

# Clinical Trial Protocol

## Iranian Registry of Clinical Trials

09 Jun 2026

### Effects of Plyometric versus Resistance training on speed, agility and power among Football players

#### Protocol summary

Registration timing: **prospective**

#### Study aim

to compare the effects of plyometric training and resistance training on the speed, agility, and power among football players.

Last update: **2022-05-21, 1401/02/31**

Update count: **0**

#### Registration date

2022-05-21, 1401/02/31

#### Design

Randomized Controlled Trial, Parallel Group, Single Blind

#### Registrant information

##### Name

Sufian Ahmed

##### Name of organization / entity

Riphah International University Islamabad Pakistan

##### Country

Pakistan

##### Phone

+92 334 4272734

##### Email address

sufianahmedghuman@gmail.com

#### Settings and conduct

The study will be conducted in Pakistan sports Board (PSB), Lahore Pakistan. Football players visiting PSB will be consented to participate in the study. The study will be single blind and the outcome assessor will be blinded by not knowing the details of the study groups. The Investigator will determine the information by the medical record number, assigned to each participant.

#### Recruitment status

**Recruitment complete**

#### Funding source

#### Participants/Inclusion and exclusion criteria

inclusion criteria: any player who plays regularly in football clubs 3-4 days a week. player with age of between 16 to 35 years of age. male football players. volunteer to participate exclusion criteria: players which have any injury during prior to study. players with any type of Pain or musculoskeletal injury at time of test. players with any contraindication to participating in sports. players participating on other training sessions

#### Expected recruitment start date

2022-06-01, 1401/03/11

#### Expected recruitment end date

2022-12-01, 1401/09/10

#### Actual recruitment start date

empty

#### Actual recruitment end date

empty

#### Trial completion date

empty

#### Intervention groups

Group A: Group A will be consist of players that will be trained by plyometric training. Group B: Group B will be consist of players that will be trained by Resistance training.

#### Scientific title

Effects of Plyometric versus Resistance training on speed, agility and power among Football players

#### Main outcome variables

improvement in speed, agility, and power among football players

#### Public title

Effects of Plyometric versus Resistance training on speed, agility and power among Football players

#### General information

##### Reason for update

##### Acronym

##### IRCT registration information

IRCT registration number: **IRCT20220216054033N4**

Registration date: **2022-05-21, 1401/02/31**

## Purpose

Health service research

## Inclusion/Exclusion criteria

### Inclusion criteria:

Any player who plays regularly in football clubs 3-4 days a week. Player with age of between 16 to 35 years of age. Male football players. Volunteer to participate.

### Exclusion criteria:

Players which have any injury during prior to study. Players with any type of Pain or musculoskeletal injury at time of test. Players with any contraindication to participating in sports. Players participating on other training sessions

## Age

From **16 years** old to **35 years** old

## Gender

Male

## Phase

N/A

## Groups that have been masked

- Outcome assessor

## Sample size

Target sample size: **36**

## Randomization (investigator's opinion)

Randomized

## Randomization description

Zelen's 1993 method of open label technique will used. the participants would be addressed about the technique and they will chose the treatment. the participants would be enrolled in the study till both groups reach the saturation/ no. of sample size achieved. in this way the natural randomization will take place and the outcome investigator will be blind.

## Blinding (investigator's opinion)

Single blinded

## Blinding description

36 Participants will be involved in my study using Purposive Sampling Technique. 2 groups of 18 participants each will be made and will be randomized using systematic sampling. Outcome assessor will be blinded by not knowing the information about the groups of the study. The Investigator will determine the information by the medical record number, assigned to each participant.

## Placebo

Not used

## Assignment

Parallel

## Other design features

## Secondary Ids

empty

## Ethics committees

### 1

#### Ethics committee

Name of ethics committee

Ethic's committee of Riphah International University

#### Street address

Quaid e Azam Industrial State

#### City

Lahore

#### Postal code

40050

#### Approval date

2022-01-19, 1400/10/29

#### Ethics committee reference number

029260

## Health conditions studied

### 1

#### Description of health condition studied

speed, agility, and power among football players.

#### ICD-10 code

R26.89

#### ICD-10 code description

Other abnormalities of gait and mobility

## Primary outcomes

### 1

#### Description

improvement in agility of football players

#### Timepoint

Before intervention and 6 weeks after intervention

#### Method of measurement

Agility T test

## Secondary outcomes

### 1

#### Description

improvement in speed of football players

#### Timepoint

Before intervention and 6 weeks after intervention

#### Method of measurement

30 meter Dash test ( for Speed)

## Intervention groups

### 1

#### Description

Intervention group: will receive a plyometric training program for 3 sessions a week and train for 12 weeks. After the every 4 weeks the tests will again done and data will be collected. Plyometric training consist of jumping and squats, single leg hope both, double leg bounding, split jump, tuck jump, box jump, and depth jump.

#### Category

Rehabilitation

## 2

### Description

Control group: will receive a plyometric training program for 3 sessions for a week and train for 12 weeks. After the every 4 weeks the tests will again done and data will be collected. Resistant training program consist of squats, leg press, heel raise, lunges and legs.

### Category

Rehabilitation

## Recruitment centers

### 1

#### Recruitment center

**Name of recruitment center**

Pakistan Sports Board

**Full name of responsible person**

Dr. Muhammad Hashim

**Street address**

Quaid e Azam Industrial State

**City**

Lahore

**Postal code**

40050

**Phone**

+92 323 4071564

**Email**

muhammad.hashim@riphah.edu.pk

## Sponsors / Funding sources

### 1

#### Sponsor

**Name of organization / entity**

Riphah International University

**Full name of responsible person**

Muhammad Hashim

**Street address**

Quaid e Azam Industrial State

**City**

Lahore

**Postal code**

40050

**Phone**

+92 323 4071564

**Email**

muhammad.hashim@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**

Riphah International University

**Full name of responsible person**

Muhammad Samama Amjad

**Position**

Lecturer

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

Quaid e Azam Industrial State

**City**

Lahore

**Province**

Punjab

**Postal code**

40050

**Phone**

+92 304 2722536

**Email**

s.amjadhafiz@gmail.com

## Person responsible for scientific inquiries

### Contact

**Name of organization / entity**

Riphah International University

**Full name of responsible person**

Muhammad Hashim

**Position**

Assistant Professor

**Latest degree**

Master

**Other areas of specialty/work**

Physiotherapy

**Street address**

Quaid e Azam Industrial State

**City**

Lahore

**Province**

Punjab

**Postal code**

40050

**Phone**

+92 323 4071564

**Email**

muhammad.hashim@riphah.edu.pk

## Person responsible for updating data

### Contact

**Name of organization / entity**

Riphah International University

**Full name of responsible person**

Samama Amjad

**Position**

Lecturer

**Latest degree**

Bachelor

**Other areas of specialty/work**

Physiotherapy

**Street address**

Quaid e Azam Industrial State

**City**

Lahore

**Province**

Punjab

**Postal code**

40050

**Phone**

+92 304 2722536

**Email**

s.amjadhafiz@gmail.com

## 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**

There is no further information.

**Study Protocol**

No - There is not a plan to make this available

**Statistical Analysis Plan**

No - There is not a plan to make this available

**Informed Consent Form**

No - There is not a plan to make this available

**Clinical Study Report**

No - There is not 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