Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

The effectiveness of using artificial intelligence on increasing self-confidence and reducing stress in students

Protocol summary

Study aim
Determining the effectiveness of using artificial intelligence on increasing self-confidence and reducing stress in students

Design
This study is a quasi-experimental, two-parallel, double-blind study conducted on 30 students of Islamic Azad University, Izeh Branch (15 in the experimental group and 15 in the control group). The sample allocation is done by simple random method using the RAND function in Excel software; first, each participant is assigned a unique identification code and then a random number is generated for each individual using the RAND function. The participants are sorted based on the generated random numbers and finally the first 15 are placed in the experimental group and the next 15 are placed in the control group.

Settings and conduct
In this study, a field experimental research method and an extensive pre-test and post-test design will be used. The research will be conducted at the Islamic Azad University of Izeh. For the experimental group, the use of artificial intelligence in the form of a specific training program will be implemented in 8 90-minute sessions, one session per week in a group. All participants and clinical caregivers and evaluators who interpret the data and all information will be confidential and an abbreviation will be considered for the participants.

Participants/Inclusion and exclusion criteria
Inclusion Criteria: Be at least 19 and no more than 45 years old Be a student at Azad University, Izeh Branch Exclusion Criteria: Have a physical illness that interferes with the treatment process Be taking psychiatric medications

Intervention groups
Intervention group: Use of artificial intelligence in the form of a specific training program, conducted in a group setting over 8 90-minute sessions, one session per week. Control group: Do not receive any intervention.

Main outcome variables
Self-confidence; stress.

General information

Reason for update

Acronym

IRCT registration information
IRCT registration number: **IRCT20260830070834N1**
Registration date: **2026-09-09, 1405/06/18**
Registration timing: **prospective**

Last update: **2026-09-09, 1405/06/18**
Update count: **0**

Registration date
2026-09-09, 1405/06/18

Registrant information

Name
Marjan Alimohamadi

Name of organization / entity

Country
Iran (Islamic Republic of)

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Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2026-09-20, 1405/06/29

Expected recruitment end date
2026-10-01, 1405/07/09

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
The effectiveness of using artificial intelligence on increasing self-confidence and reducing stress in students

Public title
The effectiveness of using artificial intelligence on self-confidence and stress

Purpose
Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:
Be at least 19 and no more than 45 years old Be a student at Azad University, Izeh Branch Be willing to participate in the research

Exclusion criteria:
Have a physical illness that interferes with the treatment process Be taking psychiatric medications

Age
From **19 years** old to **45 years** old

Gender
Both

Phase
N/A

Groups that have been masked

- Care provider
- Outcome assessor
- Data analyser

Sample size
Target sample size: **30**

Randomization (investigator's opinion)
Randomized

Randomization description
In this study, simple randomization method is used to assign participants to two experimental and control groups. The randomization unit in this study is married women who are referred and eligible for the study. First, a complete list of volunteers who have been selected based on the study entry criteria is prepared. Then, each participant is assigned a unique numerical identification code. These codes are entered into the Random Number Generator software and a random number from one to 30 is generated for each individual. After generating these numbers, the participants are sorted in order based on the value of the random number and the individuals are assigned to two groups. The first 15 people on the list are assigned to the experimental group and the next 15 people to the control group, respectively. With this method, the order of entry into the study and the researcher's knowledge of the participants will not play any role in determining the group. To ensure allocation concealment, the person responsible for entering data and performing the randomization process in the software will be independent of the intervention administrators and study evaluators and will not have access to information about the session implementation process or changes in the allocation of individuals. Participant identification codes will also be kept confidential and separate from their other personal information. Therefore, it will not be possible to predict the assigned group for each participant before the randomization process.

