

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

15 Jun 2026

### Comparing the Effectiveness of Self-Regulated Learning Strategies Training and Executive Function Enhancement Training on Academic Optimism, Sense of Belonging to School, and Academic Help-Seeking in Students with Low Academic Achievement

#### Protocol summary

##### Study aim

Determining the difference in the effectiveness of self-directed learning strategies training and executive function enhancement training on academic optimism, sense of belonging to school, and academic help-seeking in students with low academic achievement

##### Design

The clinical trial has a control group with parallel groups, double-blind, selected by purposive randomization, and with a sample size of 45 people, they are placed in three groups of 15 people by simple randomization.

##### Settings and conduct

This study will use a field experimental research method and an extensive pre-test and post-test design with a follow-up phase. All participants, clinical caregivers, and evaluators who interpret the data will be kept confidential and all participants will be given pseudonyms.

##### Participants/Inclusion and exclusion criteria

-Study subjects: Students with low academic achievement. -Age range: 15. -No concurrent clinical disorders and no dependence on alcohol or drugs. -Participate in the study with informed consent. -People who have a history of physical problems that could interfere with the research process. -No concurrent clinical disorders and no dependence on alcohol or drugs.

##### Intervention groups

Self-directed learning strategies: In this method, learners will develop greater speed and accuracy in learning, developmental issues such as greater self-confidence, and greater responsibility will also be created in learners. Executive Function Enhancement Training: The goal of this therapy is to help individuals adjust and adapt cognitive performance in the areas of attention and concentration and many other cognitive processes.

##### Main outcome variables

teaching self-regulated learning strategies, teaching empowerment executive functions, academic optimism, sense of belonging to school, academic help seeking, students

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20250217064751N1**

Registration date: **2025-03-07, 1403/12/17**

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

Last update: **2025-03-07, 1403/12/17**

Update count: **0**

##### Registration date

2025-03-07, 1403/12/17

##### Registrant information

##### Name

Roghayeh Esmail darjani

##### Name of organization / entity

##### Country

Iran (Islamic Republic of)

##### Phone

+98 11 3252 8304

##### Email address

r.esmaildarjani@iau.ac.ir

##### Recruitment status

**Recruitment complete**

##### Funding source

##### Expected recruitment start date

2025-03-05, 1403/12/15

##### Expected recruitment end date

2025-06-05, 1404/03/15

**Actual recruitment start date**  
empty

**Actual recruitment end date**  
empty

**Trial completion date**  
empty

**Scientific title**  
Comparing the Effectiveness of Self-Regulated Learning Strategies Training and Executive Function Enhancement Training on Academic Optimism, Sense of Belonging to School, and Academic Help-Seeking in Students with Low Academic Achievement

**Public title**  
Comparison of two treatment methods: self-directed learning strategies training and executive function enhancement therapy

**Purpose**  
Education/Guidance

**Inclusion/Exclusion criteria**  
**Inclusion criteria:**  
Subjects studied: Students with low academic achievement. Girl's gender. Age range 15 to 16. Participate in the research with informed consent. No concurrent clinical disorders and no dependence on alcohol or drugs.  
**Exclusion criteria:**  
People with a history of physical problems that could interfere with the research process. People with mental disorders.

**Age**  
From **15 years** old to **16 years** old

**Gender**  
Female

**Phase**  
N/A

**Groups that have been masked**

- Outcome assessor
- Data analyser

**Sample size**  
Target sample size: **45**

**Randomization (investigator's opinion)**  
Randomized

**Randomization description**  
Experimental and control groups: After selecting the sample, the next step is to divide the people into experimental and control groups. For this, simple randomization can be used. How to perform simple randomization: Step 1: After selecting the purposive sample, all the selected people are placed in a list. Step 2: From among these people, using a random method (such as drawing lots or using randomization software), the maps are divided into two experimental groups and a control group.

**Blinding (investigator's opinion)**  
Double blinded

**Blinding description**  
In the study in question, assessors and data analysts are blinded to avoid bias, and an abbreviation is used for

participants.

