

Impact of sand based and aqua based medicine ball training on strength endurance among the Kabaddi players

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Abstract

The men's kabaddi team from Vinayaka Mission College of Physical Education in Salem, Tamil Nadu, was randomly chosen to comprise the twelve (12) participants of the research. Included were both sexes, with the age range being 21–28. Athletes participating at the college level were chosen at random. The chosen participants worked out with medicine balls every other week for six weeks. Among the fitness-related traits, anaerobic capacity and explosive power were the determining factors. We used a standardized exam to look at the qualities we had already chosen. Twelve men's kabaddi players from collegiate teams make up the sample for this study. All participants were given a battery of skills assessments before and after the training. A single-group design with pre- and post-tests was used for participant selection. Using a single group's pre- and post-test results, researchers recruited individuals.

Kabaddi, medicine ball, explosive power, and anaerobic capacity are some of the topics discussed.

INSTRUCTION TRAINING

Throughout recorded history, the word "training" has been used in casual discourse. When getting ready to do anything, a person goes through this. Time is of the essence, and tasks might drag on for days, weeks, months, or even years. The word "training" is often used in relation to athletics. No matter how you slice it, coaches and sports scientists can't agree on what this phrase really means. Some professionals, particularly those in the field of sports medicine, believe that physical activity is the cornerstone of sports training. In the realm of fitness, this way of thinking is characterized by concepts like strength training, interval training, and technical and tactical instruction. The training session itself is the most basic part of training. obtaining guidance. Practical application of the method occurs throughout the training session. The enormous fervor for sports Singh (1991) argues that in sports pedagogy, the quality of training sessions is highly valued for its organization and execution.

Technique for Healthcare Balls

You may improve your strength, coordination, and balance with the help of a "medicine ball" or weighted ball, which is great for a variety of fitness-related exercises. aids in the speedy recovery of injured athletes. The materials used to create such a ball might range from leather and nylon to vinyl and rubber as well as polyurethane and many more. A range of 2 to 25 pounds is possible for its weight. Although there is a wide range of sizes available, the most common medicine ball has a 14-inch diameter. Wrestlers in Persia used sand-filled bladders as a training tool some 3,000 years ago, which is the first recorded use of a medicine ball. Later on, the renowned Greek physician Hippocrates made therapeutic balls out of sand and animal skins. Tossing the balls back and forth was a part of his patients' injury rehabilitation program. At the beginning of the nineteenth century, the words "medicine" and "health" became to mean the same thing, and the medicine ball was a tool for promoting health. Joining the likes of the dumbbell, wand, and Indian club as one of the "4 Horsemen of Fitness," this workout apparatus became famous. The current medicine ball was born out of this.

Problem Identification

In an effort to stay ahead of the competition, modern sports have ramped up medicine ball training. That is why it is crucial for coaches and players to always work on improving their talents. Intense physical training, new strategies, and improved abilities could be needed to keep up with the increasingly fierce competition. For the purpose of finding out if medicine ball training increases the anaerobic capacity and explosive power of college kabaddi players. Examining the effects of medicine ball training on the anaerobic capacity and explosive power of college kabaddi players was the primary goal of the research.

Well, I've got a few ideas.

The dependent variable may be changed via consistent practice and training over time, as has been shown in study for quite some time. The researcher developed a hypothesis based on the investigational findings and the existing field literature; this hypothesis was then evaluated with a significance level of 0.05.

To begin, medicine ball training would significantly improve anaerobic capacity.

2. Medication ball training is a terrific way to increase your explosive power. Methodological Approach

Choice of Subjects

Twelve(12) males from the men's kabaddi squad at Salem, Tamil Nadu's Vinayaka Mission College of Physical Education were selected at random to take part in the study. The participants' ages ranged from 21 to 28, and they were of both sexes. There was a random selection process for the collegiate athletes. For six weeks, the selected individuals exercised with medicine balls on a biweekly basis. The deciding criteria among the fitness-related features were explosive power and anaerobic capacity. A standardized test allowed us to evaluate the attributes we had previously selected. The research sample consists of twelve male kabaddi players from different college teams. Prior to and after the training, each participant was required to complete a battery of skill tests. We used a pre- and post-test single-group design to choose our participants. For this study, we used a single-group pre- and post-test design to recruit participants.

