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Effect of in-season training on skill performance variables among college men handball players

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ABSTRACT :

The purpose of the study was to find out the effect of in-season training and conventional training on skill performance variables among Inter-collegiate men handball players. To achieve the purpose of the present study, 30 men handball players from Bharathiar University, Coimbatore, Tamilnadu, India, were selected as subjects at random, and their ages ranged from 22 to 26 years. The subjects were divided into two equal groups of fifteen subjects each. Experimental Group I acted as in-season training, and Group II acted as conventional training. The requirements of the experiment procedures, testing, and exercise schedule were explained to the subjects so as to get their full co-operation in the effort required on their part and prior to the administration of the study. The data collected from the subjects were statistically analyzed using the 't' ratio. The results of the study indicated that the dribbling ,passing and shooting of the handball players improved due to the six weeks of training.

Key Words: Dribbling, Passing, shooting, Agility Dribble test, Zinc Handball Test, T-Test.

INTRODUCTION

During the in-season period, training for handball players typically revolves around maintaining and refining skills, enhancing physical fitness, and sharpening tactical understanding. This involves a combination of drills focusing on passing, shooting, defending, and goalkeeping, as well as strength and conditioning exercises to improve agility, speed, and endurance. The intensity of training sessions may vary, with a focus on moderate to high intensity to simulate game conditions while managing fatigue and preventing overtraining. Additionally, coaches may emphasize specific tactical strategies and game plans through analysis and simulation of match situations. Recovery practices such as stretching, massage, and proper nutrition are also crucial to optimize performance and minimize the risk of injuries during the demanding competition schedule. The duration of the in-season period training typically spans several months, with a balance between maintaining peak form and managing player workload throughout the season. **(Solberg 2015)**

HANDBALL

The game of Handball involves skill movements because the game requires all the Fitness is said to be one of the life's ingredients for healthy living. All sports and games need a certain level of fitness to exhibits the skills of an individual and Handball players are no exception to this. Today the game Handball requires high energy, stamina and strength to play the game with else reaction speed drill is a system of training aimed at the development of motor abilities and the control of body movement through the development of the neuromuscular system. Handball is the sport and is becoming more and more popular in the world. The development of the game is also influenced by its attractiveness based in variable action and direct conflict with an opponent. An intense and permanent physical activity generates changes in the central nervous system and in the muscles as well as in the organs such as the heart, lungs, liver and kidneys. Several motor abilities such as sprinting, jumping, flexibility, and throwing velocity are considered as important aspects of the game that contribute to the high performance. **(Nicolai, 1897).**

Purpose of study

The purpose of the study was to find out the effect of six weeks of in-season training on dribbling, passing and handball of hand ball player.

hypothesis

It was hypothesised that in-season training would have a better effect when compared with conventional training on the skill performance variables of men handball players.

METHODOLOGY

In order to achieve the purpose of the study, handball players were randomly selected as subjects from Bharathiar University, Coimbatore, Tamilnadu, India. Their ages ranged from 22 to 26 years. The selected participants were then randomly assigned to two groups: the experimental group, which received Experimental Group I acted In-season training (n=15) and Group II acted as conventional training (n=15). Before the start of the training experiment, all the subjects were tests on selected competition period and the readings were recorded as pre-test scores. After pre-test the experimental group participated in a In-season training program, which was designed to last 60 minutes per session, with three sessions held on alternative days (Monday, Wednesday, and Friday) over a period of six weeks. Every two weeks of training, the intensity of the load was increased by 5%, ranging from 55% to 80% of the workload. The volume of In-season training was prescribed based on the number of sets and repetitions. On the other hand, the conventional training did not receive any specialized training and continued with their routine activities. Following the six weeks of training, all the subjects were re-tested for dribbling (agility dribble), passing (zinc,1981), shooting (zinc,1981) and the readings were recorded as post-test scores. The collected pre and post-test scores were analyzed using
the paired 't' test.

Statistical technique

The collected pre and post test scores of experimental and conventional groups were analyzed with paired ‘t’ test and the results were presented in the form of tables and figures.

