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"Evaluation Of Physical Fitness Among Chandigarh Football Players"

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Abstract

The present investigation was carried out in order to evaluate the fitness evaluation of Chandigarh football players through tests. Twelve football players were selected randomly from different levels of achievement (active, non-active, national, state division). The t-ratio was utilized to analysis data concerning fitness evaluations among active and nonactive football players. The results clearly show that there is indeed a significant distinction in the endurance and speed of Chandigarh active players. It is hypothesized that there can be significant differences between the fitness level differences and the impact of physical activity on endurance and speed among Chandigarh players. This chapter offers recommendations for designing tailored training programs, promoting physical activity, and fostering overall fitness improvement within the football community.

Keywords: Endurance, Speed, Active Players, Non-Active Players, T-Ratio Analysis

Introduction

The realm of sports science continually seeks to uncover the multifaceted aspects that contribute to an athlete's performance. In football, a sport that demands a blend of physical prowess, tactical intelligence, and psychological resilience, evaluating fitness is crucial. This investigation delves into the fitness evaluation of football players from Chandigarh, employing a comprehensive test battery to discern the disparities between active and nonactive players. By understanding these differences, we can foster a more effective training regimen, thereby enhancing the overall performance and well-being of players.

Selection of Subject

The selection of subjects was concluded with 12 football players from Chandigarh, picked randomly from different levels of achievements (active, non-active, national, state division).
All subjects were healthy and free from any kind of disability or disease.

Selection of Variables

When selecting these variables, we considered the following points:
Relevance: We ensured that the chosen variables are directly related to the fitness aspects that impact football performance.

Validity and Reliability: We have used well-established and scientifically validated tests to assess each variable. Selection of Tests or Questionnaire

To ensure a robust and comprehensive analysis, twelve football players from various levels of achievement were randomly selected. These levels included active players, non-active players, and those who have competed at national and state divisions. The selection was designed to provide a representative sample of the football community in Chandigarh. The fitness evaluation was conducted using a test battery that measured several key physical attributes, including endurance and speed. The t-ratio was utilized to analyze the collected data, allowing for a precise comparison between the fitness levels of active and non-active players.

Criterion Measures:

The fitness evaluation of Chandigarh football players focuses on speed and endurance using the **Cooper test for endurance**, measuring total distance covered, and the **50-meter Sprint Test for speed**, measuring time taken.

Administration of Test:

Variable: Endurance Test: Cooper 12min test

Equipment: 400m track, Stopwatch, Pen, Paper, Lime Powder, Clapper.
Description: The Cooper test assesses the player's cardiovascular endurance, which is essential for maintaining stamina throughout a football match.
Test Administration: Players has instructed to run/walk for 12 min as far as possible. Provided clear instructions and encouraged participants throughout the run. Recorded the time taken to complete the distance.

Variable: Speed Test: 50-meter sprint.

Equipment: cones, a stopwatch, pen and paper, and a whistle.

Description: The 50-meter sprint measures the player's maximum speed and acceleration, which are vital for quick bursts of speed on the football field.

Test Administration: Used a stopwatch to record the time taken to cover the 50-meter distance.

Instructed the player to start from a stationary position and run as fast as possible.

Result, Analysis, and Discussion for the Study

In this chapter, we contrasted active and non-active Chandigarh football players using statistical procedures with the assistance of a t-test. The section covers the analysis of data, presentation of study findings, and a discussion of the formulated hypotheses. To achieve the study's objectives, the analysis adhered to a specified pattern outlined in the subsequent sections.

The descriptive statistically (T-test) of the fitness evaluation of Chandigarh football players through the test battery.

For easy comparison of mean differences & understanding the pattern, the bar diagrams were incorporated.

The t-ratio was utilized to analyze data concerning fitness evaluations among active and non-active Chandigarh football players. A Random Group Design was employed in this study, where subjects were randomly selected and not matched based on the factors under examination. The statistical analysis was conducted at a significance level of 0.05 to determine the significance of the differences observed.

	MEAN	SD	T-VALUE
Endurance (Active)	4.92	0.87	
Endurance (Non Active)	-6.67	0.66	0.09

Table 4.1

Table 4.1 shows the mean and standard deviation of active and non-active football players' endurance.

The mean for active football players endurance is 4.92, with a standard deviation of 0.87 based on their data. For non-active football players endurance, the mean is 6.67, and the standard deviation is 0.66 according to their respective data.

Since the computed t-value, which stands at 0.09, falls below the tabulated t-value of 1.812, the hypothesis is deemed insignificant at a 0.05 level of significance with a degree of freedom of 10. Consult Annexure 4 for details on tabulated t-value.

