A STUDY OF THE RELATIONSHIP BETWEEN BODY COMPOSITION AND PERFORMANCE OF JUNIOR ELITE FIELD HOCKEY PLAYERS

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ABSTRACT

The main aim of this study was to establish a relationship between body composition and performance of junior elite field hockey players. 99 male junior elite field hockey players aged 16-19 years selected from various hockey academies. Body composition parameters were measured by Omron Karada Scan HBF-701 body composition monitor. A panel of three experienced experts assessed each selected player's hockey performance based on subjective observations of their performance in practice matches and scored on a specific rating scale. Pearson product-moment correlation in SPSS version 2021 was used to establish the correlation between dependent and independent variables. Field hockey is a sport that demands a high level of physical fitness, including attributes like power, speed, endurance, agility, and strength. Understanding the relationship between body composition and performance can help optimize training and development strategies for junior elite field hockey players. In this study, researchers have established a relationship with the performance of junior elite field hockey players by assessing their body fat percentage and skeletal muscle mass. Investigators found that the fat percentage of hockey players has a negative correlation ***(r = - 0.48)*** *with performance. Whereas a positive correlation* ***(r = 0.51)*** *was found with the performance of skeletal muscle mass. Hence, it is concluded that body fat percentage and skeletal muscle mass can be used as representatives for body composition factors in future research.*