

**EXAMINING AND CORRELATION ANALYZE OF THE  
RELATIONSHIP BETWEEN FUNCTIONAL MOVEMENT  
SCREENING TEST (FMS) AND UPPER LIMB FUNCTION IN ELITE  
BASKETBALL PLAYERS AL-RAFIDAIN SPORTS CLUB**

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**Abstract**

*Background* Functional Movement Screening (FMS) becomes more and more popular in identifying functional limitations in basic functional movements. This experimental study was conducted to confirm the feasibility of implementing FMS among active Elite Basketball Players Al-Rafidain Sports Club. *The purpose of this study* is to investigate the relationship between the functional sports screen (FMS) of Elite Basketball Players Al-Rafidain Sports Club and upper limb's function. *Methods* It is essential to have more practical and comprehensive alternatives of exercise screening for understanding human function and identifying impairments and dysfunctional exercise patterns that reduce functional quality. In many cases, weakness or tension in muscles or muscle groups is usually found, then treated with separate stretching or strengthening activities, rather than using standard exercise patterns that can solve multiple injuries at the same time. Likewise, many professionals usually focus on specific areas of complaint, rather than starting with identifying comprehensive motor characteristics and correlating that characteristic with dysfunction. The study group consisted of 60 Elite Basketball Players from Al-Rafidain Sports Club; with age between 17 and 36. Their height was 175–220 cm, weight – 65–85 kg, BMI was calculated and recorded digitally for later analysis. The inclusion criterion was absence of a history of musculoskeletal injury at least 3 months before investigation. FMS consists of 7 component tests to evaluate different basic movement modes (squat, hurdle step, overhead squat, inline lunge, shoulder flexibility, straight leg elevation test, trunk stability push-up test). Arm Disability Assessment Questionnaire (DASH) has been used to assess upper limb function as an evaluation tool for the prevention of sports injuries. Pearson correlation coefficient with significance  $p \leq 0.05$  was used to test the relationship between variables. *Results:* The results show that there is a difference between the performance screening test scores for measuring arm disability and the high scores. ( $P=0.01$ ,  $R=-.068$ ) There is a strong relationship. *Conclusion* It seems necessary for coaches and sports experts to choose suitable tests for athletes to prevent sports injuries. This could effectively reduce the cost of treatment and improve the level of exercise. Therefore, based on the results of this study, it can be said that the test which has been introduced could be used as an assessment tool for injury prevention. However, its relationship with other functional tests and some factors of physical fitness has not been studied.

**Key words:** basketball players, upper limb, functional test, correlation analysis.