SELECTION TESTS

S.No	Criterion Variables	Test Items	Unit of Measurement
1.	Anaerobic Potential	MargariaKalamen Anaerobic Power Test	In Kilograms / Meter ²
2.	Explosive Power	Vertical Jump	In Centimeters

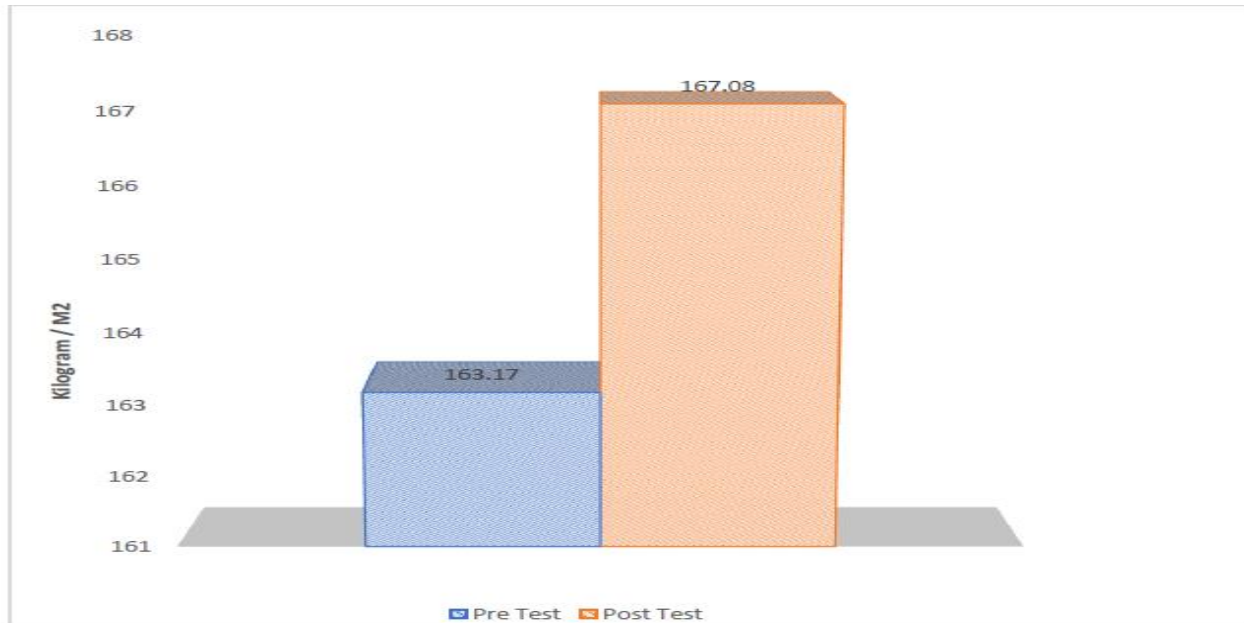
Table I: Anaerobic capacity of the experimental group pre- and post-tests analyzed using means, standard deviations, and dependent t-tests

	Test	Number	Mean	Standard Deviation
Anaerobic Power	Pre test	12	163.17	2.41
	Post test	12	167.08	1.68
	't'-test	9.02*		

At the.05 level, it is important. (Anaerobic Capacity Performance in Kilograms/M2) (The table value needed to attain the.05 level of significance with df 11 is 2.14.)

Table I shows that after the test, the experimental group's mean values decreased from 163.17 2.41 to 167.08 1.68. Subtracting the experimental group's post-test average from their pre-test average yielded a t-ratio of 9.02. At the.05 level of significance, a table value of 2.14 is required to demonstrate a difference with df 11. Medicine ball training significantly improved the anaerobic capacity performance of men's kabaddi players in college, as shown by comparing the means of the pre- and post-tests using the t-ratios.

Figure 1 displays the anaerobic capacity readings of the college kabaddi players before and after the test.



The mean values of the medication ball training group's anaerobic capacity are shown in Figure 3. ASSESSMENT FINDINGS

