

Comparative Effect of Self-Myofascial Release as a Warm-Up Exercise on Functional Fitness of Young Adults

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Abstract : Warm-up is an essential component for optimizing performance in various sports before a physical fitness training session. This study investigated the immediate comparative effect of Self-Myofascial Release through vibration rolling (VR), non-vibration rolling (NVR), and static stretching as a part of a warm-up treatment on the functional fitness of young adults. Functional fitness is a classification of training that prepares the body for real-life movements and activities. For the present study 20 male physical education students were selected as subjects. The age of the subjects was ranged from 20-25 years. The functional fitness variables undertaken in the present study were flexibility, muscle strength, agility, static and dynamic balance of the lower extremity. Each of the three warm-up protocol was administered on consecutive days, i.e. 24 hr time gap and all tests were administered in the morning. The mean and SD were used as descriptive statistics. The significance of statistical differences among the groups was measured by applying 'F'-test, and to find out the exact location of difference, Post Hoc Test (Least Significant Difference) was applied. It was found from the study that only flexibility showed significant difference among three types of warm-up exercise. The observed result depicted that VR has more impact on myofascial release in flexibility in comparison with NVR and stretching as a part of warm-up exercise as 'p' value was less than 0.05. In the present study, within the three means of warm-up exercises, vibration roller showed better mean difference in terms of NVR, and static stretching exercise on functional fitness of young physical education practitioners, although the results were found insignificant in case of muscle strength, agility, static and dynamic balance of the lower extremity. These findings suggest that sports professionals and coaches may take VR into account for designing more efficient and effective pre-performance routine for long term to improve exercise performances. VR has high potential to interpret into an on-field practical application means.

Keywords : self-myofascial release, functional fitness, foam roller, physical education

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