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Analyzing the Outcomes of the Three-Month Training Program on Cricket Players

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Abstract: This study investigates the impact of a three-month structured training program on the performance of cricket players which include overall batting, bowling and catching. The program focused overall match performance through targeted physical and skill-based exercises.

Pre- and post-training assessments were conducted to measure changes in cricket-specific performance. Two null hypotheses were tested: that the training would not significantly improve the match performance.

The results showed clear improvements in physical attributes enhanced performance in batting, bowling, and fielding (catching). These findings indicate that short-term, sport-specific training can yield significant benefits for players.

This research highlights the importance of structured training programs in sports like cricket and supports the integration of physical education methods into player's development.

Keywords: Batting, Bowling, Catching, Physical Education and cricket-Specific Performance.

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I. INTRODUCTION

Cricket, often regarded as a game of skill and strategy, demands high levels of physical conditioning, technical precision, and mental alertness. To meet these demands, structured training programs play a vital role in enhancing player performance, particularly in key areas like batting, bowling, and fielding (Bompa & Buzzichelli, 2019). With increasing competition, short-term, sport-specific interventions are being explored for their effectiveness in improving match readiness within limited timeframes.

This study focuses on evaluating the outcomes of a three-month structured training program designed to improve overall cricket performance. The program emphasized targeted physical conditioning and technical drills, and its effectiveness was assessed using pre- and post-training performance measures. By testing null hypotheses, the research aims to determine whether such a focused training period can lead to significant improvements. The study also highlights the importance of integrating scientific training methods into player development models.

The findings from this research may provide useful insights for coaches, physical educators, and sports scientists in designing time-efficient and performance-oriented training plans. By demonstrating measurable improvements within a three-month period, the study supports the adoption of structured, evidence-based approaches in cricket training that align with modern athletic development principles.

Moreover, the outcomes of this study may serve as a practical guide for implementing similar training models across different levels of cricket, from school to professional settings. It emphasizes the relevance of combining physical fitness with skill enhancement in a systematic manner, reinforcing the idea that even short-term programs, when well-structured, can lead to meaningful progress. Such research can contribute to the growing body of knowledge in sports training and help shape future coaching practices rooted in scientific evaluation.

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II. RESEARCH METHODOLOGY

> Research Design:

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This study used an experimental pre-test and post-test design, which is frequently utilized in sports training research.

> Training Program:

The experimental group has undergone a structured three-month training program, based on principles of developing overall performance of cricket player's specifically in batting, bowling and fielding.

- Population: Cricket players from Sant Baba Bhag Singh University.
- Sample Size: A simple random sampling method was used to select 16 players who meet the following criteria: Age: 18–25 years.
- Participation: Actively enrolled in the university's cricket program.

➤ Data Analysis:

Quantitative Analysis: Paired t-tests has been used to compare pre-test and post-test scores for physical fitness and skill performance. Descriptive statistics (mean, standard deviation) to summarize the data.

➤ Data Collection Methods

Pre-Test and Post-Test Assessments: Data has been collected at the start and end of the program to measure changes in performance.

III. ANALYSIS AND INTERPRETATION OF RESULT

The analysis of this study has focused on evaluating the impact of the three-month structured training program on overall performance of the cricket players. The data collected from the pre-test and post-test assessments has been analyzed to determine if significant improvements have occurred in player's performance during practice and competitive games.

To assess the effectiveness of the training program, the data from the pre-test and post-test assessments has been analyzed using quantitative methods. Paired t-test has been applied to compare the results of the critical components for cricket player's overall performance.

Descriptive statistics, including means and standard deviations, has been used to summarize the performance data and provide an overview of the batting, bowling and fielding. This will allow for a clear comparison of the player's baseline performance (pre-test) with their post-training performance. In addition, the overall impact of the training program on the player's performance in practice matches and competitive games will be assessed based on observed changes in their skill execution, tactical awareness, and match outcomes.

