

The influence of pre-season training schedule of selected physical fitness and skill performance of volleyball players

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Abstract

The purpose of this study was to find out the effect of specific preseason training package on selected physical fitness variables and skill performance of Volleyball players. The subject were 30 volleyball players in college of physical education, Alagappa University. The age group of 20 to 24 years performance of volleyball players. For this purpose the investigator divided the selected 30 subject randomly in to two groups namely. Specific Pre-season training schedule group and Control group. The various test were administered prior to training (pretest) and eight week (final test) of the training schedule. The test- retest coefficients of correlation also indicated subject's reliability as the same subjects were used under similar conditions by the same tester. The practice of specific pre-season training schedule by the experimental group is significantly effective than the control group in promoting desirable changes in physical fitness variables of speed, agility, explosive power and skill performance of serving, volleying and general playing ability. The control groups did not show a significant improvement in any of the volleyball skill test and physical fitness component. The experimental group showed a significant improvement in volleyball skill performance on serving ability, volleying ability, and physical fitness components of speed, agility, explosive power. After Eight weeks schedule.

Keywords: speed, agility, explosive power, volleyball

Introduction

The sports performance in international competition and tournaments not only denote the high level of efficiency of an individual sportsmen but also give expression to the overall efficiency of a nation. Society and culture to which she or he belongs.

There are so many factors to improve high level performance of a player or an athlete. Here investigator mentions few things which are required for high level performance. Especially, facilities, fitness components, physiological factors, psychological effects and particular skills. These factors play vital role in improving high level performance.

Physical fitness is defined as the ability of the body to adapt and recover from strenuous exercises. The sports performance depends largely on physical fitness, i.e., strength, speed, endurance, flexibility and various co-ordinate abilities. The process of improvement of motor abilities is also called conditioning.

Physical fitness is a matter of fundamental importance to the wellbeing of every individual in the field of physical Education. Physical fitness components and specific training schedule of skill ability are very important factors for volleyball players. This components of training schedule and development of skill ability are more important to the volleyball players in game situation.

Skill performance

In the development of the game volleyball, skills have come into play an increasingly vital role in the quest for victory. There are number of skills involved in the game of volleyball like passing, serving, Blocking, Setting, etc., which play a vital role in the

success of modern volleyball. Each skill is having its own importance and application to different situation. Perfection of the skills and execution of them successfully are having direct impact on the total performance in the game.

Pre-Season Training

According to Patryneal (1969) the pre-season training is the time to perfect skills, work on fundamentals, ponder strategy and to strive for high level of conditioning with emphasis on strengthening the muscles involves in the sport and improving the players. Endurance, this programme should lead to a gradual improvement in physical fitness with the peak being reached during the season.

Methodology

The purpose of this study was to find out the effect of specific preseason training package on selected physical fitness variables and skill performance of Volleyball players. The subject were 30 volleyball players in college of physical education, Alagappa University. The age group of 20 to 24 years performance of volleyball players. For this purpose the investigator divided the selected 30 subject randomly in to two groups namely. Specific Pre-season training schedule group and Control group. The various test were administered prior to training (pretest) and eight week (final test) of the training schedule.

Subject's reliability

The test- retest coefficients of correlation also indicated subject's reliability as the same subjects were used under similar conditions by the same tester.

Table 1: Computation of analysis of covariance for the means between experimental group and control group in speed test

Sources of Variance	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Between Groups	1	0.9	0.9	30
Within Groups	27	0.8	0.03	

*Significance at 0.05 level

*Table value for df 1 and 27 is 4.21

An examination of Table -1 indicates that the obtained F ratio 30 was greater than required F ratio of 4.21 at 0.05 level. Therefore we reject the null hypothesis and conclude that the mean differ significantly.

It is inferred from the results that a significant mean difference exist between specific training group and control group in development speed after 8 weeks of training period.

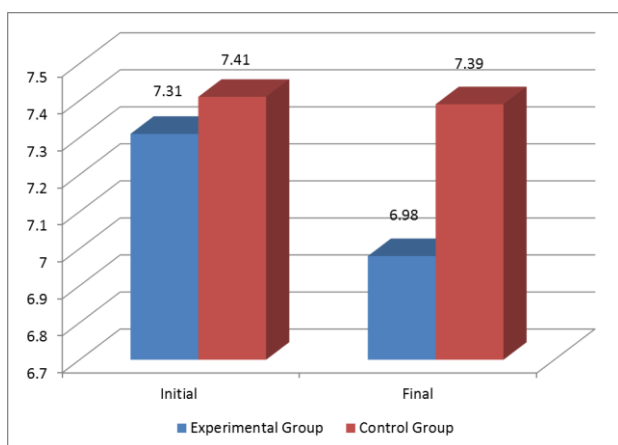


Fig 1: Means of Speed test for experimental and Control Groups

Table 2: Computation of analysis of Covariance for the means between experimental group and control group in agility test

Sources of Variance	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Between Groups	1	5.331	5.331	59.724
Within Groups	27	2.41	0.08926	

*Significance at 0.05 level

*Table value for df 1 and 27 is 4.21

A examination of Table II indicates that the obtained F ratio 59.724 was greater than the required F ratio of 4.21 at 0.05 level. Therefore we reject the null hypothesis and conclude that the means differ significantly.

It is inferred from the results that a significant mean difference exist between specific training group and control group in developing agility after 8 week of training programme.

