

EFFECT OF PREPARATORY PHASE ON RBC COUNT AMONG NATIONAL LEVEL NETBALL MALE PLAYERS

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Abstract:

In the present study it was planned to scrutinize the Effect of Preparatory Phase on RBC count among national level netball male players. One – Group Pretest - Posttest Design was used as experimental design in present study. All subjects were selected in terms of purposive samples under the sampling method of non-probability sampling. To achieve purpose of present study Total thirty (N=30) national level Netball players of Punjab state were selected as subjects for present research. The investigator has selected Preparatory Phase of eight weeks as independent variable and RBC count of national level netball male players as dependent variable of the study. After the collection of relevant data, to know the Effect of Preparatory Phase on RBC count among national level netball male players, paired t-test was employed on mean values of pre and post tests with the help of Statistical Package by Graph Pad Software. The level of significance was set at 0.05 percent. The result of the study discovered that Red Blood Cells count increase significantly in Netball players after the application of eight weeks preparatory phase of training.

Introduction

In the realm of sports science and performance optimization, understanding the physiological adaptations of athletes during preparatory phases is paramount. Netball, a dynamic and demanding sport, requires a unique blend of agility, endurance, and strategic prowess. As the pursuit of excellence in sports continues to evolve, researchers and practitioners are increasingly delving into the intricate details of training regimens and their impact on various physiological parameters.

One such crucial aspect is the influence of the preparatory phase on the Red Blood Cell (RBC) count among male netball players competing at the national level. Red Blood Cells play a

pivotal role in oxygen transport, a process vital for energy production during physical exertion. Thus, any alterations in RBC count can significantly impact an athlete's performance and overall well-being.

The preparatory phase is a critical period preceding competitive seasons, where athletes undergo specific training protocols to enhance their physical attributes and skill sets. This phase involves a combination of strength training, cardiovascular conditioning, skill refinement, and recovery strategies. The effectiveness of these preparatory measures in influencing RBC count among national-level netball male players remains a subject of considerable interest and warrants thorough investigation.

Akbar Sazvar, Mohammad Mohammadi, Farzad Nazem& Nader Farahpour (2012) considered the impact of morning aerobic exercise on some hematological boundaries in youthful, dynamic guys. 26 male (age-19 to long term), college understudies with no past smoking encounters or customary exercise programs were haphazardly chosen and partitioned into two gatherings: control and exercise. The discoveries showed that during a multi week morning aerobic exercise the quantity of RBC, platelets and hemoglobin levels expanded. While the quantity of platelets diminished essentially.

This research aims to explore the dynamic interplay between the preparatory phase and its potential effects on the Red Blood Cell count in male netball athletes. By comprehensively examining the physiological responses to specific training interventions, researchers seek to contribute valuable insights that can inform coaches, sports scientists, and athletes alike in optimizing training strategies for enhanced performance and overall health.

Methodology and Procedure

In the present study it was planned to scrutinize the effect of preparatory phase on RBC count among national level netball male players. One – Group Pretest - Posttest Design was used as experimental design in present study. The study was conducted on national level Netball players of Punjab state. Total thirty (N=30) national level Netball players of Punjab state were selected as subjects for present research. All the subjects were selected in terms of purposive samples. Only male national level Netball players of Punjab state were selected as subjects for the present study. In the light of the expert's opinion, administrative feasibility, availability of

subjects, availability of testing equipment and materials, the investigator has selected Preparatory Phase of eight weeks as independent variable and RBC count of national level netball male players as dependent variable of the study. After the collection of relevant data, to know the effect of preparatory phase on RBC count among national level netball male players, paired t-test was employed on mean values of pre and post tests with the help of Statistical Package by Graph Pad Software. The level of significance was set at 0.05 percent.

Results of the Study

Table No. 1 - Comparison of Mean, SD & t-value of Pre and Post Test of Red Blood Cells count among Netball Players

Biochemical Variable	Pre-Test Mean	Pre-Test SD	Post-Test Mean	Post-Test SD	t-value
Red Blood Cells Count	4.12	0.51	4.72	0.69	6.59*

$t_{.05} (29) = 2.04$

The table no. 1 - statistically validates that the Pre - test and Post test Mean & SD for Red Blood Cells Count among Netball players is 4.12 & 0.51 and 4.72 & 0.69 respectively. Further the table statistically reveals that the calculated t value 6.59 for Red Blood Cells Count of Netball players is greater than the table value 2.04. Therefore, the values of table shows that, after eight weeks preparatory phase of training the Red Blood Cells Count increased significantly in Netball players. The results of table no. 1 are also depicted in figure no. 1.

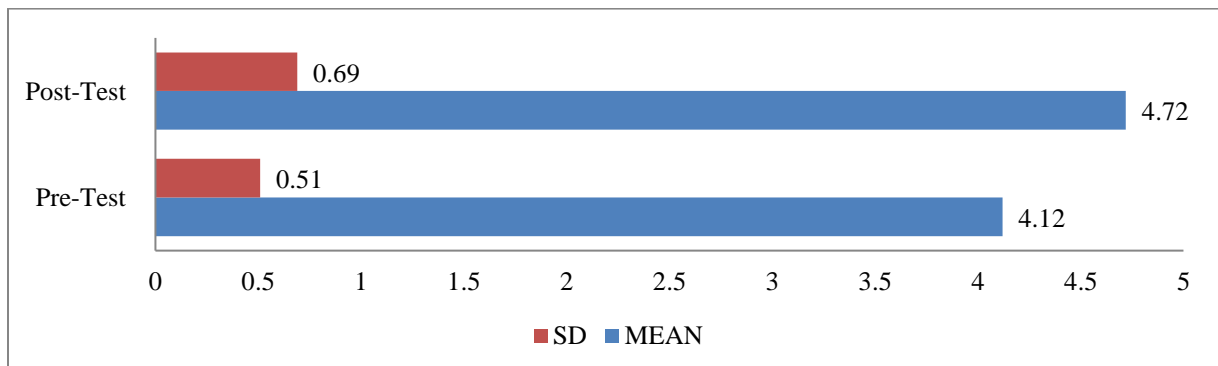


Figure No. 1 - Comparison of Mean and SD values of Pretest and Posttest of RBC Count among Netball Players in Male Students

Conclusions

The result of the study discovered that Red Blood Cells count increase significantly in Netball players after the application of eight weeks preparatory phase of training. These results of the study confirm the findings of Akbar Sazvar et.al (2012) who also found that aerobic training induced significant change in RBC.

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