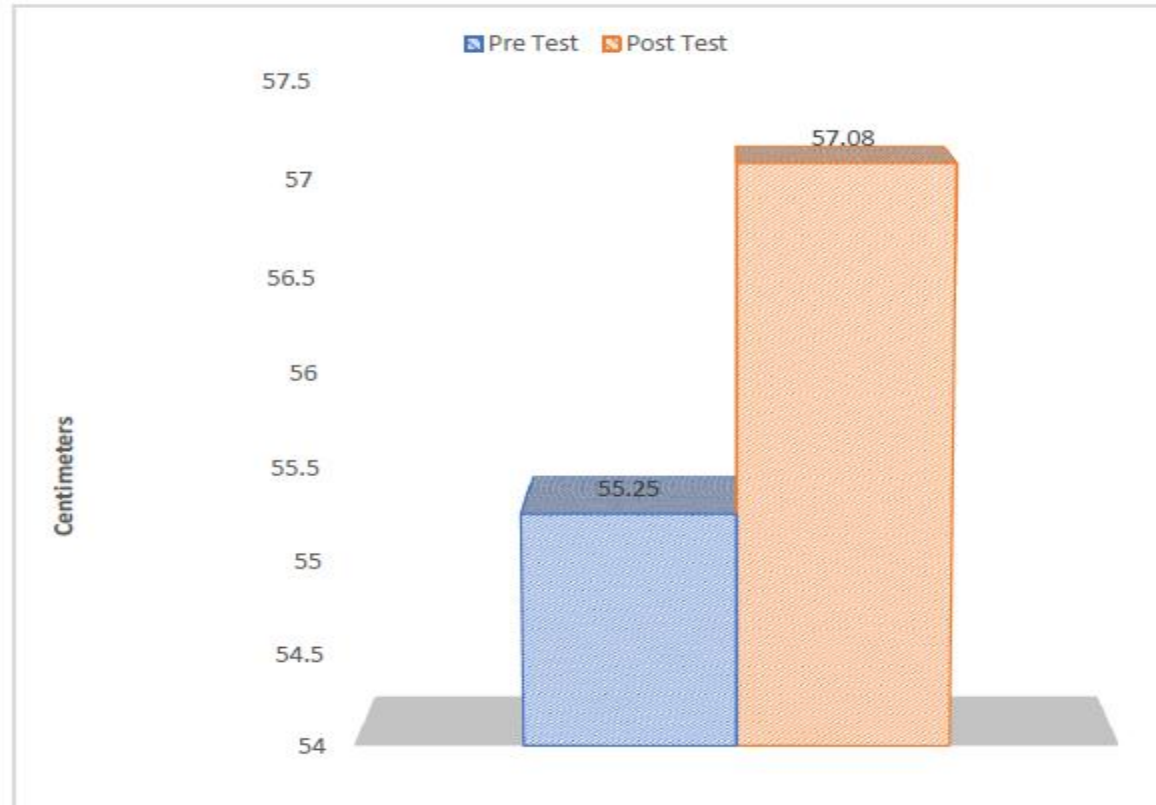
As shown in Table I, the dependent 't'-ratio for the experimental group was 9.01 when comparing their pre- and post-test averages, which were 63.17 2.41 and 167.01 1.68, respectively. To prove a difference with df 11 at the.05 level of significance, a table value of 2.14 is required. College kabaddi players' anaerobic capacity was clearly enhanced by training with medicine balls, since the 't' ratio values in the experimental group were higher than the table value.

In Table II, you can see the results of the dependent 'T' test, as well as the means and standard deviations, from the pre- and post-tests on the explosive power of the experimental group.

	Test	Number	Mean	Standard Deviation
Explosive Power	Pre test	12	55.25	2.42
	Post test	12	57.08	2.02
	't'-test	8.45*		

It is significant at the.05 level. (Units of Centimeters for Explosive Power)(Using df 11, the maximum table value required to reach the.05 level of significance is 2.14.)

According to Table II, the dependent-to-ratio value for the experimental group was 8.45 whereas the post-test mean was 57.08 2.02 and the pre-test mean was 55.25 2.42. To determine whether there is a significant difference using df 11, a p-value of 2.14 is required. College kabaddi players who trained with medicine balls had more explosive executions, as seen by the bigger 't' ratio values in the experimental group compared to the numbers in the table. Figure 2 compares the pre- and post-test averages of the explosive power of collegiate kabaddi players.



RESULTS OF THE STUDY

The dependent-to-ratio values that were produced from the difference between the two sets of means are displayed in Table II, along with the experimental group's pre- and post-test means. 8:45 arrived. A p-value of 2.14 is needed to establish a significant difference using df 11. The 't' ratio values of the experimental group are much higher than the table numbers, indicating that the college kabaddi players learnt to execute with improved explosiveness after training with medicine balls.

DISCUSSION OF RESULTS

College kabaddi players were anticipated to have an increase in anaerobic capacity during the course of the trial. Additionally, medicine ball training was anticipated to provide significant results. The findings of this investigation provide support for this notion. This led the researcher to reject the null hypothesis and support the working hypothesis of the investigation.

The other view is that college kabaddi players' explosive power might be substantially enhanced by medicine ball training. The findings of this investigation provide support for this notion. The findings therefore confirmed the study's working hypothesis and cast doubt on the alternative, null hypothesis.

Reference

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