

Effect of Training Methods and Age on the Simultaneous Increase of Vo2max, Reactive Agility, and Power in Basketball

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ABSTRACT

Basketball is an intermittent game sport and is carried out in a relatively long time with high intensity, so it requires good Vo2max, reactive agility, and leg power biomotor components. To be able to improve the biomotor components, effective training methods and models are needed. To be able to improve the biomotor components, effective training methods and models are needed. The purpose of this study was to determine the effect of training methods (interval and plyometric) and age on VO2max, reactive agility and power simultaneously in basketball athletes.

The research method used an experimental method with a 2 x 2 factorial design. The research population was basketball athletes in the Special Region of Yogyakarta, aged 13-18 years. The research sample consisted of 40 athletes aged 13-18 years who were obtained through random sampling technique. Data collection techniques using tests and measurements. The research instrument used the bleep test for vo2max, the Y-agility test for reactive agility and the vertical jump test for leg power. Data analysis used the Anava test. To find out the difference in effect using the T test.

The results of the study show that: 1) The interval training method is better than the plyometric method for increasing vo2max, reactive agility, and power for basketball athletes aged 13-18 years, 2) There are significant differences in the effect for different ages on vo2max, reactive agility, and basketball power athletes, and 3) There is an interaction between training methods and age on increasing reactive agility and power, but for vo2max there is none.

Kata Kunci: *interval, plyometric, vo2max, reactive agility, power*