Clinical Trial Protocol
Iranian Registry of Clinical Trials

08 Nov 2026

Studying the effectiveness of problem-solving skills training on aggression, functional flexibility, and academic self-efficacy of aggressive eighth-grade male students

Protocol summary

Study aim

The aim of this study is to determine the effectiveness of problem-solving skills training on aggression, functional flexibility, and academic self-efficacy of aggressive eighth-grade male students.

Design

The present study, due to the multi-stage random selection of participants, is a field experimental study and the research design is a pre-test-post-test design with a control group. In this design, the subjects are measured before the implementation of the independent variable (pre-test), then the experimental intervention or independent variables are applied.

Settings and conduct

Cluster random sampling method was used to select the sample. First, from the four education districts of Ahvaz city, two districts were selected by simple random drawing (lottery) and 40 students eligible for the research were randomly divided into two groups of 20 students.

Participants/Inclusion and exclusion criteria

Inclusion criteria: 1- No serious physical illness 2- Obtaining a score of one standard deviation above the mean in aggression. Exclusion criteria: 1- Absence of more than two sessions 2- Participation in other psychotherapy sessions.

Intervention groups

From the four education districts of Ahvaz city, two districts will be selected by simple random drawing (lottery) and then eight boys' junior high schools from each district will be selected by simple random drawing and, in the next stage, one eighth grade class from each school. Then, 40 students eligible for the study will be randomly divided into 2 groups of 20 (20 in the experimental group and 20 in the control group). It should be noted that the control group will not receive any intervention during the research. The training sessions were developed based on the Spivak and Shoreh method (cited by Cassidy and Long, 1996) and will be implemented in 6 2-hour sessions.

Main outcome variables

Problem-solving skills

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20250712066455N1**
Registration date: **2025-07-14, 1404/04/23**
Registration timing: **prospective**

Last update: **2025-07-14, 1404/04/23**
Update count: **0**

Registration date

2025-07-14, 1404/04/23

Registrant information

Name

reza hardani

Name of organization / entity

Country

Iran (Islamic Republic of)

Phone

+98 61 3378 5979

Email address

reza.hardani@iau.ir

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-07-16, 1404/04/25

Expected recruitment end date

2025-08-11, 1404/05/20

Actual recruitment start date
empty
Actual recruitment end date
empty
Trial completion date
empty

Scientific title
Studying the effectiveness of problem-solving skills training on aggression, functional flexibility, and academic self-efficacy of aggressive eighth-grade male students

Public title
Studying the effectiveness of problem-solving skills training on aggression, functional flexibility, and academic self-efficacy of aggressive eighth-grade male students
Purpose
Education/Guidance
Inclusion/Exclusion criteria
Inclusion criteria:
Not having a serious physical illness Not participating in other psychotherapy sessions at least one month before the study Obtaining a score of one standard deviation above the mean in aggression
Exclusion criteria:
Absence of more than two sessions Participation in other psychotherapy sessions Unwillingness to continue treatment
Age
From **12 years** old to **13 years** old
Gender
Male

Phase
N/A
Groups that have been masked
No information
Sample size
Target sample size: **40**
Randomization (investigator's opinion)
Randomized
Randomization description
To select the sample for diagnosing aggression in students, a cluster random sampling method was used. First, from the four education districts of Ahvaz city, two districts were selected by simple random drawing (lottery), and then eight boys' junior high schools from each district were selected by simple random drawing, and in the next stage, one eighth grade class from each school was selected. Then, after the students completed the Ahvaz Aggression Inventory, those whose scores on this inventory were one standard deviation above the mean and who were given a final diagnosis of aggression in a clinical interview by a clinical psychologist were selected as students with aggression. Of these, 40 were randomly selected to participate in the study. Then, these individuals were randomly divided into two groups of 20 (20 in the experimental group and 20 in the control group). It should be noted that the control group will not receive any intervention during the research, but to prevent factors threatening the internal validity of the research, such as compensatory competition in the control group or demoralization, they will be assured that they will receive problem-solving skills training in the next round (after data collection).
Blinding (investigator's opinion)
Not blinded
Blinding description
Placebo
Not used
Assignment
Other
Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee
Name of ethics committee
Ethics Committee of Islamic Azad University of Ahvaz Branch
Street address
Opposite Keshavarz Street, Farhang Shahr, Golestan Highway
City
Ahvaz
Province
Khouzestan
Postal code
۶۱۳۴۹۳۷۳۳۳
Approval date
2025-06-01, 1404/03/11
Ethics committee reference number
IR.IAU.AHVAZ.REC.1404.119

