

## Comparison of Vertical Jump Performance of Male Hockey and Football Players

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### Abstract

The present study was conducted on 30 male players (fifteen male hockey players; age:  $16.80 \pm 1.52$  years & fifteen male football players; age:  $16.13 \pm 0.83$  years) comprising of inmates of Sports Training Centre, scheme of Sports Authority of India and players training under the guidance of Punjab State coaches in Patiala (India). The experimental protocol developed by *Bosco et al., (1983)* and *Mcguigan et al., (2006)* were used to measure the vertical jump performance of male hockey and football players. Test of significance of the differences was applied and data was judged at 0.01 and 0.05 level of significance. The analysis of data shows that the male hockey players performed better in vertical jump test parameters like the squat jump flight time, squat jump height, counter movement jump height, counter movement flight time, Eccentric Utilization Ratio (EUR), Elasticity Index (EI) than the male football players. But male football players performed better in continuous vertical jump test (60sec) parameters like Peak Power (0-15sec), Peak Power (45-60sec) and Mean Power (0-60sec), as compared to male hockey players.

### Introduction

Hockey and football are very dynamic team sports, requiring continuous alterations of intensity and kinetic actions and it is characterized by a great number of side movements, jumps, throws and body contacts all of which strictly depend on muscular strength. Coaches and trainers are greatly interested in developing training techniques designed to improve the explosive strength, power performance of the legs and vertical jump ability (*Blattner Stuart, 1978*). Several researchers have reported the anaerobic

power & capacity of football players (*Verma et al, 1979; Kumar et al, 2014*) cricket players (*Kumar & Kathayat, 2014; Kumar et al, 2015*) and have compared vertical jump performance of male handball and basketball players (*Singh et al, 2013; Singh et al, 2014a; Singh et al, 2014b*). Numerous studies of young athletes indicated that specific training in track and field, gymnastics, swimming, soccer, basketball improve vertical jumping performance, explosive strength of upper and lower limbs. Soccer, (*Gorostiaga et al. 2002*), basketball (*Foley*