

Clinical Trial Protocol

Iranian Registry of Clinical Trials

10 Jun 2026

Comparing the Effect of Corrective Exercises Using a Mobile Application and Non-Digital Methods on Musculoskeletal Pain, Quality of Life, and Exercise Motivation in Office Workers

Protocol summary

Study aim

1-Investigate the effect of eight weeks of corrective exercises based on a mobile application and non-digital methods on musculoskeletal disorders in office workers. 2-Investigate the effect of eight weeks of corrective exercises based on a mobile application and non-digital methods on the level of improvement in the quality of life of office workers. 3-Investigate the effect of eight weeks of corrective exercises based on a mobile application and non-digital methods on the level of sports motivation in office workers.

Design

The clinical trial has two intervention groups and one control group, with parallel groups, is unblinded, randomized, and not fuzzy, and was conducted on 150 people.

Settings and conduct

Corrective exercises are given to office workers to reduce musculoskeletal pain, improve quality of life, and motivate them to exercise. One group performs the exercises using an app, the other group performs the exercises using a brochure, and the control group receives no intervention.

Participants/Inclusion and exclusion criteria

Inclusion criteria: Age between 25 and 55 years (male and female), working hours of at least 40 hours per week, presence of work-related musculoskeletal disorders, absence of major musculoskeletal limitations, non-pregnant women; Inclusion criteria: non-adherence to exercise during the study period

Intervention groups

We have 3 groups: one group does the exercises with the app, one group does the exercises with the brochure, and one group goes about their daily lives.

Main outcome variables

Musculoskeletal pain; Quality of life; Exercise motivation

General information

Reason for update

Acronym

IRCT registration information

IRCT registration number: **IRCT20250111064348N1**

Registration date: **2025-02-15, 1403/11/27**

Registration timing: **prospective**

Last update: **2025-02-15, 1403/11/27**

Update count: **0**

Registration date

2025-02-15, 1403/11/27

Registrant information

Name

Marzieh Shahgholian

Name of organization / entity

The University of Shahrekord

Country

Iran (Islamic Republic of)

Phone

+98 38 3242 3504

Email address

momori24.sh@gmail.com

Recruitment status

Recruitment complete

Funding source

Expected recruitment start date

2025-02-19, 1403/12/01

Expected recruitment end date

2025-08-23, 1404/06/01

Actual recruitment start date

empty

Actual recruitment end date

empty

Trial completion date

empty

Scientific title

Comparing the Effect of Corrective Exercises Using a Mobile Application and Non-Digital Methods on Musculoskeletal Pain, Quality of Life, and Exercise Motivation in Office Workers

Public title

Investigating the effect of corrective exercises on musculoskeletal pain

Purpose

Supportive

Inclusion/Exclusion criteria

Inclusion criteria:

- Age between 25 and 55 years (male and female) Full-time employment in a desk job with at least 40 hours per week At least one year of experience in this job Presence of work-related musculoskeletal disorders Regular use of a smartphone (at least daily) No history of cardiovascular disease or major musculoskeletal limitations No obvious physical or mental illness Ability to work with a mobile application Not being pregnant women No chronic illness Not using any mobile application related to physical activity with musculoskeletal disorders No pain before employment and caused by non-occupational accidents No history of rheumatoid arthritis, lupus, osteoarthritis, gout, diabetes or thyroid diseases, so that these diseases affected their musculoskeletal or joint system

Exclusion criteria:

Inability to use the app regularly Lack of adherence to exercises during the study period

Age

From **25 years** old to **55 years** old

Gender

Both

Phase

N/A

Groups that have been masked

No information

Sample size

Target sample size: **150**

Randomization (investigator's opinion)

Randomized

Randomization description

Participants will be assessed according to the inclusion criteria and fill out the relevant questionnaires. Eligible individuals will then be divided into three groups using a computer-generated random sequence, consisting of two intervention groups and one control group. This random sequence will be generated by an independent statistician who had no role in recruiting or collecting participant data. The necessary exercises and explanations will then be explained to each group separately.

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

Shahrekord University Ethics Committee

Street address

Rahbar Boulevard

City

Sharekord

Province

Chahar-Mahal-va-Bakhtiari

Postal code

8818634141

Approval date

2025-02-05, 1403/11/17

Ethics committee reference number

IR.SKU.REC.1403.057

Health conditions studied

1

Description of health condition studied

Musculoskeletal disorders

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

Percentage of employees with musculoskeletal disorders

Timepoint

Measurement of musculoskeletal disorders at the beginning of the study and 60 days later

Method of measurement

Nordic questionnaire

Secondary outcomes

1

Description

Improving quality of life

Timepoint

Quality of life assessment at the beginning of the study and 60 days later

Method of measurement

World Health Organization Quality of Life Questionnaire

2

Description

Level of sports motivation

Timepoint

Measurement of exercise motivation at the beginning of the study and 60 days later

Method of measurement

Behavior Regulation Exercise Questionnaire

Intervention groups

1

Description

First intervention group: This group receives corrective exercises, which include stretching and strengthening exercises, using the app, and performs them through the app, and communicates with their researcher through the app.

Category

Rehabilitation

2

Description

Second intervention group: This group will receive corrective exercises, which include stretching and strengthening exercises, similar to those of the first intervention group, via brochure and will be in contact with the researcher in person and by phone.

Category

Rehabilitation

3

Description

Control group: This group does not receive any intervention and continues with their daily, normal lives.

Category

Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center

Chaharmahal o Bakhtiari Water and Waste Water Co

Full name of responsible person

Marzieh Shahgholian

Street address

Rahbar Boulevard

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8818634141

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mari2209.sh@gmail.com

Sponsors / Funding sources

1

Sponsor

Name of organization / entity

Chaharmahal o Bakhtiari Water and Waste Water Co

Full name of responsible person

Marzieh Shahgholian

Street address

Quds Square

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Province

Chahar-Mahal-va-Bakhtiari

Postal code

88164-73475

Phone

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Email

mari2209.sh@gmail.com

Web page address

<https://abfa-chb.ir>

Grant name

Grant code / Reference number

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

Yes

Title of funding source

Chaharmahal o Bakhtiari Water and Waste Water Co

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

Industry

Person responsible for general inquiries

Contact

Name of organization / entity

The University of Shahrekord

Full name of responsible person

Marzieh Shahgholian

Position

Student

Latest degree

Bachelor

Other areas of specialty/work

Pathology and Corrective exercises

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Person responsible for scientific inquiries

Contact

Name of organization / entity

The University of Shahrekord

Full name of responsible person

Sajad Bagherian Dehkordi

Position

Assistant Professor

Latest degree

Ph.D.

Other areas of specialty/work

Pathology and Corrective exercises

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Person responsible for updating data

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Name of organization / entity

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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

Data is shareable.

When the data will become available and for how long

Access period begins one year after results are published.

To whom data/document is available

Academic and scientific researchers

Under which criteria data/document could be used

For use in future research

From where data/document is obtainable

mari2209.sh@gmail.com

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

One year after statistical analysis and summarization, all results and all mentioned documents will be made available to you.

Comments