Effect of Exercise Modes on Functional Fitness in Middle-aged Women

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The term “functional fitness” has gained attention in recent years for its impact on both performance in athletes and quality of life and movement efficiency in all adults.

**Purpose:** The goal of this exploratory study was to determine what type of exercise may be best in preserving the functional ability of women as they age. Exercise is known to help with functional abilities at any age, but little research has been conducted addressing the most effective type of exercise.

**Methods:** Thirty women ages 52-67 (mean=59.3±4.02 years) volunteered to participate in the study. Functional fitness was assessed using all seven items of the Functional Movement Screen (Deep Squat, Hurdle Step, Inline Lunge, Shoulder Mobility, Straight Leg Raise, Trunk Stability Pushup, and Rotary Stability). Before the FMS, participants answered a questionnaire concerning the type, intensity, and frequency of their exercise for the past six months. Seventeen women participated in both moderate cardio activities and core/strengthening activities such as yoga, pilates, and other exercises involving balance, shifting the center of gravity, and strengthening the core. The other 13 women participated regularly in moderate cardiovascular exercise only. From the questionnaire results, two groups were formed: a cardio + core group (CC; n=17) and a cardio only group (C; n=13).

**Results:** Ages in the two groups and weekly volume of exercise were statistically equal (p>.05). In the FMS, the CC group scored significantly higher than the C group in Deep Squat (p=.006), Lunge (p=.019), Hurdle Step (p=.037); Straight Leg Raise (p=.020); Trunk Stability Pushup (p=.019); and total FMS (p=.0009). The only two items which did not show a significant between-group difference were the Shoulder Mobility and Rotary Stability tests (p=.4309 and .2599, respectively).

**Conclusion:** Women who participate in forms of both cardio and core exercise have better functional fitness than those who participate only in cardiovascular exercise.