

Full name of responsible person

Dr. Seyed Mahmoud Tabatabai

Street address

Bozorgmehr Counseling Center, in front of Education District 2, 17 Shahrivar Jadid St., Tabriz City.

City

tabriz

Province

East Azarbaijan

Postal code

5157944533

Phone

+98 41 3228 5645

Email

smt11351@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

University of Mazandaran

Full name of responsible person

Alireza Khasali

Street address

Deputy of Research and Technology, Central Organization, Pasdaran St.

City

babolsar

Province

Mazandaran

Postal code

4741613534

Phone

+98 11 3530 3300

Email

khesali@umz.ac.i

Grant name

Grant code / Reference number

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

Yes

Title of funding source

University of Mazandaran

Proportion provided by this source

5

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

Mazandaran University of Medical Sciences

Full name of responsible person

Hamidreza Dehghan

Position

student

Latest degree

Master

Other areas of specialty/work

Psychology

Street address

No. 5, first floor, water apartments, Farmandari street, Farhangian alley.

City

tabriz

Province

East Azarbaijan

Postal code

5351869012

Phone

+98 41 3322 4021

Email

hamidreza.dehghan313@ymz.ac.ir

Person responsible for scientific inquiries

Contact**Name of organization / entity**

University of Mazandaran

Full name of responsible person

Habibolah Naderi

Position

Assistant Professor of Psychology

Latest degree

Ph.D.

Other areas of specialty/work

Psychology

Street address

Faculty of Humanities and Social Sciences, University Blvd., Campus of Mazandaran University, Shahid Zolfaghari Blvd.

City

babolsar

Province

Mazandaran

Postal code

4741613534

Phone

35303565

Email

h.naderi@umz.ac.ir

Person responsible for updating data

Contact**Name of organization / entity**

University of Mazandaran

Full name of responsible person

Hamidreza Dehghan

Position

Student

Latest degree

Master

Other areas of specialty/work

Psychology

Street address

No. 5, first floor, Water Apartments, Farmandari Street, Farhangian alley.

City

Tabriz

Province

East Azarbaijan

Postal code

5351869012

Phone

+98 919 913 3406

Email

Hamidreza.Dehghan313@yahoo.com

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 need to publish data.

Study Protocol

Undecided - It is not yet known if there will be a plan to make this available

Statistical Analysis Plan

No - There is not a plan to make this available

Informed Consent Form

Yes - There is a plan to make this available

Clinical Study Report

Yes - There is a plan to make this available

Analytic Code

Not applicable

Data Dictionary

Not applicable

Title and more details about the data/document

The collected data were analyzed using SPSS-23 software.

When the data will become available and for how long

To whom data/document is available

Supervisors, consultants and referees

Under which criteria data/document could be used

From where data/document is obtainable

To the dissertation

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

Comments