

INFLUENCES OF DIFFERENT PHASES OF TRAINING ON AEROBIC CAPACITY OF MALE HANDBALL PLAYERS

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ABSTRACT

The reason for this investigation was to decide the impact of various periods of preparing on vigorous limit of male handball players. Twelve (12) male handball players were chosen. These twelve players spoke to Annamalai University in South Zone Inter University handball competition for the year 2011. The rule factors chose in this investigation was vigorous limit, which was estimated in treadmill through Bruce treadmill test. Testing occurred at four amid the periodized preparing year; at the beginnings of general readiness (T1), explicit planning (T2), and rivalry stage starting (T3) end of rivalry periods of preparing and cresting (T4). A full testing battery was directed at T1 and T4, while two minor testing sessions were led at T2 and T3. The ANOVA uncovered a huge change in vigorous limit of handball players amid various periods of preparing ($F = 4.953, p < 0.05$). Bonferroni post hoc test uncovered no critical contrast between all examinations (all $ps > 0.05$) on vigorous limit of handball players. It is reasoned that vigorous limit experiences huge changes amid the diverse periods of preparing.

KEYWORDS: handball, aerobic capacity, male, preparation, competition, periodization .

INTRODUCTION

Periodization can be characterized as the intentional variety of a preparation program after some time, with the goal that the contender will approach their ideal versatile potential only preceding a vital occasion. Handball is quick body contact sports which require vigorous wellness, so as to enhance high-impact wellness explicit preparing must be joined, yet the players under go complex preparing during the time to enhance their by and large physical wellness. In spite of the fact that the basic, physiological and metabolic qualities of competitors have been altogether examined throughout the years, the physiological components which bolster the effectiveness of periodized preparing programs stay hazy.

As per Fleck (1999) generally short preparing routines, periodized programs can evoke altogether more prominent adjustments in chose execution files than non-periodized. Another clarification for the matchless quality of the periodized preparing approach might be that, contrasted with controls, higher preparing loads have been accounted for by gatherings rehearsing these projects, which in the long run realize altogether more noteworthy adjustments and execution enhancements (Stone et al. 1999).

Most extreme oxygen take-up (VO_{2max}) alludes to the most elevated rate at which oxygen can be taken up and devoured by the body amid extraordinary exercise (Bassett and Howley 2000). Customarily, the size of a person's VO_{2max} has been seen as a standout amongst the most imperative indicators of continuance execution. Drawn out exercise requires supported vitality

arrangement to keep up muscle constriction and is practiced through the persistent generation of ATP (adenosine triphosphate), the widespread vitality particle. The generation of ATP is practiced through three metabolic pathways (breakdown of a fuel to discharge vitality), which incorporate the phosphagen framework (the creation of ATP from creatine phosphate), glycolysis (glucose breakdown), and mitochondrial breath (high-impact digestion inside the mitochondrion of the cell). The initial two pathways are just fit for vitality generation for brief spans; thus, ATP recovery for expanded exercise is cultivated transcendentally through mitochondrial breath. The biochemical responses engaged with mitochondrial breath rely upon consistent oxygen accessibility for legitimate working. Upgraded oxygen conveyance and usage amid exercise will enhance mitochondrial breath and in this manner the limit with regards to perseverance work out. The focal (heart, lungs, veins) physiological capacities can constrain VO₂max.

Assessing and comprehension of physiological capacities over the span of a preparation season might be of incredible incentive in prespective of physical execution. The preparation forces cardiovascular and aspiratory adjustment and their impact on execution are taken note. Absence of concentrates on exactly examining the adjustment of physiological capacities amid a preparation season has roused to taken up an investigation in advancing quantum of hypothesis in the field of preparing strategies. The reason for this investigation was to decide the impact of various periods of preparing on vigorous limit of male handball players.

METHODS

Twelve (12) male handball players were chosen. These twelve players spoke to Annamalai University in South Zone Inter University handball competition for the year 2011. These players were chosen aimlessly as subjects, who volunteered to take an interest in this examination. Every one of the players had been a piece of the group for at least 2 years. The chose subjects gave composed, educated agree to take part in this examination. All subjects knew about all the testing that occurred, which included both field and research center evaluations.

DISCUSSION

Hoff and Helgerud (2004) expressed that typical VO₂max esteem for football players should lay between 55 to 67 (ml/kg/min) in this examination male handball players normal vigorous limit is 59.66 (ml/kg/min). General preliminary stage (T1) is a vital time of molding the handball players (Natal Rebelo and Soares, 1995) and the high estimations of VO₂max achieved and kept up till end of aggressive stage. Aerobic exercise amid this period, for the most part results in next to zero muscle hypertrophy yet increases hairlike and mitochondrial thickness, catalyst action (creatine phosphokinase and myokinase), metabolic stores (ATP, Creatine phosphate and glycogen), connective tissue quality (tendon and ligament) (Baechle and Earle, 2000; Amigo et al. 1998). Astrand and Rodahl (2003) expressed that oxygen consuming preparing could enhance or diminish a competitor's vigorous power by 5% to 30%, however this enormously relied upon the competitor's beginning wellness levels, with low beginning dimensions picking up the best increments. As foreseen, oxygen consuming parameters changed over the season. Be that as it may, comparable outcomes were acquired in this investigation. The extent of progress because of any preparation program relies upon the competitor's pre-preparing level and the qualities of the program or playing season. The explanations behind this decrement undoubtedly mirror the preparation upgrade. Brady et al. (1995) ascribed the regular decrement to the way that mentors might lessen the preparation improvement towards the finish of the season.



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