

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

15 Jul 2026

### The Effectiveness of Neurofeedback Training on Competitive Aggressiveness, Emotion Regulation Difficulties and Sport Function in Football Athletes.

#### Protocol summary

##### Study aim

Determining the effectiveness of neurofeedback training on Competitive Aggressiveness, emotion regulation Difficulties, Sports Function in Football Athletes.

##### Design

intervention and control groups, with parallel, double-blind, randomized groups. Excel software rand function is used for randomization. The statistical population: 70 people. 24 Athletes (experimental group: 12- control group: 12). All complete the questionnaire, and only the intervention group is treated with Neurofeedback Training.

##### Settings and conduct

Research Method: Semi-experimental and pre-test-post-test research design with the control group. The statistical population: Football Athletes in the age range of 16 to 21 years who were active at the Football Club in Astaneh Ashrafiyeh city. during the first quarter of 1401. Athletes during 2 months, three a week, and in Each session is followed by Neurofeedback Training for 30 minutes.

##### Participants/Inclusion and exclusion criteria

Entry requirements: registration card of the football club, Being a boy, At least 3 months of continuous training in the club, Being young (16-21). No entry conditions: Having psychological disorders, Athletes in the youth age range (over 21), Activities in sports clubs outside the study city.

##### Intervention groups

Intervention group: Football Athletes. 12 people in the experimental group and 12 people in the control group. neurofeedback device and tools such as Competitive Aggression and Anger Scale Test (Maxwell & Moores), Difficulties in Emotion Regulation Scale Test (Gratz & Roemer), Sports Performance Scale Test (Charbonneau), and Sports Success Scale Test (Moosavi & Vaez) will be used. Subjects before and after intervention complete

the questionnaire, only the intervention group under Neurofeedback training is included.

##### Main outcome variables

Neurofeedback Training, Competitive Aggressiveness, Emotion Regulation Difficulties, Sports Function.

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20211218053447N1**

Registration date: **2022-07-16, 1401/04/25**

Registration timing: **registered\_while\_recruiting**

Last update: **2022-07-16, 1401/04/25**

Update count: **0**

##### Registration date

2022-07-16, 1401/04/25

##### Registrant information

##### Name

Navid Agand

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 13 4212 0152

##### Email address

navid.a0152@gmail.com

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2022-07-11, 1401/04/20

##### Expected recruitment end date

2022-07-21, 1401/04/30

**Actual recruitment start date**

empty

**Actual recruitment end date**

empty

**Trial completion date**

empty

**Scientific title**

The Effectiveness of Neurofeedback Training on  
Competitive Aggressiveness, Emotion Regulation  
Difficulties and Sport Function in Football Athletes.

**Public title**

The Effectiveness of Neurofeedback on Footballists.

**Purpose**

Prevention

**Inclusion/Exclusion criteria****Inclusion criteria:**

Having a registration card in a football club Being a boy  
At least 3 months of continuous training in the club Being  
young (age 16-21)

**Exclusion criteria:**

Having psychological disorders. Athletes in the youth age  
range(over 21). Activities in sports clubs outside the  
study city.

**Age**

From **16 years** old to **21 years** old

**Gender**

Male

**Phase**

N/A

**Groups that have been masked**

*No information*

**Sample size**

Target sample size: **24**

**Randomization (investigator's opinion)**

Randomized

**Randomization description**

At first, Football Athletes are selected according to the  
inclusion criteria. And then according to the random  
sequence obtained through Random allocation software,  
In the same way, Football Athletes will be randomly  
divided into experimental and control groups.

**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**

Ethics Committee of Lahijan Branch of Azad  
University

**Street address**

No. 24, Ayatollah Vahid street, Riyahini alley

**City**

Astaneh Ashrafiyeh

**Province**

Guilan

**Postal code**

4441953533

**Approval date**

2022-05-15, 1401/02/25

**Ethics committee reference number**

IR.IAU.LIAU.REC.1401.009

**Health conditions studied****1****Description of health condition studied**

Football Athletes

**ICD-10 code****ICD-10 code description****2****Description of health condition studied**

Competitive Aggressiveness

**ICD-10 code****ICD-10 code description****3****Description of health condition studied**

Emotion Regulation Difficulties

**ICD-10 code****ICD-10 code description****4****Description of health condition studied**

Sport Function

**ICD-10 code****ICD-10 code description****Primary outcomes****1****Description**

Competitive Aggression Score in Athletes Competitive  
Aggression and Anger Scale Test

**Timepoint**

Measurement of Competitive Aggression at the  
beginning of the study and 15 sessions after starting  
Neurotherapy(Neurofeedback training)