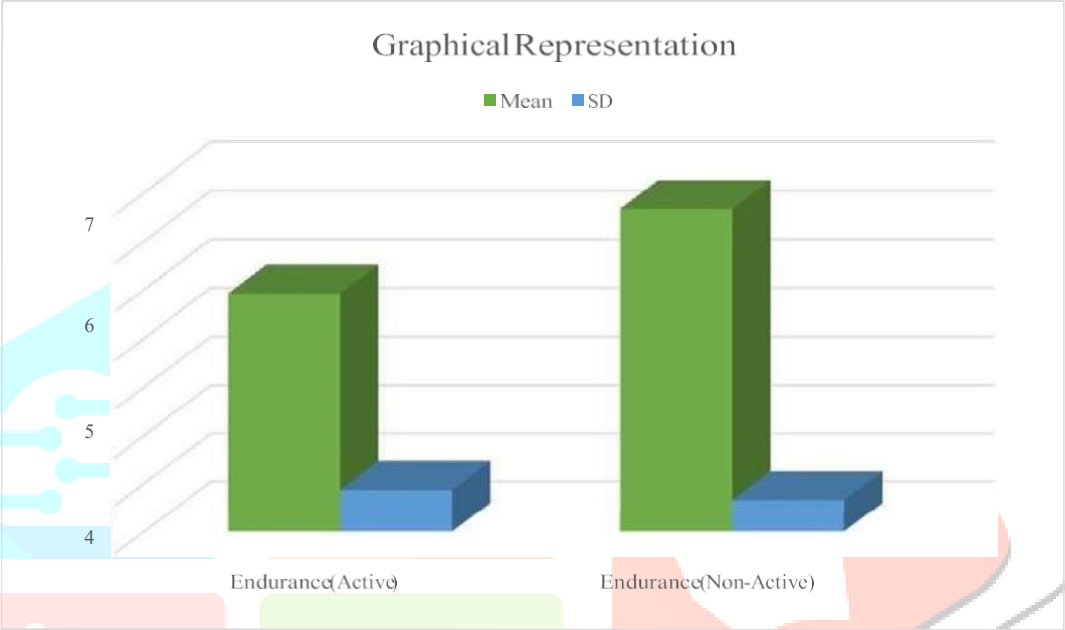

Fig. 4.1

Fig. 4.1 shows the graphical representation of active and non-active football players endurance. It shows the graphical representation of the mean and standard deviation of active and non-active football players endurance.

	MEAN	SD	T-VALUE
Speed (Active)	5.91	0.40	
Speed (Non-Active)	6.79	0.86	0.09

Table 4.2

Table 4.2 Shows the mean and standard deviation of active and non-active football players speed.

The mean for active football players speed is 5.91, with a standard deviation of 0.40 based on the data. For non-active football players speed, the mean is 6.79, and the standard is
0.86 according to their respective data.

Since the computed t-value, which stands at 0.09, falls below the tabulated t-value of 1.812, the hypothesis is deemed insignificant at a 0.05 level of significance with a degree of freedom of 10. Consult Annexure 4 for details on tabulated t-value.

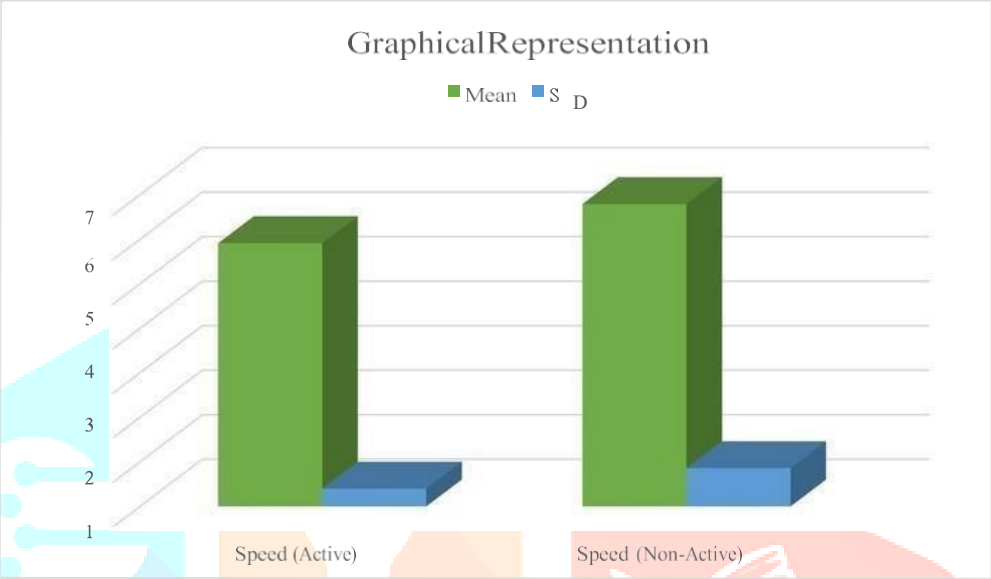

Fig. 4.2

Fig.–4.2 shows the graphical representation of active and non-active football players speed. It shows the graphical representation of the mean and standard deviation of active and non-active football players speed.

4.1 Discussion of Hypothesis

It is hypothesized that there will be a significant difference between the active and non- active football players. The research results clearly shows that there is indeed a significant distinction in the endurance and speed of Chandigarh active and non-active football players.

It is-hypothesized that the active players have more endurance and speed than non- active players. The findings indicated that a majority of active players were better performers on the field than non-active players. Conversely, non-active players were less proficient than active players due to their limited involvement in sports and fitness activities.

Discussion of the study

The present investigation was carried out to evaluate **"EVALUATION OF PHYSICAL FITNESS AMONG CHANDIGARH FOOTBALL PLAYERS"** total of 12(twelve) Chandigarh Soccer players, age ranged from 18 to 25 years, were purposely selected from Chandigarh. All the participants were enquired about their medical history, and also, they were requested to report any other conditions, which values them long term or short-term problems in exercise. No dropout in participants was there. The participants were informed about the pros and cons of the experiment during the cause of the research to be conducted in detail. Data were collected from Chandigarh state during the month of October 2025.

Further in the consultation with the experts in the field, minutely gleaning through the literature available, and considering the feasibility criteria in mind, especially the availability of equipment.

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