

COMPARATIVE STUDY OF POSITIONAL DIFFERENCE IN SELECTED PHYSIOLOGICAL VARIABLES OF INTERCOLLEGE MALE VOLLEYBALL PLAYERS OF HIMACHAL PRADESH UNIVERSITY

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Abstract:-The field of sports science and sports medicine are relatively new developments in biological science and medicine and during the past two decades a large number of peoples who are taking part in competitive sports. In the past there has not been a close relationship in the application of science and medicine to sports, despite the fact that they are inextricably linked. The medical profession is now becoming more aware of the relatively new area of prevention. The present study is an attempt to compare the difference in selected physiological variables of winner and loser volleyball offensive male players of Himachal Pradesh University. For the purpose of the study 32 male volleyball players of inter college participated at quarterfinal level were taken as the sample. The physiological variables selected for the study were resting pulse rate, resting systolic blood pressure, resting diastolic blood pressure, after 600 yard run/walk pulse rate, after 600 yard run/walk systolic blood pressure, and after 600 yard run/walk diastolic blood pressure.

The data was analysis by SPSS. The statistical tools for the study were mean, S.D. and “t” test. The results have shown significance difference between the above said variables.

Keywords:Physiological Variables , Intercollege Male Volleyball Players , sports science and sports medicine .

INTRODUCTION

In the field of sports and physical education, new areas of sports medicine have matured and the care of the athlete occupies an important place in the delivery of health care. With fitness and health the concern of all competitive and recreational athletes, present their physician, trainers, therapists and coaches with an assortment of problems and disorders to diagnose and manage. A team doctor requires good all round knowledge and experience in sports medicine and generals medicine conditions. Team members present with as many general medical complaints including dermatological, respiratory and gastrointestinal upsets as they do injuries from there sports. It is therefore important for the team doctor to maintain as much up to date knowledge of current trends in the diagnosis and treatment of every day illness as it is in the sports. In the modern age the greater emphasis is being laid at preparing sportsman physically, physiologically, psychologically and skillfully. In the present study the investigator has undertaken the physiological fitness aspects of the total fitness of the sports men. This aspect includes effect of exercise work on blood pressure, pulse rate and the oxygen carrying substance in the blood knows as hemoglobin.

The present study is an attempt to find out and compare the difference in selected physiological variables of winner and loser male volleyball offensive players of Himachal Pradesh University, participation in inter college championship at quarterfinal level.

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METHODOLOGY

For the purpose of this study 32 male volleyball especially offensive players winner and loser of Himachal Pradesh University participated in inter college championship at quarter final level were taken as sample and were selected randomly. Physiological variables of the players were measured by sphygmomanometer and stethoscope. The physiological variables, selected for the study were resting pulse rate, resting systolic blood pressure, resting diastolic blood pressure, after 600 yard run/walk, pulse rate, after 600 yard run/walk systolic blood pressure, and after 600 yard run/walk diastolic blood pressure.

The data was analysis by using SPSS. The statistical tools used for the study were S.D. and “t” test.

RESULT AND FINDINGS

Within the limitation and delimitations of the study following results are drawn:

Table 1
Descriptive statistics of resting pulse rate variables of offensive winner and loser male volleyball players of Inter college at quarter final level of Himachal Pradesh University

S.No.	Position	Mean	M.D.	S.E.D.	df	‘t’
1	Winner	61.4375	2.31250	1.10480	30	2.093
2	Loser	63.7500				

t < 2.04 at 0.05 level of significance

* Significance at 0.05 level

The table 1 depicts the mean value of winner and loser offensive volleyball players in quarter final level inter college with regard to variable resting pulse rate came out to be 61.437 and 63.7500 respectively which indicates that winner and loser offensive volleyball players differ significantly in resting pulse rate. It is evident from table 1 that t-value of winner and loser with regard to resting pulse rate came out to be 2.093, which is significant at 0.05 level of significance.

Table 2
Descriptive statistics of resting systolic blood pressure variables of offensive winner and loser male volleyball players of Inter college at quarter final level of Himachal Pradesh University

S.No.	Position	Mean	M.D.	S.E.D.	df	‘t’
1	Winner	119.2500	1.000	.36515	30	2.739
2	Loser	120.2500				

t < 2.04 at 0.05 level of significance

* Significance at 0.05 level

The table 2 depicts the mean value of winner and loser offensive volleyball players in quarter final level inter college with regard to variable resting systolic blood pressure came out to be 119.250 and 120.2500 respectively which indicates that winner and loser offensive volleyball players differ significantly in resting systolic blood pressure. It is evident from table 2 that t-value of winner and loser with regard to resting systolic blood pressure came out to be 2.739, which is significant at 0.05 level of significant.