**Method of measurement**

Athletes Competitive Aggression and Anger Scale  
Test(Maxwell & Moores)

## 2

### Description

Difficulties in Emotion Regulation Score in Difficulties in Emotion Regulation Scale Test (Gratz & Roemer)

### Timepoint

Measurement of Difficulties in Emotion Regulation at the beginning of the study and 15 sessions after starting Neurotherapy(Neurofeedback training)

### Method of measurement

Difficulties in Emotion Regulation Scale Test (Gratz & Roemer)

## 3

### Description

Sport Performance Score in Sport Performance Scale Test(Charbonneau) and in Sports Success Scale Test(Moosavi&Vaez)

### Timepoint

Measurement of Sport Performance at the beginning of the study and 15 sessions after starting Neurotherapy(Neurofeedback training)

### Method of measurement

Sport Performance Scale Test(Charbonneau) and Sports Success Scale Test(Moosavi&Vaez)

## Secondary outcomes

empty

## Intervention groups

### 1

#### Description

Intervention group: Football Athletes who receive Neurofeedback Training. In relation to therapeutic intervention and data collection, neurofeedback device treatment protocols and tools such as Questionnaires will be used. Each Athletes undergoes neurotherapy for 30 minutes 3 times a week for 2 months in each session. Neurofeedback intervention is performed with monopolar protocol. At the point "FCz" of the head, Theta(4 to 8 Hz) will decrease, Low Beta(16 to 21 Hz) will increase, and High Beta(20 to 32 Hz) will decrease. All Athletes complete the questionnaires before and after the intervention. The questionnaires used in this research are as follows: 1)Competitive Aggression and Anger Scale Test 2)Difficulties in Emotion Regulation Scale Test 3)Sport Performance Scale Test 4)Sports Success Scale Test

#### Category

Treatment - Devices

### 2

#### Description

Control group: Football Athletes who do not receive Neurofeedback Training. In relation to data collection, tools such as Questionnaires will be used. Pre-test and post-test are taken from all athletes without therapeutic intervention. The questionnaires used in this research

are as follows: 1)Competitive Aggression and Anger Scale Test 2)Difficulties in Emotion Regulation Scale Test 3)Sport Performance Scale Test 4)Sports Success Scale Test

#### Category

Treatment - Devices

## Recruitment centers

### 1

#### Recruitment center

##### Name of recruitment center

Astaneh Ashrafiyeh Sports and Youth Office

##### Full name of responsible person

Navid Agand

##### Street address

next to Umm Al-Shuhada Square, Shahid Rajaei Street

##### City

Astaneh Ashrafiyeh

##### Province

Guilan

##### Postal code

4441953533

##### Phone

+98 911 507 8797

##### Email

navid.a0152@gmail.com

## Sponsors / Funding sources

### 1

#### Sponsor

##### Name of organization / entity

Islamic Azad University

##### Full name of responsible person

Hosein KHara

##### Street address

45 meter University Blvd, east kashif street

##### City

Lahijan

##### Province

Guilan

##### Postal code

۳۹۵۱۵-۴۴۱۶۹

##### Phone

+98 13 4222 9081

##### Email

navid.a0152@gmail.com

#### Grant name

#### Grant code / Reference number

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

No

#### Title of funding source

Lahijan Islamic Azad 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**

Islamic Azad University

**Full name of responsible person**

Navid Agand

**Position**

University student

**Latest degree**

Bachelor

**Other areas of specialty/work**

Psychology

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**Person responsible for scientific inquiries****Contact****Name of organization / entity**

Islamic Azad University

**Full name of responsible person**

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**Position**

University student

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**Person responsible for updating data****Contact****Name of organization / entity**

Islamic Azad University

**Full name of responsible person**

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**Position**

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**Latest degree**

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**Sharing plan****Deidentified Individual Participant Data Set (IPD)**

Yes - There is a plan to make this available

**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**

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**

All data obtained from the results of questionnaires, diagnostic interviews and improving the performance of clients will be published.

**When the data will become available and for how long**

Access period starts from September 2022

**To whom data/document is available**

Data and other documents are available to all researchers in the field of research.

**Under which criteria data/document could be used**

If other people request to receive data and documents, send a message to my personal email.

**From where data/document is obtainable**

Navid Agand is responsible by calling +989115078797 and emailing navid.a0152@gmail.com

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

Applicants should call +989115078797 to receive the required documents or data or send an email to

navid.a0152@gmail.com . Documents will be provided to them within 72 hours to a week.

#### **Comments**