Table-1

COMPUTATION OF 't'-RATIO OF IN-SEASON TRAINING GROUP AND CONVENTIONAL TRAINING GROUP ON DRIBBLING (IN SECONDS)

Group	Pre test			Post test			Mean difference	‘t’ ratio
	Mean	SD	SME	Mean	SD	SME		
In-season training group	9.21	0.63	0.16	8.84	0.68	0.17	0.37	**3.26***
Conventional training group	9.27	0.40	0.10	9.05	1.07	0.27	0.22	0.80

Significant at 0.05 level of confidence

Table 4.1 shows that the ‘t’ ratio on dribbling performance of in-season training were 3.26 respectively. Since these values were higher than the required table value of 2.14 and it was found to be statistically significant at 0.05 level of confidence for degrees of freedom 1 and 14. Further the obtained ‘t’ ratio between pre and post test of conventional training group 0.80 was lesser than the required table value of 2.14 and it was found to be not statistically significant.

From the result, it was concluded that in-season training produced a significantly great improvement in the dribbling performance of the college men handball players.

findings

Based on the analysis of the study it was found that six weeks of tabata training produced significant improvement on dribbling (0.80 < 3.26), passing (1.2< 6.7) shooting (1.20 < 9.79) of handball players.

Fig - 1: Bar diagram shows the mean values of pre-test and post-tests of conventional and experimental group on dribbling

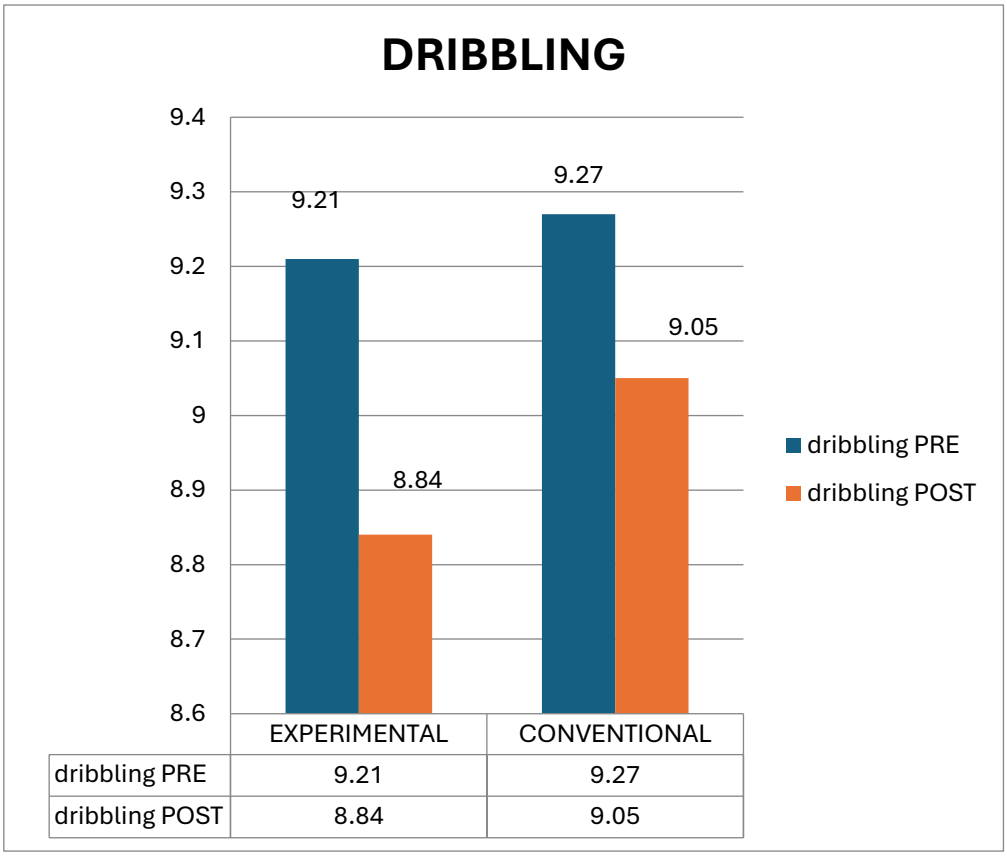


Table-2

COMPUTATION OF 't'-RATIO OF IN-SEASON TRAINING GROUP AND CONVENTIONAL TRAINING GROUP ON PASSING (COUNTS)

Group	Pre test			Post test			Mean difference	't' ratio
	Mean	SD	SME	Mean	SD	SME		
In-season training group	18.73	1.16	0.30	21.06	1.16	0.30	2.33	6.7*
Conventional training group	18.60	1.84	0.47	18.13	1.99	0.51	0.47	1.2

Significant at 0.05 level of confidence

Table shows that the't' ratio on passing performance of in-season training were 6.7 respectively. Since these values were higher than the required table value of 2.14 and it was found to be statistically significant at 0.05 level of confidence for degrees of freedom 1 and 14. Further the obtained 't' ratio between pre and post test of conventional training group 1.2 was lesser than the required table value of 2.14 and it was found to be not statistically significant.

