ISSN: 2349 - 4891

International
Journal of Recent Research and Applied Studies
(Multidisciplinary Open Access Refereed e-Journal)

Effect of Skills Training With and Without Yogic Practices on Flexibility among Badminton Players

P.Karthika

MSc., Yoga Therapy I year, Tamil Nadu Physical Education and Sports University, Chennai,Tamilnadu, India.

Received 19th June 2018, Accepted 23rd July 2018

Abstract

The purpose of the study was to investigate the effect of skills training with and without yogic practices on flexibility among Badminton players. Forty five Badminton players were selected from Chennai, and their age ranged between 16 to 19 years. The subjects were divided into three groups consists of 15, each namely two experimental groups and one control group. The experimental group-I underwent a skills training programme and experimental group-II underwent skills training with yogic practices for twelve weeks training programme The control group was not taking any part of training during the course of the study. Flexibility was assessed by sit & reach test and unit of measurement in centimeters. Pre-test was taken before the training period and post- test was measured immediately after the twelve weeks of training period. Statistical technique was used for Analysis of Co-Variance (ANCOVA) and the level of significance was set at 0.05. Scheffe's test was used as a post hoc test to determine which of the paired mean differ significantly. The results revealed that there was a significant difference found on flexibility.

Keywords: Skills Training, Skills Training with Yogic practices and flexibility.

Introduction

Sports performance is complex mixture of genetic make-up and environment influences like training etc. Performance in Badminton is determined by several factors namely skill, technique, tactics, fitness, training etc (Memmert & Roth, 2007). Sports' training is the physical, technical, intellectual, psychological and moral preparation of an athlete by means of physical exercise. The main aim of training is to prepare the Badminton players for outstanding performance in competition. Physical fitness is the sum of numerous factors, which can vary from individual to individual. Different sports required different type of fitness emphasizing on a particular fitness factors. Similarly the training varied sports discipline to sports discipline. Skills training is a highly co-ordinate and well planned exercise. Generally in military this type of training is very common. In modern sports training the game-specific skills' training is gaining tremendous popularity, which focus on game-specific fitness as well as performance related skill factors.

Yoga is a physical, mental and spiritual discipline, originating in ancient India. The goal of yoga or of the person practicing yoga is the attainment of a state of perfect spiritual insight and tranquility while meditating on the super soul (Gorostiaga et al. 2006). Yoga is a system that benefits body, mind and spirit by teaching self control through series of postures and exercises as well as through breathing and relaxation and meditation techniques (Hermassi et al. 2011). The most important benefit of yoga is physical and mental therapy. By keeping the body clean, flexible and well lubricated, we can significantly reduce the catabolic process of cell deterioration. To get the maximum benefits of yoga one has to combine the practices of yogasanas, pranayama and meditation (Parimalam & Pushparajan, 2012).

Correspondence
P.Karthika
E-mail: karthika_hp@yahoo.co.in

Objective of the Study

The objective of this study was to find out the effect of skills training with and without yogic practices on flexibility for twelve weeks among Badminton players.

Methodology

To achieve this purpose of the study forty five women Badminton players were selected from Chennai, Tamilnadu and their age ranged from 16 to 19 years. The subjects were randomly assigned into three groups of 15 subjects each and namely such as experimental groups-I underwent a skills training, experimental group-II underwent skills training with yogic practices and group-III acted as control group and did not undergo any special training program. The training was given to the experimental groups for twelve weeks, per week three days. The independent variables are skills training and

skills training with yogic practices. The dependent variable was flexibility. Flexibility was assessed by sit & reach test and unit of measurement in centimeters. The data has collected before and after twelve weeks of training period and statistically analyzed by using Analysis of Co-Variance (ANCOVA). Scheffe's test has used as a post hoc test to determine which of the paired mean differ significantly. All the statistical analysis tests were computed significance at 0.05 level of confidence.

Results

Table 1
Analysis of co-variance for the pre, post and adjusted post-test mean values for experimental groups and control groups on flexibility

Means	Ex Group-I (Skills Training)	Ex Group-II (Skills With Yoga)	Control Group	SV	SS	df	MS	'F' ratio	Table Value
Pre Test	**18.27**	**18.20**	**18.13**	Between	0.133	2	0.067	0.10	3.22
SD±	0.798	0.861	0.743	Within	27.067	42	0.644		
Post Test	**20.67**	**21.27**	**18.07**	Between	86.800	2	43.40	**51.78***	3.22
SD±	0.899	0.099	0.703	Within	35.200	42	0.838		
Adjusted Post Test	**20.67**	**21.27**	**18.07**	Between	86.475	2	43.238	**50.37***	3.23
				Within	35.194	41	0.858		

*****Significant at 0.05 level of confidence.
(The table values required for significance at 0.05 level of confidence for 2 & 42 and 2 & 41 are 3.22 and 3.23 respectively).

