Clinical Trial Protocol
Iranian Registry of Clinical Trials

22 Nov 2026

Impact of ''Your shape'' virtual reality gaming on physical activity of young healthy females

Protocol summary

Study aim
To determine the effects of your shape virtual reality gaming on physical activity and cardiopulmonary endurance of young females

Design
Pretest posttest single group design

Settings and conduct
The study will be carried out in Department of Rehabilitation Sciences Shifa Tameer-e-Millat university, Islamabad. Subjects will be recruited based on inclusion and exclusion criteria, allocated to single group. Pretest measurements will be taken of all the participants and then intervention will be given thrice a week for 8 weeks. Subjects will be reassessed after 8 weeks.

Participants/Inclusion and exclusion criteria
Healthy vitally stable females with age 18-30 years will be included in the study. The participants would not be having any systemic, cardiopulmonary, neurological or orthopedic issues. Subjects undergone any surgeries in past one year will also be excluded.

Intervention groups
Subjects will be playing your shape gaming through Xbox 360 thrice a week for 8 weeks. Your shape includes variety of exercises including step touch, low leg combo, knee front, low squat punch, knee squat, low leg curls, sumo squats and push ups etc. There is also variation in difficulty level from easy to difficult with the passage of time.

Main outcome variables
V02 max calculated through the formula 15(HRmax/HRrest) Energy expenditure calculated through VO2 max×5 Physical activity

General information

Reason for update

Acronym
YSVRG

IRCT registration information
IRCT registration number: **IRCT20210106049949N1**
Registration date: **2021-08-11, 1400/05/20**
Registration timing: **retrospective**

Last update: **2021-08-11, 1400/05/20**
Update count: **0**

Registration date
2021-08-11, 1400/05/20

Registrant information

Name
Nasir Sultan

Name of organization / entity
Shifa Tameer-e-Millat University, Islamabad

Country
Pakistan

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+92 51 8441751

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nasir_dpt.ahs@stmu.edu.pk

Recruitment status
Recruitment complete

Funding source

Expected recruitment start date
2020-11-15, 1399/08/25

Expected recruitment end date
2021-06-15, 1400/03/25

Actual recruitment start date
2020-11-20, 1399/08/30

Actual recruitment end date
2020-12-10, 1399/09/20

Trial completion date
2021-06-20, 1400/03/30

Scientific title
Impact of ''Your shape'' virtual reality gaming on physical activity of young healthy females

Public title

Impact of virtual reality using your shape gaming on the physical activity level of young females

Purpose

Health service research

Inclusion/Exclusion criteria

Inclusion criteria:

Healthy vitally stable young females No orthopedic problems No systemic problems

Exclusion criteria:

Neurological disorders Balance problems, Vertebro-basilar insufficiency

Age

From **18 years** old to **30 years** old

Gender

Female

Phase

1-2

Groups that have been masked

No information

Sample size

Target sample size: **34**

More than 1 sample in each individual

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

One pretest and one post test measurement

Actual sample size reached: **20**

More than 1 sample in each individual

Actual sample size in each individual: **20**

One pretest and one post test measurement

Randomization (investigator's opinion)

N/A

Randomization description

Blinding (investigator's opinion)

Not blinded

Blinding description

Placebo

Not used

Assignment

Single

Other design features

Quasi interventional study

Secondary Ids

empty

Ethics committees

1

Ethics committee

Name of ethics committee

Institution Review Board and Ethical committee Shifa International Hospital ,Shifa Tameer e Millat U

Street address

Darul Shifa Campus Street # 3 H8/1

City

Islamabad

Postal code

46000

Approval date

2020-11-12, 1399/08/22

Ethics committee reference number

IRB#360-1180-2020

Health conditions studied

1

Description of health condition studied

Serious Gaming , Balance problems, Sedentary Life style, Physical Fitness,

ICD-10 code

Y93.A1

ICD-10 code description

Activity, exercise machines primarily for cardiorespiratory conditioning

Primary outcomes

1

Description

The primary outcome evaluated of the study was Physical Activity (Energy Expenditure)

Timepoint

The primary outcomes measured at the start on base line and at the end of study.(after 3weeks)

Method of measurement

To measure the physical activity, the variables of cardiorespiratory fitness are assessed; VO2 max, METs and energy expenditure

Secondary outcomes

1

Description

VO2max enhancement of Oxygen uptake

Timepoint

At initial session and after 3 weeks

Method of measurement

V02 max through the Heart rate ratio formula= 15(HRmax/HRrest). Calculated through the heart rate ratio method

2

Description

One metabolic equivalent (MET) Consumption Increased

Timepoint

At initial session and after 3 weeks

Method of measurement

Defined as the amount of oxygen consumed while sitting at rest and is equal to 3.5 ml O2 per kg body weight x min. calculated through the formula, VO2 max÷3.5

3

Description

Heart rate improvement

Timepoint

At initial session and after 3 weeks

Method of measurement

Heart rate (beats per minute) through the radial pulse

method

Intervention groups

1

Description
The participants were enrolled in a 4 weeks' exercise program with 12 sessions in total which was cut down to 9 sessions total in 3 weeks, every participant took 3 cardio sessions per week intermittently i-e with minimum 48 hours' interval between each session. The sessions were taken during morning and noon in a quiet separate room when participants had not had any meal 2 hours prior to the session. The participants did their exercises on yoga mats. The LED screen was 55 inches. Participants were at least 3 meters away from the screen where the Kinect sensor could easily detect them. There was a 4 min warm-up session before every session of aerobic exercise. "Pump it" and "Hulalla" were used as the warm ups for 2 minutes each. Then the actual exercise session started that was purely aerobic and had different exercises involving both the upper limbs and the lower limbs. Participants focused on "Break a sweat A", "Break a sweat B" and "Break a sweat C" for the first half of the exercise program i-e first 4-5 sessions. And gradually transitioned towards "Break a sweat D" and "Break a sweat C" at the second half of the program i-e last 4-5 sessions. Every session included a 2-minute cool down at the end which included stretching and other cool down techniques.

Category
Rehabilitation

Recruitment centers

1

Recruitment center

Name of recruitment center
Shifa Tameer e Millat University

Full name of responsible person
Dr Abdul Ghafoor Sajjad

Street address
Darul Shifa Campus Street # 3 H8/1

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Web page address
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Sponsors / Funding sources

1

Sponsor

Name of organization / entity
Shifa Tameer e Millat 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
Shifa Tameer e Millat University

Proportion provided by this source
30

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
Shifa Tameer e Millat University

Full name of responsible person
Nasir Sultan

Position
Senior Lecturer

Latest degree
Master

Other areas of specialty/work
Physiotherapy

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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)
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
EFFECTS OF “YOUR SHAPE” VIRTUAL REALITY GAMING ON THE PHYSICAL ACTIVITY OF HEALTHY YOUNG ADULTS OF ISLAMABAD
When the data will become available and for how long
The data will be Available up to December 2021 and started in January 2020 . Article abut all results will be provide at the end of 2021.
To whom data/document is available
This data is available for all new researchers and community having problems identified in the study. Almost all aspect of physical activity are covered in this study regarding healthy individuals.
Under which criteria data/document could be used
Peer reviewed by authentic Reviewers selected by Journals of Health Sciences.
From where data/document is obtainable
this will be available on global platform on websites and in form of journal articles for readers.
What processes are involved for a request to access data/document
it depends on Journal reading and displaying policy. and by contacting mentioned contact person through email.
Comments