

# Effect of CrossFit Training Exercise on Gym Trainee

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## ABSTRACT

### PURPOSE:

Cross-Fit is a cutting-edge training method. The current study's objectives were to: investigate the impact of CrossFit on physical fitness linked to health; and contrast the impact of CrossFit with matched individuals in a conventional training programme.

A Total of N=40 gym trainees were selected from Aura fitness, Delhi of age group 20-25. They were divided into a group of 2.

The first group was controlled group and the second group was experimental group.

### Selection of variables: -

- Cardiovascular Fitness

### Key words :

Aerobic fitness, Muscular fitness, Training Adaptations

## **Introduction**

CrossFit is a high-intensity fitness programme that combines aerobic exercise, weightlifting, and bodyweight exercises. It involves a variety of exercises and routines that are usually performed in a circuit or interval setting. Cross-Fit is recognised as one of the functional training methods that is high-intensity and developing quickly. Cross-Fit has rapidly expanded and is currently in high demand in recent years. It is a kind of exercise that has gained universal acceptance as a substitute for traditional fitness equipment.

## **Training**

A high-intensity workout regimen called CrossFit includes bodyweight movements, weightlifting, and aerobic activity. Exercises in the programme range from callisthenics through jogging, rowing, gymnastics, and Olympic weightlifting. CrossFit workouts are designed to push participants' physical and mental limits.

## **Gym Training**

Exercise and fitness routines carried out at a gym or other fitness facility are collectively referred to as "gym training" in this context. It includes a variety of training techniques and activities meant to enhance physical health, strength, and endurance.

## **RESEARCH METHODOLOGY**

### **Selection Of Subject**

A Total of N=40 gym trainees were selected from Aura fitness of age group 20-25. They were divided into a group of 2.

The first group was controlled group and the second group was experimental group.

### **Selection of variables: -**

- Cardiovascular Fitness

### **Tool of Study**

- Cardiovascular fitness was measured by studying the heart rate of trainee.
- Rockport Walking test was performed on the treadmill.
- VO2 max was analysed.

### **Limitations**

CrossFit includes cardiovascular exercises, but compared to more traditional endurance-focused training methods like long-distance running or cycling, there may not be enough emphasis on aerobic endurance.

It's important to keep in mind that these limitations may be reduced with the correct coaching and teaching, incremental volume and intensity increases, and mixing CrossFit training with other forms of exercise to meet individual needs and fitness objectives.

### **Delimitations**

It's crucial to keep in mind that different people may have different experiences and viewpoints while talking about the difficulties or restrictions of CrossFit. The following possible drawbacks or objections to CrossFit have been voiced:

### **Objective of study**

- Objectivity of the study includes studying the effect of the cross-fit training on the 40 trainee which were trained.
- It includes the studying of dependent variable cardiovascular system.
- It includes designing of an effective program for the gym trainee.

### **Significance of study**

- It includes designing of an effective program for the gym trainee.
- Studying CrossFit has a variety of effects and benefits, including: Practises based on evidence CrossFit research can provide information and insights on the effectiveness, safety, and physiological impacts of the training approach.

- This can help coaches, trainers, and athletes who are debating whether to include CrossFit into their exercise routines.

### **Administration of Training**

It was essential to deliver several programmes to similar groups under similar circumstances in order to compare the benefits of CrossFit to conventional resistance training. A good way to choose two training groups was to match individuals based on two performance factors (namely, muscular endurance and power).

1. Treadmill running for 3 km.
2. Bench Press ( 15-18 Reps )
3. Push-Ups ( 25-32 Reps )
4. Back Squat ( 12-15 Reps )
5. Pull-Ups ( 8-12 Reps )
6. Deadlift ( 8-10 Reps )

All the Exercises from point 2-6 were performed in 3 sets each.

There was a gap of 60 seconds in between each rep.

### **Test And Training Protocol**

It is composed of a warm-up and stretching phase (10–15 minutes), a demonstration phase (5–10 minutes), Cross-fit workouts (55–60 minutes), and a cooling and stretching phase (3-5 minutes).

### **DATA ANALYSIS**

#### **Procedure**

Testing took place the first two weeks (baseline) and the last week (post-test). All programme instructors received testing protocol training from the principal researcher, and the instructors then carried out all baseline and post-testing. This approach made certain that each participant was for both the pre and post evaluations, the same rates and testing circumstances were used.

## DATA ANALYSIS

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	pre	88.30	20	7.901	1.767
	post	85.05	20	8.550	1.912

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	pre & post	20	.657	.002

Paired Samples Test									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	pre - post	3.250	6.835	1.528	.051	6.449	2.126	19	.047

### **Conclusion:**

The current study set out to determine how Cross Fit affected overall physical fitness for health-related reasons. The secondary goal was to contrast the results of Cross Fit which was achieved.

Results of the current study confirm the advantages of Cross Fit training for muscular and aerobic endurance. Cross Fit training led to an improvement in health-related physical fitness characteristics that was comparable to, if not greater than, that seen after conventional resistance training. The findings of this pilot study lend support to the use of Cross Fit as a different type of resistance training for trainee.

### **Recommendation:**

Although Cross Fit training is a well-known commercial programme, there is a paucity of empirical data on its efficacy. The current study builds on earlier research on the subject and details persistent adaptations brought on by this unconventional training regimen. The current study also shows that Cross Fit show equivalent fitness adaptations in trainee.

### **REFERENCES**

1. Prawdzik C. Doctors: Exercise caution when introducing CrossFit. Athletic Business [Internet]. [cited 2014 April 27]. Available from: <http://www.athleticbusiness.com/military/doctors-exercise-caution-whenintroducing-crossfit.htm>
2. Smith MM, Sommer AJ, Starkoff BE, Devor ST. Crossfit-based high-intensity power training improves maximal aerobic fitness and body composition.. J Strength Cond Res 2013;27(11):3159-3172. PubMed PMID: 23439334. doi: 10.1519/JSC.0b013e318289e59f. [Google Scholar]
3. Barfield JP, Channell B, Pugh C, Tuck M, Pendel D. Format of basic instruction program resistance training classes: Effect on fitness changes in college students. The Physical Educator;2011:69-325. [Google Scholar]
4. American College of Sports Medicine. ACSM's Health-related physical fitness manual. Philadelphia (PA): Lippincott, Williams, & Wilkins; 2005. [Google Scholar]

5. Harman E, Garhammer J. Administration, scoring, and interpretation of selected tests. In: Baechle T, Earle R, editors. Essentials of strength training and conditioning. Champaign (IL: Human Kinetics; 2008. [Google Scholar]
6. Astorino TA, Allen RP, Roberson DW, Jurancich M. Effect of high-intensity interval training on cardiovascular function, VO<sub>2</sub>max, and muscular force. The Journal of Strength & Conditioning Research 2012;26(1):138-145. PubMed PMID: 22201691. doi: 10.1519/JSC.0b013e318218dd77. [Google Scholar]