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## Effect of fitness training encompassing gymnastics-oriented program of six weeks duration on performance of volleyball players

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**Introduction & Aim:** The present trend which is universally accepted for achieving high class performance from top volleyball players is fitness which is achieved through sustained, systematic and scientifically planned conditioning program. The main aim of the study was to know how the gymnastic oriented training program will affect the fitness levels and the technical performance of the volleyball players.

**Method:** 27 Volleyball players were divided into 12 experimental and 15 control group aged between 18 to 24 years. The tests for Fitness included vertical jump, push-ups, chin ups, sit ups, back strength, 30 m sprint, boomerangs test; 600m run, sit & reach bridge up and shoulder rotation and technical skill tests like passing, spiking and service were used for the study. A pre and post test was conducted before and after the training program of 6 weeks.

**Results:** The results indicated no significant difference in the anthropometric measurements of age, height and weight between the experimental and control group as the 't' values observed were 0.28, 1.63 & 1.60 respectively. There were significant improvements in Vertical jump, push-ups, sit-ups, modified boomerang test, bridge test and shoulder rotation index with the 't' values being 2.60, 3.41, 3.91, 4.02, 3.55 and 2.33 respectively. However no significant differences existed in Chin-ups, Back strength, 30 M sprint and 6000 M run with the 't' values being 2.08, 1.77, 1.28 and 0.80 respectively. There were significant improvement in the post test for the technical skills tests in the experimental group with 't' values being 3.65, 2.57, and 3.62 for the passing, spiking and service respectively. There was no significant difference in the values of the control group except in the service which showed significant difference.

**Conclusion:** It was found that both the physical fitness and skill proficiency of the volleyball players increased through the participation in the gymnastics oriented program.

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