The outcomes of this analysis will be crucial for determining the effectiveness of the training program and formulating recommendations for future training regimens aimed at improving player performance. The exact result is given in below mentioned tables including Table 1, 2 and 3.

Table 1 Mean and Standard Deviation of Before and After Test of Batting

| | Mean | N | Std. Deviation | Std. Error Mean |
|-------------------------------|---------|----|----------------|-----------------|
| Pair 1 Batting Average Before | 19.5625 | 16 | 9.58727 | 2.39682 |
| Batting Average After | 24.6000 | 16 | 11.75245 | 2.93811 |

Table 2 Comparison of Pre-Test and Post-Test Between Inter-University Male Cricket Players of Batting

| | | Paired Differe | ences | | | | |
|----------|---------|----------------|---|----------------------------------|--|--|---|
| Mean | Std. | Std. Error | 95% confidence interval of the difference | | t df | | Sig. 2-tailed |
| | Dev. | Mean | Lower | Upper | | | |
| | | | | | | | |
| | | | | | | | |
| -5.03750 | 2.50968 | .62742 | -6.37481 | -3.70019 | -8.029 | 15 | .000 |
| | | | | | | | |
| | | Mean Dev. | Mean Std. Std. Error Mean | Mean Std. Std. Error of the diff | Mean Std. Dev. Std. Error Mean 95% confidence interval of the difference Lower Lower Upper | Mean Std. Dev. Std. Error Mean 95% confidence interval of the difference Lower t | Mean Std. Dev. Std. Error Mean 95% confidence interval of the difference Lower t df |

Table 2 Illustrates that the Mean and SD Values of Pre-test and Post-test of the Variable Batting of Interuniversity Cricket Players were -5.03750 and 2.50968 respectively. The obtained "t" value -8.029 was found statistically significant, (P<0.05) at 0.05 level of significance.

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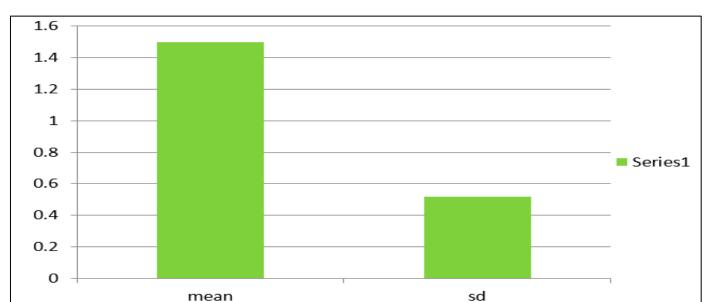


Fig 1 Shows Mean and Sd of Pre-Test and Post-Test of the Variable Batting of Interuniversity Cricket Players

Table 3 Mean and Standard Deviation of Before and After Test of Bowling

| | Mean | N | Std. Deviation | Std. Error Mean |
|-----------------------|--------|----|----------------|-----------------|
| Pair 1 Bowling Before | 9.1250 | 16 | 4.47027 | 1.11757 |
| Bowling After | 4.9375 | 16 | 1.87861 | .46965 |

Table 4 Comparison of Pre-Test and Post-Test Between Inter-University Male Cricket Players of Bowling

| | | Paired Differences | | | | | | |
|------------------------------|---------|--------------------|------------|--------------------------|---------|-------|----|---------------|
| | Mean | Std. | Std. Error | 95% confide of the di | | t | DF | Sig. 2-tailed |
| | | Dev. | Mean | Lower | Upper | | | |
| Pair 1 Bowling Average | | | | | | | | |
| Before | 4.18750 | 3.01593 | .75398 | 2.58042 | 5.79458 | 5.554 | 15 | .000 |
| Bowling Average After | | | | | | | | |

Table 4 Illustrates that the Mean and SD Values of Pre-test and Post-test of the Variable Bowling of Interuniversity Cricket Players were -4.18750 and 3.01593 respectively. The obtained "t" value 5.554 was found statistically significant, (P<0.05) at 0.05 level of significance.

