INFLUENCE OF YOGA PRACTICE AND CIRCUIT TRAINING IN COMBINATION OF DRILL PRACTICE ON FIELD GOAL SPEED TEST PARAMATERS AMONG COLLEGE LEVEL MEN BASKETBALL PLAYERS

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ABSTRACT

The study was to examine the isolated and combined yoga and circuit training in combination of drill practice on field goal speed test among college level men basketball players. Total N=48 (forty eighty) men college level basketball players recruited randomly from various college of Andhra Pradesh and their age period ranged from 18 years to 25 years as per subject's school records and, who at least participated college level basketball games competitions. The chosen basketball players was randomly recruited into four groups each group n=12 basketball players i.e. empirical groups I basketball players underwent isolated yoga practice in combination of drill practice (YPBG = 12), empirical group II basketball players underwent isolated circuit training in combination of drill practice (CTBG = 12), empirical group III underwent: basketball players underwent combined yoga practice and circuit training in combination of drill practice (YCBG = 12) and control group basketball players (NTBG = 12) . NTBG was practiced only their respective specialization game. The training period was fixed for 18- week's duration and four sessions in a week. The measurement of field goal speed test scores was collected through Johnson basketball test in numbers before and after the completion of specific training. The collected score's were analyzed through ANCOVA and level of significant was restricted at 0.05 levels. The study found that isolated, combined yoga practice and circuit training program training in combination of drill practice had positive significant impact to improve basketball goal speed test numbers performance of men basketball players of three empirical group's players comparative to control group.

Keywords: – yoga, circuit, exercises, drills and basketball

Introduction:

Basketball is a sport that is played by two teams of five players on a rectangular court. He objective is to shoot a ball through a hoop 18 inches in diameter and mounted at a height of 10 feet to back boards at each end of the court. A team can score a field goal by shooting the ball through the basket being defended by the opposition team during regular play. The basketball court playing surface consisting of rectangular floor, outdoor surface are generally made from standard paving materials such as concrete or asphalt.

The examples of circuit training station are back extension, skipping, pull ups, squats, sit ups, treadmills, press ups and step ups. Yoga, once an ancient practice confined to the Indian subcontinent, has now gained global recognition as a scientific and holistic system for maintains health and wellbeing. In today's world, yoga is widely embraced as a method for physical fitness, mental peace and spiritual awakening. With scientific validation and global support, yoga is now integrated into healthcare, education, corporate wellness program, even sports training.

Statement of the Research Problem:

To analyze the "Effect of yoga practice and circuit training in combination of basketball drills practice on goal speed test among college level men basketball players".

Objectives of this research study

1. The primary objective of this research study is to evaluate the 18-weeks influence of yoga practice and circuit training in combination of basketball drills practice on field goal speed test among college level men basketball players.
2. The secondary objective of this research are
   - To compare the selected training methods between isolated and combined training on basketball field goal speed test performance among college level men basketball players.
   - To judge the best suitable training program among selected three treatments for enhancement of basketball field goal speed performance of college level men basketball players.

Research Hypothesis:

- There will be a significant increase in numbers of basketball field goal speed performance of empirical group's basketball players after the eighteen weeks impact of isolated and combined yoga practice and circuit training in combination of basketball drill practice when compared with control group basketball players.
- The combined yoga practice and circuit training in combination of basketball drill practice will be more effective than the isolated training program.

Methodology:

The study was to measure the isolated and combined yoga and circuit training in combination of drill practice on field goal speed test among college level men basketball players. Total N=48 (forty eighty) men college level basketball players recruited randomly from various college of Andhra Pradesh and their age period ranged from 18 years to 25 years as per subject's school records and, who at least participated college level basketball games competitions. The chosen basketball players was randomly recruited into four groups each group n=12 basketball players i.e. empirical groups I basketball players underwent isolated yoga practice in combination of drill practice (YPBG = 12), empirical group II basketball players underwent isolated circuit training in combination of drill practice (CTBG = 12), empirical group III underwent: basketball players underwent combined yoga practice and circuit training in combination of drill practice (YCBG = 12) and control group basketball players (NTBG = 12) . NTBG was practiced only their respective specialization game. The training period was fixed for 18- week's duration and four sessions in a week. The measurement of field goal speed test scores was collected through Johnson basketball test in numbers before and after the completion of specific training. The collected scores were analyzed through ANCOVA and level of significant was restricted at 0.05 levels.

