

Relationship Between Health-Related Physical Fitness and Body Composition of Retired Players of the National Rugby Team, Sri Lanka

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Lack of consideration towards a healthy lifestyle and physical fitness after retirement may lead to issues in the body composition and impact the health-related physical fitness components of rugby players. The objective of this study was to identify the relationship between health-related physical fitness components and the body composition of retired players of the national rugby team. For the present cross sectional study purposive sample method were used and the data were analyzed by the Pearson's coefficient correlation test. The sample group comprised thirty-seven ($n=37$) players whose body composition variables (body mass index, body fat, muscle mass, visceral fat and physique rating) and fitness variables (cardiorespiratory endurance, upper body muscle endurance and strength, muscular trunk strength, explosive leg power, flexibility) had been measured. A significant strong negative correlation was detected between the visceral fat and muscular trunk strength ($p=0.01$, $R=0.428$), flexibility ($p=0.01$, $R=0.610$), and explosive leg power ($p=0.01$, $R=0.536$). In addition, body fat and flexibility ($p=0.01$, $R=0.623$) revealed a significantly strong negative correlation. Interestingly, significant strong positive correlations were detected between heart rate and body fat ($p=0.01$, $R=0.411$) and visceral fat ($p=0.01$, $R=0.409$). According to a recent study, the physical fitness of retired rugby players is much lower. Therefore, their body composition has increased significantly.

Keywords: Physical Fitness, Visceral Fat, Former Rugby Players