

Effect of Passive Static Stretching on Vertical Jump Performance Among Kulliyah of Allied Health Sciences (KAHS) Basketball Players

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ABSTRACT

Objectives/Research Problem: The objectives of this study is to determine the effectiveness of static stretching on vertical jump performance among Kulliyah of Allied Health Sciences basketball players and to find out any difference in the effect of passive static stretching between male and female basketball players on vertical jump performance.

Materials and Method: Subjects who were selected to participate in this study, included 25 male and 25 female students aged between 19 to 25 years (mean 24.8 ± 1.3) from Kulliyah of Allied Health Sciences represented their respective departments in Inter-Department Games (IDG) 2016. Subjects with musculoskeletal injury (e.g., postoperative conditions, musculotendinous, ligamentous, or bony defects) were excluded. The subjects were asked to perform 3 vertical jumps (with arm swings) and no stretching routine. Then, moderate intensity of passive static stretching was given for quadriceps, hamstrings, and calf muscles of both limbs. Static stretching was applied for 15 seconds followed by 15 seconds rest, this was repeated three times. Immediately participants were asked to complete another 3 vertical jump (with arm swings).

Results and Discussion: The mean averages of the jumping height difference without stretching and after stretching were recorded for statistical analysis. There was a significance difference between without stretching (Mean=39.470) and after stretching (Mean=41.294) values of passive static stretching and vertical jump performance. There was a significant increase in vertical jump performance when passive static stretching applied ($p \leq 0.05$). In gender comparison; there is no difference in terms of average jumping difference after stretching between male and female basketball players ($p \geq 0.05$).

Conclusion: It can be concluded that passive static stretching can be beneficial to improve vertical jump performance among basketball players and the effect of passive static stretching is almost the same for both male and female basketball players in terms of vertical jump performance.

KEYWORDS: Static Stretching, Vertical Jump, Basketball

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