

Effect of functional training on physical fitness among athletes: a systematic review

ABSTRACT

There is evidence that functional training is beneficial for the overall physical fitness of athletes. However, there is a lack of a systematic review focused on the effects of functional training on athletes' physical fitness. Thus, the aimed of the present review is to clarify the effects of functional training on physical fitness among athletes. In accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyzes (PRISMA) Statement guidelines, the systematic search of PubMed, SCOPUS, EBSCOhost (SPORTDiscus), and CINAHL Plus databases was undertaken on the 2nd November 2020 to identify the reported studies, using a combination of keywords related to functional training, physical fitness, and athletes. From the 145 studies, only nine articles met all eligibility criteria and were included in the systematic review. The assessment was performed on the Pedro scale, and the quality of the study included in the nine studies was fair (ranging from 3 to 4). The results showed that speed (n = 6) was the aspect of physical fitness studied in functional training interventions, followed by muscular strength (n = 5), power (n = 4), balance (n = 3), body composition (n = 3), agility (n = 3), flexibility (n= 1) and muscular endurance (n = 1). Existing evidence concludes that functional training significantly impacts speed, muscular strength, power, balance, and agility. Furthermore, there are still limit numbers of evidence showing effect of functional training on flexibility and muscular endurance. In contrast, no significant improvement was found in body composition where functional training was conducted.

Keyword: Flexibility; Muscular endurance; Body composition; Balance; Speed