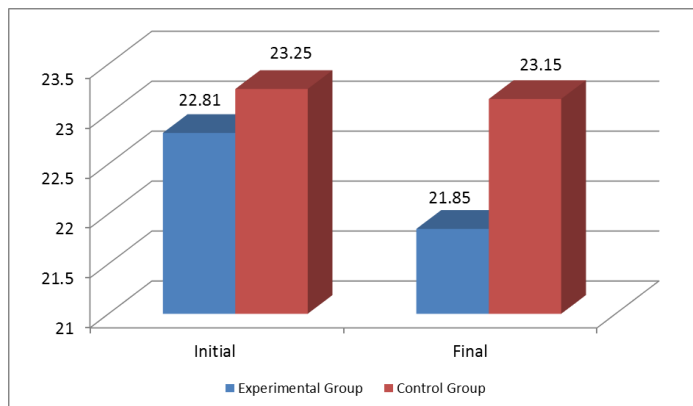


Fig 2: Means of Agility test for experimental and Control Groups

Table 3: Computation of Analysis of covariance for the means between experimental group and control group in explosive power

Sources of Variance	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Between Groups	1	1.13257	1.1357	565.41
Within Groups	27	0.06893	0.0022	

*Significance at 0.05 level

*Table value for df 1 and 27 is 4.21

An examination of Table III indicates that the obtained F ratio 51.29873 was greater than the required F ratio of 4.21 at 0.05 level. Therefore we reject the null hypothesis and conclude that the means differ significantly.

It is inferred from the results that at significant mean difference exist between specific training group and control group in developing explosive power after 8 weeks of training programme.

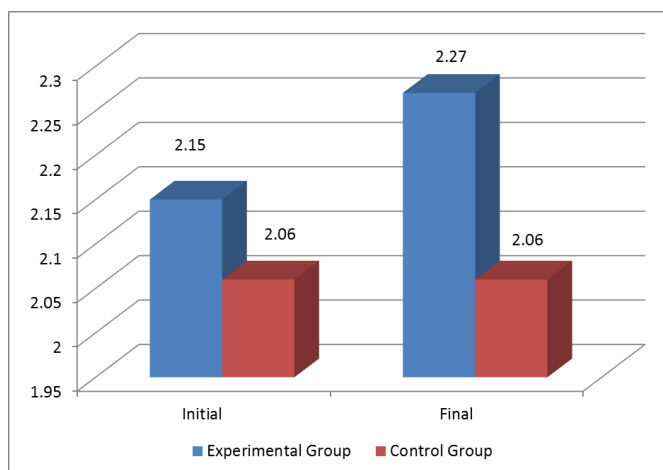


Fig 3: Means of Explosive Power test for experimental & Control Groups

Table 4: Computation of Analysis of covariance for the means Between Experimental group and control group in serving ability

Sources of Variance	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Between Groups	1	137.17	137.17	67.115
Within Groups	27	55.183	2.0438	

*Significance at 0.05 level

*Table value for df 1 and 27 is 4.21

An examination of Table IV indicates that the obtained F ratio 67.115 was greater than the required F ratio of 4.21 at 0.05 level. Therefore we reject the null hypothesis and conclude that the means differ significantly.

It is inferred from the results that a significant mean difference exist between specific training group and control group in developing serving ability after 8 weeks of training programme.

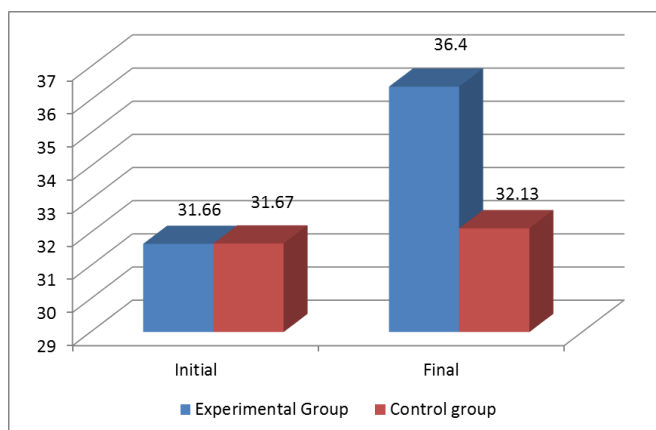


Fig 4: Means of serving test for experimental & Control group

Table 5: Computation of Analysis of covariance for the means between experimental group and control group in volleying ability

Sources of Variance	Degrees of Freedom	Sum of Squares	Mean Squares	F Ratio
Between Groups	1	61.896	61.896	29.694
Within Groups	27	56.28	2.0844	

*Significance at 0.05 level

*Table value for df 1 and 27 is 4.21

An examination of Table V indicates that the obtained F ratio 29.694 was greater than the required F ratio 4.21 at 0.05 level. Therefore we reject the null hypothesis and conclude that the mean differ significantly.

It is inferred from the results that a significant mean difference exist between specific training group and control group in developing volleyball, volleying skill after 8 weeks of training programme.

Findings

The findings of the study are give below:

Speed has improved significantly due to the specific training group.

Endurance has improved significantly due to the specific training group.

Agility has improved significantly due to the specific training group.

Explosive power has improved significantly due to the specific training group.

The skill performance of serving and volleying abilities in volleyball has improved significantly due to the specific training schedule group.

Concussion

The following conclusions are drawn based on the findings of the study.

1. The practice of specific pre-season training schedule by the experimental group is significantly effective than the control group in promoting desirable changes in physical fitness variables of speed, agility, explosive power and skill performance of serving, volleying and general playing ability.
2. The control groups did not show a significant improvement in any of the volleyball skill test and physical fitness component.
3. The experimental group showed a significant improvement in volleyball skill performance on serving ability, volleying ability, and physical fitness components of speed, agility, explosive power. After Eight weeks schedule.

Reference

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