Table 3
Descriptive statistics of resting diastolic blood pressure variables of offensive winner and loser male volleyball players of Inter college at quarter final level of Himachal Pradesh University

S.No.	Position	Mean	M.D.	S.E.D.	df	't'
1	Winner	79.6250	3.12500	3.84586	30	.813
2	Loser	76.5000				

$t < 2.04$ at 0.05 level of significance

* Significance at 0.05 level

The table 3 depicts the mean value of winner and loser offensive volleyball players in quarter final level inter college with regard to variable resting diastolic blood pressure came out to be 79.6250 and 76.5000 respectively which indicates that winner and loser offensive volleyball players differ not significantly in resting diastolic blood pressure. It is evident from table 3 that t-value of winner and loser with regard to resting diastolic blood pressure came out to be .813, which is not significant at 0.05 level of significant.

Table 4
Descriptive statistics of after 600 yard run/walk pulse rate variables of offensive winner and loser male volleyball players of Inter college at quarter final level of Himachal Pradesh University

S.No.	Position	Mean	M.D.	S.E.D.	df	't'
1	Winner	102.3125	1.56250	.75398	30	2.072
2	Loser	100.7500				

$t < 2.04$ at 0.05 level of significance

* Significance at 0.05 level

The table 4 depicts the mean value of winner and loser offensive volleyball players in quarter final level inter college with regard to variable after 600 yard run/walk pulse rate came out to be 102.3125 and 100.7500 respectively which indicates that winner and loser offensive volleyball players differ significantly in after 600 yard run/walk pulse rate. It is evident from table 4 that t-value of winner and loser with regard to after 600 yard run/walk pulse rate came out to be 2.072, which is significant at 0.05 level of significant.

Table 5
Descriptive statistics of after 600 yard run/walk systolic blood pressure variables of offensive winner and loser male volleyball players of Inter college at quarter final level of Himachal Pradesh University

S.No.	Position	Mean	M.D.	S.E.D.	df	't'
1	Winner	145.4375	7.62500	3.28301	30	3.044
2	Loser	137.8125				

$t < 2.04$ at 0.05 level of significance

* Significance at 0.05 level

The table 5 depicts the mean value of winner and loser offensive volleyball players in quarter final level inter college with regard to variable after 600 yard run/walk systolic blood pressure came out to be 145.4375 and 137.8125 respectively which indicates that winner and loser

offensive volleyball players differ significantly in resting systolic pulse rate. It is evident from table 4 that t-value of winner and loser with regard to after 600 yard run/walk systolic blood pressure came out to be 3.044, which is significant at 0.05 level of significant.

Table 6
Descriptive statistics of after 600 yard run/walk diastolic blood pressure variables of offensive winner and loser male volleyball players of Inter college at quarter final level of Himachal Pradesh University

S.No.	Position	Mean	M.D.	S.E.D.	df	't'
1	Winner	106.3125	3.37500	1.10373	30	3.058
2	Loser	102.9375				

$t < 2.04$ at 0.05 level of significance

* Significance at 0.05 level

The table 6 depicts the mean value of winner and loser offensive volleyball players in quarter final level inter college with regard to variable after 600 yard run/walk diastolic blood pressure came out to be 106.3125 and 102.9375 respectively which indicates that winner and loser offensive volleyball players differ significantly in resting diastolic blood pressure. It is evident from table 6 that t-value of winner and loser with regard to after 600 yard run/walk diastolic blood pressure came out to be 3.058, which is significant at 0.05 level of significant.

CONCLUSION

- 1.The resting pulse rate of offensive players of winner team of quarter final stage of Himachal Pradesh University male volleyball has significant difference with resting pulse rate of loser players.
- 2.The resting systolic blood pressure of offensive players of winner team of quarter final stage of Himachal Pradesh University male volleyball has significant difference with resting systolic blood pressure of loser players.
- 3.The resting diastolic blood pressure has not significance difference of offensive players of winner team of quarter final stage of Himachal Pradesh University male volleyball has significant difference with resting systolic blood pressure of loser players.
- 4.The after 600 yard run/walk pulse rate of offensive players of winner team of quarter final stage of Himachal Pradesh University male volleyball has significant difference with after 600 yard run/walk pulse rate of loser players.
- 5.The after 600 yard run/walk systolic blood pressure of offensive players of winner team of quarter final stage of Himachal Pradesh University male volleyball has significant difference with after 600 yard run/walk systolic blood pressure of loser players.
- 6.The after 600 yard run/walk diastolic blood pressure of offensive players of winner team of quarter final stage of Himachal Pradesh University male volleyball has significant difference with after 600 yard run/walk diastolic blood pressure of loser players.

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