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**Effect of plyometric exercises on limb muscle power in volleyball players**

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**Abstract**

The necessity of power in volleyball is to support the game's technique. Volleyball players' leg muscles must be strong enough to sustain techniques like smashes, blocks, and serves. Proper workouts, such as plyometric exercises, should reinforce the importance of muscular leg power. This study aims to determine the impact of plyometric side-to-side box shuffle and leap to box exercises on leg muscle power and determine which workouts are more successful in developing volleyball participants' limb muscular explosiveness. This is an experimental study with a "Two Groups Prettest Posttest Design" as the research design. The sample size for this study was up to 30 female athletes, with Purposive Sampling being employed as the sampling strategy. The samples were randomly split into two groups. The vertical leap test was utilized to determine the strength of the limb muscles in this research. Normality tests, homogeneity tests, and *t*-tests are used in data analysis. The results revealed a sig value of 0.918, indicating a difference in enhancing muscular leg strength in footballers between side-to-side box shuffle and leap to box workouts. Jump to box training improves muscular leg strength more than side-to-side box shuffle training, with a ratio of rises of 22.00 percent and 16.73 percent, respectively.

**Keywords:** pliometric, power, leg muscles, volleyball

**INTRODUCTION**

Every sports player in diverse sports needs the power component of the limbs. In sports, explosive power refers to a muscle's capacity to direct maximal strength in a brief period of time. Further disclosed physical condition components such as limb power are essential aspects that any

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