Table: I

Analysis of Covariance for basketball field goal speed test – Johnson basketball test (numbers) of the YPBG, CTBG, YCBG and NTBG groups for Basketball players

Groups	YPBG	CTBG	YCBG	NTBG	SOV	Sum of squares	df	Mean Square	F' Ratio
Pre test mean	19.250	19.083	19.166	20.166	B	9.167	3	3.056	
SD	1.356	6.680	6.96	6.939	W	1574.50	44	35.784	0.085^{NS}
Post test mean	24.500	24.916	27.416	19.166	B	433.500	3	144.500	
SD	3.965	7.341	6.881	7.661	W	1932.500	44	43.920	3.290*
Adjusted mean	24.674	25.264	27.677	18.385	B	562.258	3	187.419	
					W	223.407	43	5.196	36.073*
Mean difference	+5.25	+5.833	+8.25	-1.00	-	-	-	-	-

Note: Table F-ratio value at 0.05 level of confidence for 3 and 44 (df) =2.82, 3 and 43 (df) =2.82 *Significant & NS: Not significant.

YPBG: Yoga practice basketball players in combination of basketball drill practice group.
CTBG: Circuit training in combination of basketball drill practice group.
YCBG: Combined yoga practice and circuit training in combination of basketball drill practice group.
NTBG: Non training group basketball players.

The above table-I shows that there is a significant difference on basketball field goal speed performance among the four groups such as isolated yoga practice in combination of basketball drill practice group (YPBG), isolated circuit training in combination of basketball drill practice group (CTBG), combined yoga practice and circuit training in combination of basketball drill practice (YCBG) and control group basketball players (NTBG). Since the 'F' value required being significant at 0.05 level for 3, 44 d/f and 3, 43 are 2.82, but the computation values of basketball field goal speed performance post and adjusted posttest 'F' values are 3.290 and 36.073 respectively. Which are greater than the tabulated value, it shows that training is effective for positive changes in basketball field goal speed performance. Since the obtained 'F' ratio is found significant.

TABLE: 2

The basketball field goal speed test results of scheffe's method test mean differences between YPBG, CTBG, YCBG and NTBG groups for men basketball players

YPBG	CTBG	YCBG	NTBG	MD	CI
24.674	25.264	-	-	0.59^{NS}	2.988
24.674	-	27.677	-	3.003*	
24.674	-	-	18.385	6.289*	
-	25.264	27.677	-	2.413^{NS}	
-	25.264	-	18.385	6.879*	
-	-	27.677	18.385	9.292*	

Note: * Significant & NS: No significant

YPBG: Yoga practice basketball players in combination of basketball drill practice group.
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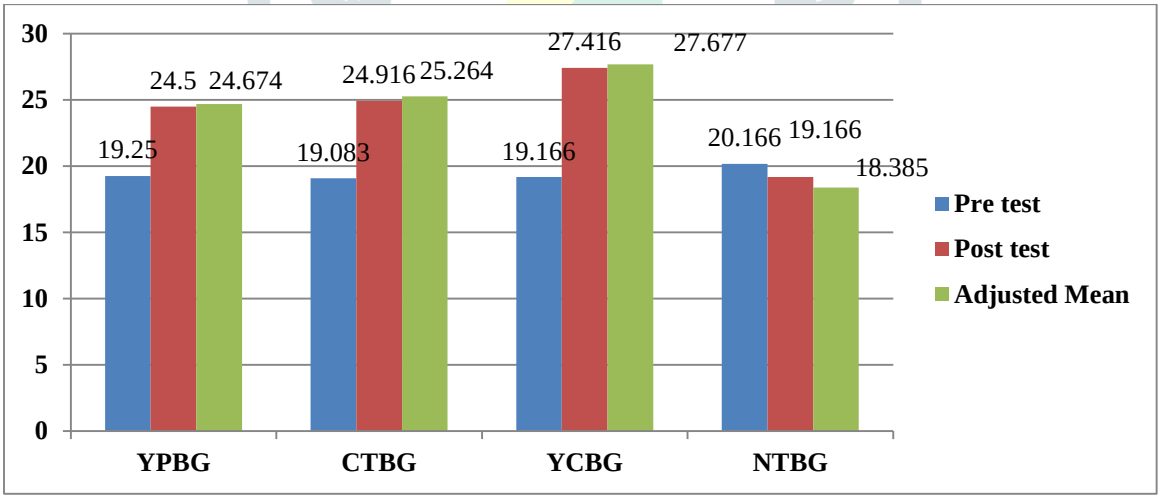
In above table 2 presented the adjusted final mean variations between the yoga practice in combination of basketball drill practice group [YPBG] and combined yoga practice and circuit training in combination of basketball drill practice group [YCBG], yoga practice basketball in combination of basketball drill practice group [YPBG] and non training group basketball players [NTBG], circuit training in combination of basketball drill practice group [CTBG] and non training group basketball players [NTBG] and combined yoga practice and circuit training in combination of basketball drill practice group [YCBG] and non-training group basketball players [NTBG] are 3.003, 6.289, 6.879 and 9.292 values are higher than calculated formula CI value 2.988. Hence investigator recorded significant variations resulted between training groups and control groups, isolated and combined training group basketball players after completion of empirical period.

