Relationship among Anthropometric, Body Composition and Physical Fitness of Basketball Skill Performance: A Study of Ethiopian University Players

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Abstract

Aim: the present study was to identify the relationships among anthropometric, body composition and physical fitness with basketball skill performance of Ethiopian inter University male basketball players. Method: two hundred (N=200) men basketball players selected by simple random sampling technique from Ethiopian inter University basketball Tournament. To achieve the objectives of the study six Anthropometric variables, eight Body composition variables and six physical fitness variables were included as independent variables and one dependent variable basketball skill performance which was assessed by AAHPERD basketball skill test (Accuracy speed passing, control dribbling, defensive movement and speed spot shooting). It was aggregation made by using principal component analysis to reduce correlated variable in to one. Results: Person's product moment correlation was used as a statistical tool. The result showed that Anthropometric variables i.e. weight, height, body mass index, arm length, Palme length and leg length were found to possess positive and significant (p< 0.05) correlation with the basketball skill performance at 0.01, body composition variables i.e. Biceps skin fold, triceps skin fold, subscapular skin fold, suprailiac skin fold, percent of body fat and fat weight were found to possess negative and significant (p< 0.01) correlation with the basketball skill performance at 0.01, body density and lean body mass measurements were found to possess positive and significant (p< 0.01) correlation with the basketball skill performance at 0.01 and physical fitness variables i.e.Sit and reach ,sergeant jump. Harvard step test and hand grip dynamometer for strength were found to possess positive and significant (p< 0.01) correlation with the basketball skill performance at 0.01 and 50 meter dash and SEMO agility were found to possess negative and significant (p< 0.01) correlation with the basketball skill performance at 0.01. Conclusion: Hence, it can be concluded from the findings of the present study that Anthropometric, Body composition and physical fitness variables contribute significant in basketball skill performance.

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