

Survey of the Relationship between Functional Movement Screening Tests and Anthropometric Dimensions in Healthy People, 2018

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Abstract : Introduction: Movement function is considered as the ability to produce and maintain balance, stability, and movement throughout the movement chain. Having a score of 14 and above on 7 sub-tests in the functional movement screening (FMS) test shows agility and optimal movement performance. On the other hand, the person's body is an important factor in physical fitness and optimal movement performance. The aim of this study was to identify effective anthropometric dimensions in increasing motor function. Methods: This study was a descriptive-analytical and cross-sectional study using simple random sampling. FMS test and 25 anthropometric dimensions and subcutaneous in five body regions measured in 139 healthy students of Bam University of Medical Sciences. Data analysis was performed using SPSS software and univariate tests and linear regressions at a significance level of 0.05. Results: 139 students were enrolled in the study, 51.1% (71 subjects) and the rest were female. The mean and standard deviation of age, weight, height, and arm subcutaneous fat were 21.5 ± 1.45 , 12.6 ± 64.3 , 168.7 ± 9.8 , 15.3 ± 7 , respectively. 17 subjects (12.2%) of the participants in the study have a score of less than 14, and the rest were above 14. Using regression analysis, it was found that exercise and arm subcutaneous fat are predictive variables associated with obtaining a high score in the FMS test. Conclusion: Exercise and weight loss are effective factors for increasing the movement performance of individuals, and this factor is independent of the size of other physical dimensions.

Keywords : functional movement, screening test, anthropometry, ergonomics

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