Therefore yoga practice in combination of basketball drill practice group [YPBG] and circuit training in combination of basketball drill practice group [CTBG] and circuit training in combination of basketball drill practice group [CTBG] and combined yoga practice and circuit training in combination of basketball drill practice players group [YCBG] are 0.59 and 2.413 values are higher than calculated formula CI value 2.988. Hence investigator recorded insignificant variation between mentioned groups

The prior, final and adjusted post scores results mean of the YPBG, CTBG, YCBG and NTBG basketball player groups for basketball field goal speed – Johnson basketball test (numbers) clearly represented in bar diagram figure: 1.

FIGURE: 1 The basketball field goal speed test pre post and adjusted post test mean numbers of YPBG, CTBG, YCBG and NTBG groups for basketball players presented in bar graph



YPBG: Yoga practice basketball players in combination of basketball drill practice group.
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Discussion on Hypothesis:

- The first hypotheses stated that there will be significant increase in numbers of basketball field goal speed performance of empirical group's basketball players after the eighteen weeks impact of isolated and combined yoga practice and circuit training in combination of basketball drill practice when compared with control group basketball players. The statistical analysis proved that isolated, combined yoga practice and circuit training program in combination of basketball drill practice significantly increased the basketball field goal speed performance of basketball players. Hence research first hypothesis accepted.
- The second hypotheses stated that combined yoga practice and circuit training in combination of basketball drill practice will be more effective than the isolated training program. The statistical analysis proved combined training is not superior to isolated training method. Hence research second hypotheses rejected.

Discussion and Findings:

The impact of isolated and combined yoga practice and circuit training in combination of basketball drill practice are constructive for basketball field goal speed performance of basketball players comparative with non training group basketball players. The studies connected with basketball field goal speed performance results are Giuseppe et al., (2018) found that Different intensities of basketball drills showed a higher accuracy in the shots of experts and junior basketball players. Martina et al., (2018) seen that ball-drills and repeated sprint ability training are effective for improving technical skills in basketball players. Kalidasan and Nageswaran (2015) concluded that weight training, plyometric training and combined training are effective for improving dribblieng and speed performance of intercollegiate basketball players. Sasa et al., (2015) result shows that stationary ball-handling drills had positive affect on shooting and passing, double leg single leg on passing and dribble in basketball players. Chaudhary Nimesh and Sharma (2015) proved that basketball skill based drills practice with aerobic training are effective for increasing speed parameters of basketball players.

Conclusions:

Tester finally approved that 12-weeks experiment of isolated and combined yoga practice and circuit training in combination of basketball drill practice is significantly accepted for improving the basketball field goal speed test of basketball players. Hence, isolated circuit training and combined training in combination of basketball drill practice add more beneficial than isolated yoga practice in combination of basketball drill for developing basketball field goal speed performance of men basketball players. Therefore, combined yoga practice and circuit training in combination of basketball drill practice and isolated circuit training in combination of basketball drill practice are adding equal performance in basketball field goal speed test of men basketball players.

References

Giuseppe Marcolin, Nicola Camazzola,Davide Grigoletto, Antonio Paoli (2018) Different intensities of basketball drills affect jump shot accuracy of expert and junior players. Peer J, 14.

Martina A. Maggioni, Matteo Bonato, Alexander Stahn, Antonio La Torre, Luca Agnello, Gianluca Vernillo, Carlo Castagna and Giampiero (2018) Effects of ball-drills and repeated sprint ability training in basketball players, International Journal of Sports Physiology and Performanc, Human Kinetics, Inc.

Kalidasan. M and Nageswaran A.S (2015) Effect of different trainings on speed and dribbling performance among intercollegiate basketball players, International journal of research paripex, 4(9), 143-145.

Sasa Jakovljevic, Zoran Pajic, Branko Gardasevic and Nenad Jankovic (2015) The impact of stationary ball-handling drills on fundamental offensive basketball skills in 13 and 14-year-old basketball players, Facta Universitatis, 13(3).

Chaudhary Nimesh and Sharma S.K (2015) Effect of basketball skill based drills practice with aerobic training on speed of basketball players, International journal of physical ediuctaion sports management and yogic science, 5(3), 26-28.