From the result, it was concluded that in-season training produced a significantly great improvement in the passing performance of the intercollegiate men handball players.

Fig - 2: Bar diagram shows the mean values of pre-test and post-tests of conventional and experimental group on passing

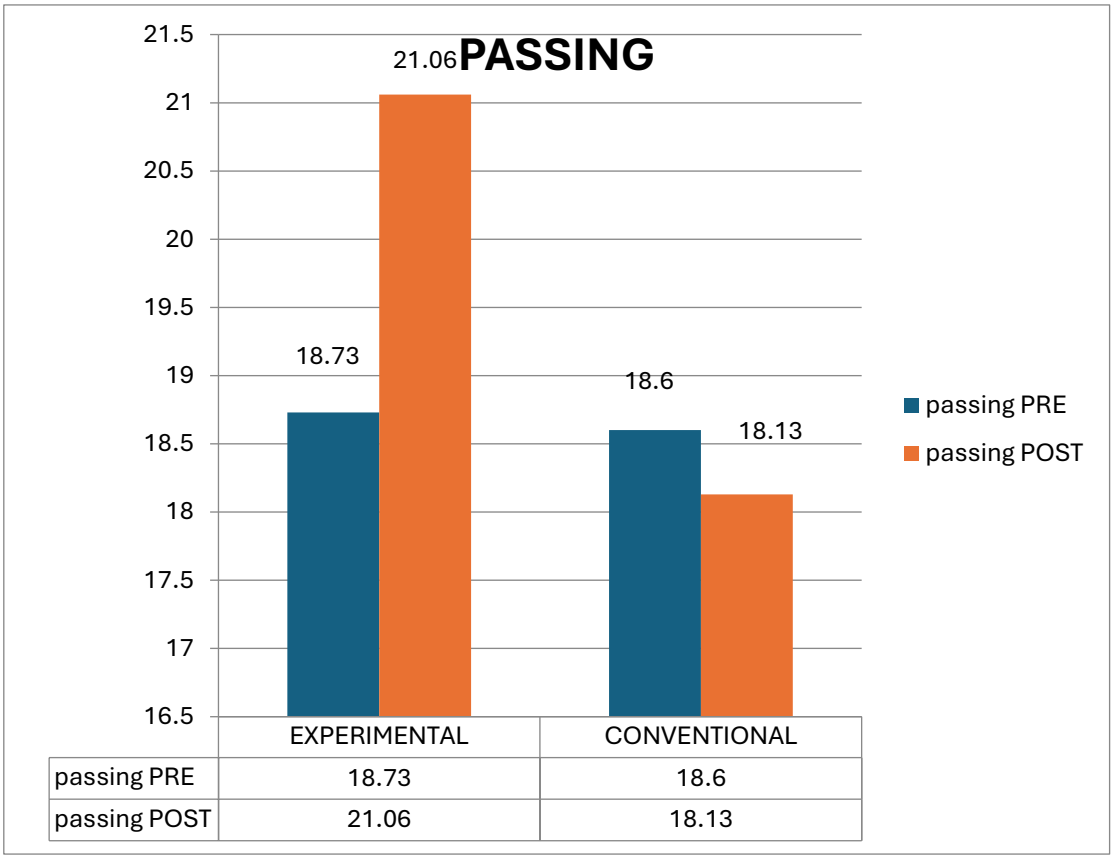


Table-3

COMPUTATION OF 't'-RATIO OF IN-SEASON TRAINING GROUP AND CONVENTIONAL TRAINING GROUP ON SHOOTING (IN POINTS)