Health conditions studied

1

Description of health condition studied
Problem-solving skills on aggression, behavioral flexibility and academic self-efficacy
ICD-10 code
F43
ICD-10 code description
Reaction to severe stress, and adjustment disorders

Primary outcomes

1

Description
Problem-solving skills
Timepoint
In the present study, the problem-solving skills training course will consist of 6 2-hour sessions, conducted based on the Spivak and Shore method (cited by Cassidy and Long, 1996).

Method of measurement

The training sessions were developed based on the Spivak and Shore method (quoted from Cassidy and Long, 1996) and will be implemented in 6 2-hour sessions. The research will use a library method and a questionnaire to collect data. The tools will include: Ahvaz Aggression Inventory by Zahedifar et al. (1990), Connor and Davidson's Functional Flexibility Questionnaire (2003), the Standard Academic Self-Efficacy Questionnaire (CASES), and the Academic Self-Efficacy Questionnaire by Zajakova et al. (2005).

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group: The present study, due to the multi-stage random selection of participants, is a field experimental study and the research design is a pre-test and post-test design with a control group. In this design, the subjects are measured before the implementation of the independent variable (pre-test), then the experimental intervention or independent variables are applied. After that, the subjects are measured again. 40 students will be randomly selected to participate in the study. Then, these people will be randomly divided into 2 groups of 20 people (20 people in the experimental group and 20 people in the control group). After the groups were formed, the subjects were led to special rooms and were given questionnaires to measure the variables as a pre-test and they were assured that the answers they gave would remain confidential. They were asked to answer the questions confidently and honestly. The experimental group participated in training courses for about 1 month and received a problem-solving skill training intervention based on the Spivak and Shore method (cited by Cassidy and Long, 1996) in 6 2-hour sessions. After completing the training course, experimental group was re-assessed with questionnaires that measured the variables as a post-test.

Category

Other

2

Description

Control group: The present study, due to the selection of participants by a multi-stage random method, is a field experimental study and the research design is a pre-test and post-test design with a control group. In this design, the subjects are measured before implementing the independent variable (pre-test), then the experimental intervention or independent variables are applied. After that, the subjects are measured again. 40 students will be randomly selected to participate in the study. Then, these people will be randomly divided into 2 groups of 20 people (20 people in the experimental group and 20 people in the control group). After the groups were formed, the subjects were led to special rooms and were given questionnaires to measure the variables as a pre-test and they were assured that the answers they gave would remain confidential. They were asked to answer the questions confidently and honestly. The people in the experimental group participated in training courses for about 1 month and received a problem-solving skill training intervention based on the Spivak and Shore method (cited by Cassidy and Long, 1996) in 6 2-hour sessions. Also, no intervention was carried out for the control group. However, to prevent threats to the internal validity of the test, the intervention was administered to them after the end of the study. After the training period, the control group was re-assessed with questionnaires that were used to measure the variables as a post-test.

Category

Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Boys' Junior High School

Full name of responsible person

rezahardani

Street address

No. 209, between Helali and Farhani, Rad Street, South Complex

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Ahvaz

Province

Khouzestan

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Email

reza.hardani@iau.ir

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Islamic Azad University

Full name of responsible person

Pezhman taghipour birgani

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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
10
Public or private sector
Private
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
Reza hardani
Position
Master's Student
Latest degree
Bachelor
Other areas of specialty/work
Psychology
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Person responsible for scientific inquiries

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Person responsible for updating data

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Sharing plan

Deidentified Individual Participant Data Set (IPD)
Undecided - It is not yet known if there will be a plan to make this available
Study Protocol
Undecided - It is not yet known if there will be a plan to make this available
Statistical Analysis Plan
Not applicable
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
Not applicable
Data Dictionary
Not applicable