

Effect Of High-Intensity Interval And Resistance Training On Agility And Vo2 Max Of Intercollegiate Men Kabaddi Players

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Abstract

Aim: To study the agility and vo2 max among inter-collegiate men kabaddi players.

Background: We examine the inter-collegiate men kabaddi players

Objectives: A total of 30 college players from south Chennai, Tamil Nadu, India at the age range of 17 to 25 participated in this study. That is made to determine the high-intensity interval and resistance training on agility and vo2 max of intercollegiate men kabaddi players.

Methods: The subjects were separated into three equal groups of 10 each. Experimental group-1 high-intensity interval training and group-2 resistance training and control group. Various high-intensity interval training and resistance training will be given for 8 weeks. The data retrieval process is done by Agility was measured by the Illinois agility test and vo2 max was measured by the Queens College step test analysis at pre-test and post-test. Collected data's will be analyzed by ANOVA. The level of confidence of 0.05 was fixed.

Conclusion: The result of the research shows that high-intensity interval and resistance training gave a positive performance on agility and vo2 max when compared to the control group of inter-collegiate men kabaddi players.

Keywords: High-Intensity Interval, Resistance Training, Kabaddi Players, Anova

Introduction

Sports within side gift global have to turn out to be extraordinarily competitive. Kabaddi is essentially an outside group recreation, performed within side the tropical nations of Asia. Kabaddi is famous to all of us as the sport of exciting the masses, the recognition the easy and simple nature of play has attracted humans to the core. The recreation no longer wants any excessive-value gadget or a technically complex tool to apply in its conduct. Though it is essentially an outside recreation performed on clay courts, in recent times the sport is being performed on an artificial surface, with gamers gambling with shoes, the sport took a specific measurement in itself and attained super success. Kabaddi is a completely unique frame touch recreation. The simple concept is to attain factors through raiding into the opponent's courtroom docket and touching as many protection gamers as viable without getting stuck on a single breath. The recreation of Kabaddi incorporates bodily characteristics consisting of Agility, appropriate lung capacity, Muscular coordination, presence of thoughts and brief responses.

Hiit is infinitely variable with the specific physiological adaptations induced by this form of training determined by a myriad of factors including the precise nature of the exercise stimulus. Hiit can serve as an effective alternative to traditional endurance-based training, inducing similar or even superior physiological adaptations in healthy individuals. Interval training leads to many physiological changes, including increased cardiovascular efficiency, the ability to deliver oxygen to the working muscles, and increased tolerance to the build-up of lactic acid. These changes result in improved performance, greater speed, and endurance. Interval training on VO2 max, lactate threshold and economy, it's important to recognize that interval training can also have a strong influence on the development of strength and power

Hiit is infinitely variable with the particular physiological variations brought about through this shape of schooling decided through a myriad of things which include the right nature of the workout stimulus. Hiit can function as a powerful opportunity to standard endurance primarily based totally training, inducing comparable or maybe advanced physiological variations in wholesome

individuals. Interval training ends in many physiological modifications, which include elevated cardiovascular efficiency, the cap potential to supply oxygen to the operating muscles, and elevated tolerance to the build-up of lactic acid. These modifications bring about stepped-forward overall performance, extra speed, and endurance. Interval schooling on VO₂ max, lactate threshold and economy, it's essential to apprehend that c programming language schooling also can have a robust effect on the improvement of power and electricity

Rst applications have historically centered on growing maximal power in character muscles, emphasizing one aircraft of motion. Rst is a modality of workout that has grown in recognition over the last decades, especially for its function in enhancing athletic overall performance through growing muscular strength, power and speed, hypertrophy, muscular endurance, motor overall performance, balance, and coordination. Rst is an anaerobic shape of a workout. This training program may be used to decorate the cap potential of the frame to carry out at excessive pressure and/or electricity outputs for a brief duration to enhance the cap potential of the frame to carry out repeated bouts of maximal activity.

Statement of the problem

The purpose of the present study examines the effect of high-intensity interval and resistance training on agility and vo₂ max of intercollegiate men kabaddi players

Material & Methods

For the observation 30 intercollegiate men, Kabaddi gamers elderly from 17 to 25 years have been decided on as topics for the research. They are divided into 3 groups as HIIT group as group 1, RST as group 2 and the control group. A Pre-check turned into carried out was observed via way of means of a post-check after eight weeks of education, for agility and vo₂ max. Before every education session, all of the topics were done 10 mins of low to mild warming-up workout and stretching. The researcher or trainer demonstrates the suitable technique of appearing at every HIIT and resistance workout for higher expertise of the topics. Agility was measured by the Illinois agility test and vo₂ max was measured by the Queens College step test.

Statistical Analysis

The statistics amassed from each corporation as experimental groups and manipulate group on agility and vo₂ max statistically tested evaluation of variance (ANOVA) become used to decide differences if there's any extensive distinction most of the remedy way of variable 0.05 degree of confidence. The evaluation of variance on agility and vo₂ max has been analyzed and all of the tables are noted below:

Result of the study

Anova for the pre-test, post-test means values for HIIT, RST and CNT groups on agility and vo₂ max

AGILITY							
Test	HIIT group	RST Group	CNT Group	Sum of Square	Df	Mean	F ratio
Pre Test	17.52	17.56	17.51	0.009	2	0.005	0.041
				3.09	27	0.114	
Post Test	16.63	17.01	17.53	4.73	2	2.36	18.31*
				3.49	27	0.12	
VO ₂ MAX							
Test	HIIT group	RST Group	CNT Group	Sum of Square	Df	Mean	F ratio
Pre Test	74.16	74.19	74.40	0.348	2	0.174	0.293
				16.00	27	0.593	
Post Test	78.03	77.25	74.36	74.64	2	37.32	30.42*
				33.11	27	1.22	

(*significance at 0.05 levels with df 2 and 27 is 2.70)

The pre-test look at suggested values on the agility of the HIIT group, RST Group, and control group are 17.52, 17.56, and 17.51 respectively. The obtained `F` ratio of 0.041 for the pre-test a look at suggest became much less than the table value 2.70 for df 2 and 27 required for importance at 0.05 degree of self-assurance on Agility. The post-test takes a look at suggested values on the agility of HIIT group, RST Group and control group are 16.63, 17.01 and 17.53 respectively. The obtained `F` ratio of **18.31*** for the post-test a look at suggesting became extra than the table value 2.70 for df 2 and 27 required for importance at 0.05 degree of self-assurance on agility.

The pre-test look at suggested values on the Vo₂ Max of the HIIT group, RST Group, and control group are 74.16, 74.19 and 74.40 respectively. The obtained `F` ratio of 0.293 for the pre-test a look at suggest became much less than the table value 2.70 for df 2 and 27 required for importance at 0.05 degree of self-assurance on Vo₂ Max. The post-test takes a look at suggested values on the Vo₂ Max of HIIT group, RST Group and control group are 78.03, 77.25 and 74.36 respectively. The obtained `F` ratio of 30.42 for the post-test take a look at suggesting became extra than the table value 2.70 for df 2 and 27 required for importance at 0.05 degree of self-assurance on Vo₂ Max.

Conclusion

In light of the research, the result of the study was drawn. Based on the result the research was concluded that the 8 weeks of HIIT and RST have been a significant improvement on agility and Vo2 Max of the inter-collegiate men kabaddi players

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