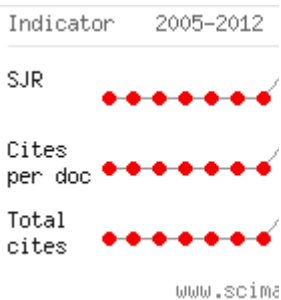


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[Home](#) > [Vol 7, No 3 \(2012\)](#) > [Sharma](#)

Correlations of anthropometric characteristics with physical fitness tests in Indian professional hockey players

Archna Sharma, Varishtha Tripathi, Shyamal Koley

Abstract

The purpose of this study was to investigate the correlations of anthropometric characteristics with isotonic strength (handgrip strength), lower limb power, aerobic strength, and skill tests in purposely selected 60 Indian professional male hockey players of different levels players (35 national and 25 state level) aged 18-23 years collected from Ranjit Singh Hockey Academy, Amritsar, Punjab, India. To serve this purpose, three anthropometric characteristics (height, weight

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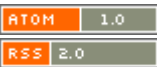
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and percent body fat), right and left handgrip strength, vertical jump, multi stage fitness test, slalom sprint and dribble tests were performed on each subject. Results indicated statistically significant ($p < 0.05$) differences only in lower limb power between Indian national and state level male hockey players. In Indian professional male hockey players, height has significantly positive correlations with weight, right and left handgrip strength, lower limb power and negative correlations with % body fat and dribble test, and body weight has significantly positive correlations with % body fat, right and left handgrip strength, lower limb power and negative correlations with slalom sprint. Significantly positive correlations were noted among the fitness component variables too.

Key words: AEROBIC STRENGTH; SKILL TESTS; ANTHROPOMETRIC CHARACTERISTICS; HANDGRIP STRENGTH; INDIAN PROFESSIONAL MALE HOCKEY PLAYERS; LOWER LEG POWER

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