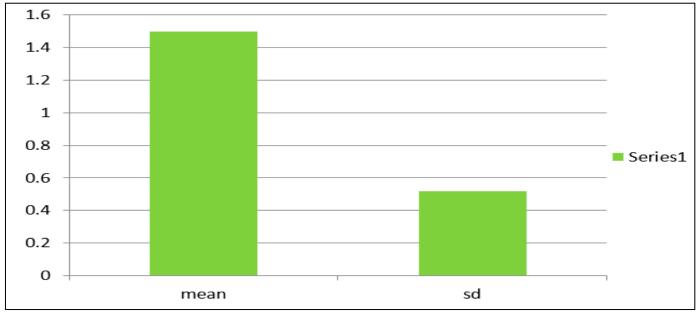


Fig 2 Shows Mean and Sd of Pre-Test and Post-Test of the Variable Bowling of Interuniversity Cricket Players

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| Table 5 Mean and Standard Deviation of Before and A | After Test of Catching |
|---|------------------------|
|---|------------------------|

| | Mean | N | Std. Deviation | Std. Error Mean |
|----------------------------|--------|----|----------------|-----------------|
| Pair 1 Catching Before 30m | 3.9375 | 16 | 1.12361 | .28090 |
| Catching After 30m | 2.4375 | 16 | 1.03078 | .25769 |

Table 6 Comparison of Pre-Test and Post-Test Between Inter-University Male Cricket Players of Catching

| | Paired Differences | | | | | | | |
|---|--------------------|--------------|--------------------|--------------------------|---------|--------|----|-------------------|
| | Mean | Std. Dev. | Std. Error Mean | 95% confide of the di | | al t | | Sig. 2- tailed |
| | | Dev. | Mean | Lower | Upper | | | |
| Pair 1 Catching Before Catching After | 1.50000 | .51640 | .12910 | 1.22483 | 1.77517 | 11.619 | 15 | .000 |

Table 6 Illustrates that the Mean and SD Values of Pre-test and Post-test of the Variable Catching of Interuniversity Cricket Players were -1.50000 and .51640 respectively. The obtained "t" value -11.619 was found statistically significant, (P<0.05) at 0.05 level of significance.

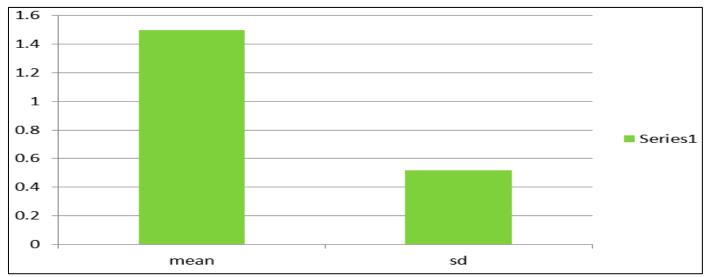


Fig 3 Shows Mean and Sd of Pre-Test and Post-Test of the Variable Catching of Interuniversity Cricket Players

IV. DISCUSSION OF THE FINDINGS

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The result of the study revealed that there was seen a noticeable improvement in the overall performance of cricket players during practice matches and competitive games after completing the training program in selected variables such as-Batting, Bowling and Catching before and after test of the three months training program on cricket players.

V. CONCLUSION

This research explores the outcomes of a three-month training program on cricket players, with a particular focus on performance-related skills. The study investigated hypothesis regarding the lack of noticeable improvement in overall cricket performance was rejected, as marked enhancements were observed in batting, bowling, and catching skills after the training program. These findings indicate that structured physical training positively influences specific components of cricket performance, underscoring the value of targeted elements of development programs. The study has shown a significant improvement in the overall performance of cricket players after completing the training

program in selected variables such as- Batting, Bowling and Catching before and after test of the three months training program on cricket players.

FINDINGS OF THE STUDY

The result of the study was designed to check the significant improvement of cricket players and a noticeable improvement in the overall performance during practice matches and competitive games after completing the training program in selected variables such as- Batting, Bowling and Catching before and after test of the three months training program on cricket players.

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