Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Effects of monocomponent and multi component moderate intensity interval training on balance and speed among amateur athletes

Protocol summary

Study aim
To determine the effectiveness of monocomponent and multicomponent moderate intensity interval training on balance and speed in amateur athletes.

Design
study is RCT with single assignment used. Participants were the blinded party so it is single blind study. Participants were assigned at random and lottery method used

Settings and conduct
the study is set in pakistan sports board in lahore and the participants were blinded about which group they were part of. It is conducted by a person as part of postgraduate thesis

Participants/Inclusion and exclusion criteria
Inclusion Criteria • Both genders • Age between 15 years to 35 years • Amateur athlete (must play chosen sport regularly & train at least 4 days per week) • No history of head injury in the last 6 months (10) • Able to adhere to instructions given • Non smokers Exclusion Criteria: • Injured athlete • Professional sportsperson • Novice • Diabetic athletes • Cardiac or Respiratory issues • Any lower extremity musculoskeletal injuries in the past 6 months (10) • Chronic injuries of lower limb

Intervention groups
1.Monocomponent exercise group 2. multicomponent exercise group

Main outcome variables
1. speed 2. balance measured using SEBT modified

General information

Reason for update

Acronym
MIIT

IRCT registration information
IRCT registration number: **IRCT20231229060561N1**
Registration date: **2024-01-03, 1402/10/13**
Registration timing: **registered_while_recruiting**
Last update: **2024-01-03, 1402/10/13**
Update count: **0**

Registration date
2024-01-03, 1402/10/13

Registrant information

Name
Aqsa Cheema

Name of organization / entity
Riphah International University lahore

Country
Pakistan

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+92 343 4592610

Email address
sibghaanum999@gmail.com

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2023-12-20, 1402/09/29

Expected recruitment end date
2024-01-30, 1402/11/10

Actual recruitment start date
empty

Actual recruitment end date
empty

Trial completion date
empty

Scientific title
Effects of monocomponent and multi component moderate intensity interval training on balance and speed among amateur athletes

Public title
Effects of monocomponent and multi component moderate intensity interval training on balance and speed among amateur athletes

Purpose

Education/Guidance

Inclusion/Exclusion criteria

Inclusion criteria:

• Both genders Age between 15 years to 35 years Amateur athlete (must play chosen sport regularly & train at least 4 days per week) No history of head injury in the last 6 months Able to adhere to instructions given Non smokers

Exclusion criteria:

• Injured athlete Professional sportsperson Novice Diabetic athletes Cardiac or Respiratory issues Any lower extremity musculoskeletal injuries in the past 6 months

Age

From **15 years** old to **35 years** old

Gender

Both

Phase

0

Groups that have been masked

No information

Sample size

Target sample size: **24**

More than 1 sample in each individual

Number of samples in each individual: **2**

one at the start of intervention. 2nd at 6 weeks when the intervention program ended

Randomization (investigator's opinion)

Randomized

Randomization description

Simple randomization process where lottery method will be used to assign the participants and allocation concealed by sealed envelope method. unit of randomization is individual

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Research and Ethics committee

Street address

25 Raza Saeed Rd, Bhabra Block M Gulberg III, Lahore, Punjab 25-M block Lahore

City

Lahore

Postal code

54660

Approval date

2023-08-03, 1402/05/12

Ethics committee reference number

REC/RCR & AHS/23/0451

Health conditions studied

1

Description of health condition studied

Improvement in balance and speed of athletes using 2 different intervention strategies

ICD-10 code

ICD-10 code description

Primary outcomes

1

Description

the improvement in speed and balance among amateur athletes after a 6 week multicomponent vs monocomponent MIIT program

Timepoint

6 weeks. Speed and Balance measured once at start of trial and once at the end of 6 weeks

Method of measurement

1. sprint test 2. SEBT modified

Secondary outcomes

empty

Intervention groups

1

Description

Intervention group 1

Category

Treatment - Other

2

Description

Intervention group 2

Category

Treatment - Other

Recruitment centers

1

Recruitment center

Name of recruitment center

Pakistan Sports Board

Full name of responsible person

Aqsa Khalil Cheema

Street address

PSB, Qaddafi stadium, lahore+=

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Sponsors / Funding sources

1

Sponsor
Name of organization / entity
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muhammad.hashim@riphah.edu.pk
Web page address
https://riphah.edu.pk/
Grant name
Grant code / Reference number
Is the source of funding the same sponsor organization/entity?
Yes
Title of funding source
Riphah International University
Proportion provided by this source
100
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
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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
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