Blinding (investigator's opinion)
Double blinded

Blinding description
In order to control bias and improve the internal validity of the research, this study will be designed with a double-blind approach; in this way, the outcome assessor and data analyst will be kept unaware of the allocation of students to the experimental and control groups. In this process, the outcome assessor will collect and record data at all stages of the pre-test, post-test, and, if the follow-up stage is implemented, without knowing the assigned group of the participants, in order to reduce the possibility of bias in measuring the self-confidence and stress variables. Also, the raw data of the participants will be provided to the statistical analyst using anonymous codes, such as Group 1 and Group 2, and the true nature of the groups will not be revealed until the end of the data analysis process. All stages of assigning participants to the experimental and control groups will be carried out by an individual independent of the intervention implementation team, and the assignment codes will be kept confidential. The decoding of the group codes will only be done after the final completion of the statistical analyses. Accordingly, by reducing the evaluator's and analyst's awareness of the participants' group status, an attempt will be made to minimize the possibility of bias in data collection, recording, and analysis and to increase the validity of the research results.

Placebo
Not used

Assignment
Parallel

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee
Behbahan Islamic Azad University Ethics Committee

Street address
Shahid Bayani St., Amir Kabir Blvd.

City
Behbahan

Province
Khouzestan

Postal code
6361713198

Approval date
2026-08-24, 1405/06/02

Ethics committee reference number
IR.IAU.BEHBAHAN.REC.1405.238

Health conditions studied

1

Description of health condition studied
Student stress
ICD-10 code
N39.3
ICD-10 code description
Stress incontinence (female) (male)

Primary outcomes

1

Description
Self-confidence
Timepoint
before performing the intervention and two weeks after completion of the intervention
Method of measurement
Sarmad et al. Self-Esteem Questionnaire (2011)

2

Description
Stress
Timepoint
before performing the intervention and two weeks after completion of the intervention
Method of measurement
Chen Stress Questionnaire (2022)

Secondary outcomes

empty

Intervention groups

1

Description
Intervention group: The AI intervention sessions will be based on the training package designed by Khodamoradi (1400). The sessions of this intervention will be conducted in 8 90-minute sessions (one session per week) in a group for the experimental group. The AI training program is an approach that aims to purposefully utilize AI capabilities in students' cognitive, educational, and personal processes and to increase self-confidence and reduce stress. In this program, students will be introduced to the correct and purposeful ways of using AI tools and will use this technology as a tool to facilitate learning, problem solving, organize academic activities, receive feedback, and enhance a sense of empowerment. The main educational themes of this program include: familiarization with the concept of artificial intelligence and its applications in life and education, identification of the capabilities and limitations of artificial intelligence tools, training on how to use artificial intelligence tools purposefully and responsibly, training on using artificial intelligence to search and organize information, using artificial intelligence to plan and manage academic activities, utilizing artificial intelligence in problem solving and decision-making, using artificial intelligence feedback to enhance a sense of competence and self-confidence, training on how to use artificial intelligence to reduce pressure and stress from academic activities, practical practice in using artificial intelligence tools in different situations, and finally consolidating and summarizing the skills learned. The main emphasis of this program is on the conscious, purposeful, and responsible use of artificial intelligence in order to increase students' sense of empowerment, strengthen self-confidence in carrying out academic activities, and reduce stress from academic issues and assignments.
Category
Other

2

Description
Control group: They do not receive any intervention or treatment.
Category
N/A

Recruitment centers

1

Recruitment center
Name of recruitment center
Islamic Azad University, Izeh Branch
Full name of responsible person
Marjan Aali Mohammadi
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Daneshjo Square, Zagros Blvd.
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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
Islamic Azad University
Full name of responsible person
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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

Person responsible for general inquiries

Contact

Name of organization / entity
Islamic Azad University

Full name of responsible person
Marjan Alimohamadi

Position
Daneshjuo

Latest degree
Bachelor

Other areas of specialty/work
Psychology

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Person responsible for updating data

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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
Participant data is completely confidential and I do not intend to publish it.

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
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

No - There is not a plan to make this available

Data Dictionary

No - There is not a plan to make this available