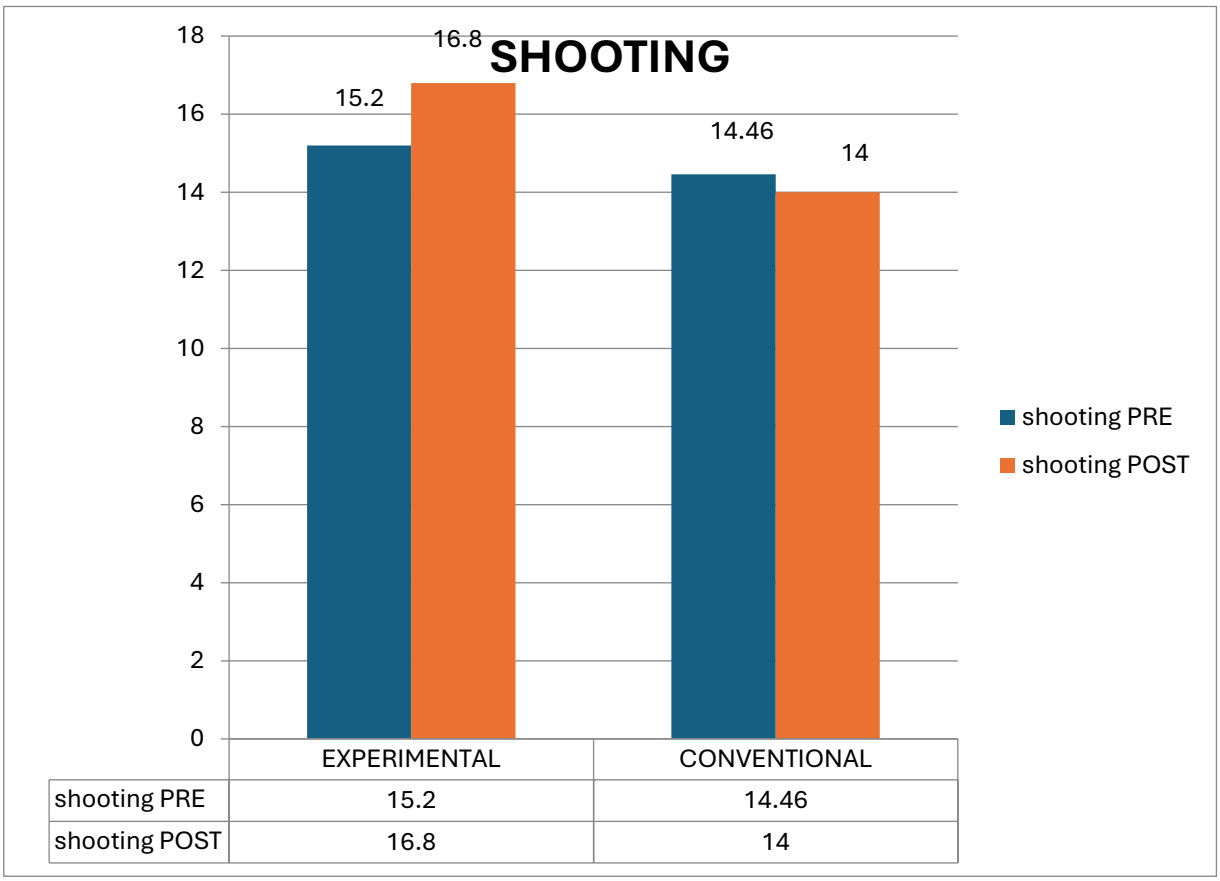
Group	Pre test			Post test			Mean difference	't' ratio
	Mean	SD	SME	Mean	SD	SME		
In-season training group	15.20	1.69	0.43	16.80	1.82	0.47	1.6	9.79*
Conventional training group	14.46	1.84	0.47	14.00	2.07	0.53	0.46	1.20

Significant at 0.05 level of confidence.

Table 4.3 shows that the 't' ratio on shooting performance of in-season training were 9.79 respectively. Since these values were higher than the required table value of 2.14 and it was found to be statistically significant at 0.05 level of confidence for degrees of freedom 1 and 14. Further the obtained 't' ratio between pre and post test of conventional training group 1.20 was lesser than the required table value of 2.14 and it was found to be not statistically significant.

From the result, it was concluded that in-season training produced a significantly great improvement in the shooting performance of the college men handball players.

Fig - 3: Bar diagram shows the mean values of pre-test and post-tests of conventional and experimental group on shooting



	EXPERIMENTAL	CONVENTIONAL
shooting PRE	15.2	14.46
shooting POST	16.8	14

Discussion on findings

The results of the study indicated that the experimental group I namely in-season training group had significantly influenced on the skill performance variables such as dribbling, passing and shooting. The group II namely conventional training group had not shown significant improvement in any of the selected variables as they have not been subjected to any of the specific training conditioning similar to that of experimental group. Thus, the effect of in-season training on the criteria variables was understood.

Conclusion

Based on the findings of this study, it was concluded that a systematic and scientifically designed six-week in-season training program produced remarkable improvements in the dribbling, passing and shooting of hand ball players aged twenty two to twenty six years. Additionally, it was determined that in-season training is an appropriate method to develop the dribbling, passing and shooting of hand ball players.

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