Clinical Trial Protocol
Iranian Registry of Clinical Trials

16 Sep 2026

Comparison of the effectiveness of direct transcranial direct current stimulation(tDCS) and computer cognitive rehabilitation(cCRT) and Combination of tDCS with cCRT on the executive functions of Shiraz Univesrity college students addicted to social networks

Protocol summary

Study aim

comparing the effectiveness of transcranial direct current stimulation(tDCS) and computerized cognitive rehabilitation(cCRT) and the combined rehabilitation of tDCS and cCRT on the executive functions of students addicted to social networks

Design

The clinical trial is a semi-experimental type and the design of this research is a pre-test-post-test type with a control group and the research sample also includes 64 students who will be selected by voluntary available sampling method.

Settings and conduct

After the sampling by the published announcement, the pre-test will be implemented on the sample group and the interventions will be applied in the cognitive laboratory of Shiraz University on the experimental sample group according to the predetermined protocol. Nothing will be done on the sample group and finally, the post-test will be taken after the last intervention session.

Participants/Inclusion and exclusion criteria

Having an addiction to virtual social networks The minimum age is 18 years and the maximum age is 50 years Familiarity with using a computer Being healthy in terms of vision, hearing and movement abilities to complete the instructions and Use of computer Absence of open wounds on the scalp Absence of heart diseases, heart battery and history of seizures and epilepsy Absence of more than two sessions Unwillingness to continue rehabilitation Having severe mental or physical disorders Simultaneous participation in other rehabilitation programs

Intervention groups

This research includes 3 experimental groups (group one: transcranial direct current stimulation rehabilitation, group two: computerized cognitive rehabilitation rehabilitation and group three: combined tDCS rehabilitation with cCRT) and 1 control group It will be inactive that the assignment of people in these 4 groups will be done randomly.

Main outcome variables

executive functions

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20230103057038N1**
Registration date: **2023-05-18, 1402/02/28**
Registration timing: **prospective**

Last update: **2023-05-18, 1402/02/28**
Update count: **0**

Registration date

2023-05-18, 1402/02/28

Registrant information

Name
Seyedeh Sara Farajzadeh

Name of organization / entity
Shiraz University

Country
Iran (Islamic Republic of)

Phone
+98 44 3366 9086

Email address
sarafarajzadeh@hafez.shirazu.ac.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date
2023-06-10, 1402/03/20
Expected recruitment end date
2023-07-11, 1402/04/20
Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Comparison of the effectiveness of direct transcranial direct current stimulation(tDCS) and computer cognitive rehabilitation(cCRT) and Combination of tDCS with cCRT on the executive functions of Shiraz Univesrity college students addicted to social networks

Public title
Comparison of the effectiveness of direct transcranial direct current stimulation and computer cognitive rehabilitation and Combination of tDCS with cCRT on the executive functions of students addicted to social networks
Purpose
Supportive
Inclusion/Exclusion criteria
Inclusion criteria:
being addicted to social networks being a student The minimum age should be 18 years and the maximum age should be 50 years old being familiar with the basics of computers
Exclusion criteria:
Having an open wound on the scalp Having heart diseases, heart battery and a history of seizures and epilepsy and severe mental illnesses Suffering from visual, hearing and movement disabilities to complete the instructions and use the computer
Age
From **18 years** old to **45 years** old
Gender
Both

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **80**
Randomization (investigator's opinion)
Randomized
Randomization description
64 sample people will be classified into 4 groups by simple random method (3 groups of tDCS, cCRT and a combination of these two and 1 control group), the randomization will be done in such a way that the names of the sample people will be written on papers and placed in the container. Then people will be randomly entered into each group by choosing their names from the container.
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Factorial
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics committee of Shiraz University
Street address
No. 45, Jafari Street; Tarighat Alley; Saadi2 Alley; Urmia; West Azerbaijan
City
Shiraz
Province
Fars
Postal code
5715167345
Approval date
2022-12-14, 1401/09/23
Ethics committee reference number
IR.US.REC.1401.035

Health conditions studied

1

Description of health condition studied
Social Network Addiction
ICD-10 code
ICD-10 code description

Primary outcomes

1

Description
Executive Functions(Working Memory- Sustained Attention- Cognitive Flexibility- Response Inhibition- Problem Solving And Planning)
Timepoint
Before the intervention - immediately after the end of the intervention - 90 days after the end of the intervention
Method of measurement
Wisconsin Cards Test, Stop-Sign Test,Tower of London Test, Continuous Performance Test, N-Back Memory Test

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: Transcranial Direct Currnet Stimulation
Category
Treatment - Devices

2

Description
Intervention group: Captain Log Cognitive Rehabilitation Computer Software
Category
Treatment - Other

3

Description
Intervention group: combined rehabilitation of Transcranial Direct Currnet Stimulation and Captain Log Cognitive Rehabilitation Computer Software
Category
Treatment - Devices

4

Description
Control group: They will not receive intervention
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Shiraz University
Full name of responsible person
Abdulaziz Aflakseir
Street address
No. 45, Jafari Street; Tarighat Alley; Saadi2 Alley; urmia
City
Shiraz
Province
Fars
Postal code
5715167345
Phone
+98 44 3366 9086
Email
sarafrj.1996@gmail.com

Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Shiraz University
Full name of responsible person
Dr Abdulaziz Aflakseir
Street address
No. 45, Jafari Street; Tarighat Street; Saadi2 Alley; Urmia
City
Shiraz
Province
Fars
Postal code
5715167345
Phone
+98 44 3366 9086
Email
sarafrj.1996@gmail.com
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Shiraz University
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
Shiraz University
Full name of responsible person
Seyedeh Sara Farajzadeh
Position
دانشجو
Latest degree
Bachelor
Other areas of specialty/work
Psychology
Street address
No.45, tarighat St, Saadi 2 Ave
City
Urmia
Province
Fars
Postal code
5715167345
Phone
+98 44 3366 9086
Fax
Email
sarafarajzadeh@hafez.shirazu.ac.ir

Person responsible for scientific inquiries

Contact

Name of organization / entity
Shiraz University

Full name of responsible person
Seyedeh Sara Farajzadeh

Position
دانشجو

Latest degree
Bachelor

Other areas of specialty/work
Psychology

Street address
No.45, tarighat St, Saadi 2 Ave, Urmia

City
Urmia

Province
Fars

Postal code
5715167345

Phone
+98 44 3366 9086

Fax

Email
sarafarajzadeh@hafez.shirazu.ac.ir

Person responsible for updating data

Contact

Name of organization / entity
Shiraz University

Full name of responsible person
Seyedeh Sara Farajzadeh

Position
دانشجو

Latest degree
Bachelor

Other areas of specialty/work
Psychology

Street address
No.45, tarighat St, Saadi 2 Ave, Urmia

City
Urmia

Province
Fars

Postal code
5715167345

Phone
+98 44 3366 9086

Fax

Email
sarafarajzadeh@hafez.shirazu.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
There is no further information

Study Protocol
Yes - There is a plan to make this available

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

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

Title and more details about the data/document
The protocol, consent form and the results report will be published 6 months after the publication of the article

When the data will become available and for how long
6 months after the publication of the article - from 1402

To whom data/document is available
Researchers working in academic institutions

Under which criteria data/document could be used
1- Mentioning the author's name and referring to her 2- Failure to conduct researchs that are very similar to this research 3- Using documents after the article is published

From where data/document is obtainable
email:sarafrj.1996@gmail.com

What processes are involved for a request to access data/document
Send an email to the author and explain the necessity of requesting documents and a summary of the research

Comments