**Placebo**  
Not used

**Assignment**  
Parallel

**Other design features**

**Secondary Ids**  
empty

**Ethics committees**

**1**

**Ethics committee**  
**Name of ethics committee**  
Ahvaz Islamic Azad University  
**Street address**  
35 Pour Ganji Street, Velayat Alley 8, Enghelab Town  
**City**  
Babylon  
**Province**  
Mazandaran  
**Postal code**  
4717937146

**Approval date**  
2025-01-15, 1403/10/26

**Ethics committee reference number**  
IR.IAU.AHVAZ.REC.1403.450

**Health conditions studied**

**1**

**Description of health condition studied**  
Counseling therapy for students with low academic achievement

**ICD-10 code**

**ICD-10 code description**

**Primary outcomes**

**1**

**Description**  
Academic optimism

**Timepoint**  
Measuring this variable takes two months from the start of the study to its end.

**Method of measurement**  
Academic optimism: In this study, academic optimism refers to the score that subjects obtain from the 21-question academic optimism questionnaire by Golparvar et al. (2015).

**2**

**Description**  
Sense of belonging to school

**Timepoint**  
Measuring this variable takes two months from the start

of the study to its end.

### **Method of measurement**

Sense of belonging to school: In this study, the sense of belonging to school refers to the score that subjects obtain from the 27-question Sense of Belonging to School Questionnaire by Barry et al. (2004).

### **3**

#### **Description**

Academic Help Seeking

#### **Timepoint**

Measuring this variable takes two months from the start of the study to its end.

#### **Method of measurement**

Academic help seeking: In this study, academic help seeking refers to the score that subjects obtain from the 14-question Ryan and Pentrich (1997) Academic Help Seeking Questionnaire.

## **Secondary outcomes**

empty

## **Intervention groups**

### **1**

#### **Description**

Intervention group: Self-directed learning strategies include: cognitive strategies (repetition and review strategies, expansion and expansion, and organization); metacognitive strategies (planning strategies, control and monitoring strategies, and discipline strategies); and resource management strategies. In this method, learners will have personal control over the learning process, and therefore, greater speed and accuracy in learning, and developmental issues such as greater self-reliance, self-efficacy, and greater responsibility will also be created in learners. Self-directed learners use self-directed learning strategies appropriately and are at a high level of motivation.

#### **Category**

Behavior

### **2**

#### **Description**

Intervention group: Executive function training encompasses a wide range of methods for empowering and strengthening cognitive processes and behavioral abilities such as problem-solving ability, attention, reasoning, organization, planning, working memory, inhibitory control, arousal control, priming, priming change, and response inhibition according to specific techniques. Emphasis on executive function training is one of the effective methods of cognitive training. In executive function training, we can understand the interconnectedness of thought, emotion, and behavior, their relationship and contradiction. The goal of this treatment is to help individuals adjust and adapt cognitive performance in the areas of attention and concentration and many other cognitive processes.

### **Category**

Behavior

## **Recruitment centers**

### **1**

#### **Recruitment center**

##### **Name of recruitment center**

Junior high schools with low academic achievement students

##### **Full name of responsible person**

Roghayeh Esmail darjani

##### **Street address**

35 Pour Ganji Street, 8 Velayat Alley, Enghelab Town

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##### **Province**

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##### **Postal code**

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##### **Phone**

+98 11 3252 8304

##### **Email**

R.darjani68@gmail.com

## **Sponsors / Funding sources**

### **1**

#### **Sponsor**

##### **Name of organization / entity**

Islamic Azad University

##### **Full name of responsible person**

Dr. Parvin Ehteshamzadeh

##### **Street address**

Farhang Shahr, Islamic Azad University of Ahvaz

##### **City**

ahvaz

##### **Province**

Khuzestan

##### **Postal code**

6134937333

##### **Phone**

+98 61 3334 8421

##### **Email**

p\_ehtesham85@iau.ac.ir

#### **Grant name**

#### **Grant code / Reference number**

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

Yes

#### **Title of funding source**

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

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**Email**  
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## Person responsible for general inquiries

### Contact

**Name of organization / entity**  
Islamic Azad University  
**Full name of responsible person**  
Roghayeh Esmail darjani  
**Position**  
PhD student  
**Latest degree**  
Master  
**Other areas of specialty/work**  
Psychology  
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## Person responsible for scientific inquiries

### Contact

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## Person responsible for updating data

### Contact

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Islamic Azad University  
**Full name of responsible person**  
Roghayeh Esmail darjani  
**Position**  
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**Latest degree**  
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**Other areas of specialty/work**  
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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

The participants' data is confidential and I do not intend to publish it.

### Study Protocol

No - There is not 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

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

### Clinical Study Report

Undecided - It is not yet known if there will be 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