The table - 1 shows that the pre-test mean values on flexibility of skills raining group, skills training with yogic practice group and control group are 18.27, 18.20 and 18.13 respectively. The obtained 'F' ratio 0.10 for pre-test scores was lesser than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on flexibility. The post-test mean values on flexibility of skills training group, skills training with yogic practice group and control group are 20.67, 21.27 and 18.07 respectively. The obtained 'F' ratio 51.78 for post-test scores was greater than the table value 3.22 for df 2 and 42 required for significance at 0.05 level of confidence on flexibility. The adjusted post-test means of skills training group, skills training with yogic practice group and control group are 20.67, 21.27 and 18.07 respectively. The obtained 'F' ratio of 50.37 for adjusted post-test means was greater than the table value of 3.23 for df 2 and 41 required for significance at 0.05 level of confidence on flexibility. The results of the study indicated that there was a significant difference among the adjusted post-test means of skills training group, skills training with yogic practices group and control group on flexibility. Since the obtained 'F' ratio value was significant further to find out the paired mean difference, the Scheffe's test was employed and presented in table- 2

Table 2
The scheffe's test for the difference between paired means on flexibility

Experimental Group-I (Skills Training Group)	Experimental Group-II (Skills Training with Yogic practices Group)	Control Group	MD	CI
20.67	-	18.07	2.60*	0.86
-	21.27	18.07	3.20*	
20.67	21.27	-	0.60	

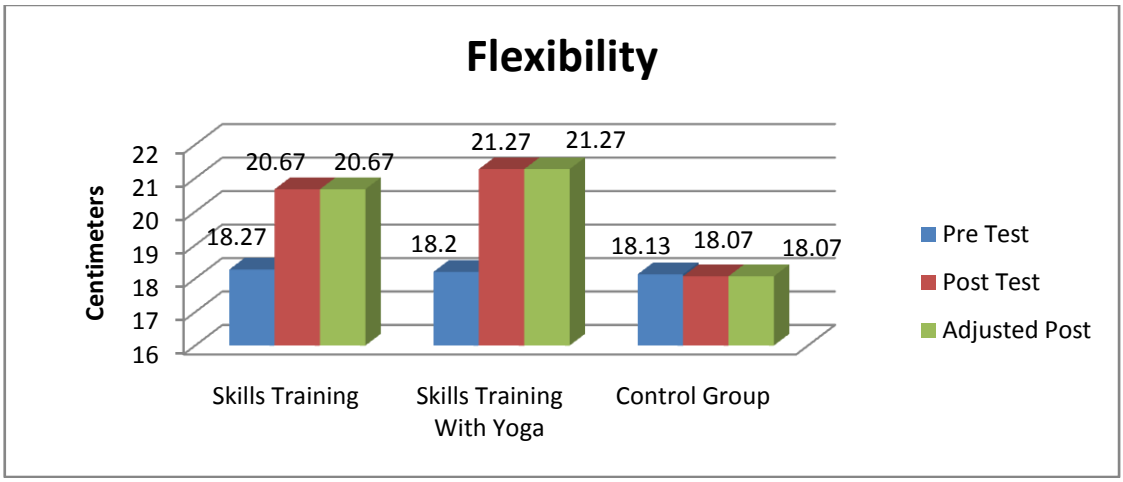
*****Significance of .05 level of confidence, Scheffe's C.I value of flexibility was 0.86.

The table 2 shows that the adjusted post-test mean difference in flexibility between skills training group and control group is 2.60 it was significant at 0.05 level of confidence and proved there was a significant

improvement. Skills' training with yogic practices and control group is 3.20 it was significant at 0.05 level of confidence. However, the mean difference between the two experimental groups was 0.60 which was not significant at 0.05 level of confidence. It may be concluded from the results that there was no significant difference between adjusted post means of skills training group and skills training with yogic practices group. Statistically significant difference existed between the skills training with yogic practices group and control group. The result of the study showed that there was a significant difference between skills training group and control group on flexibility. The pre test, post test and adjusted post mean values of skills training group, skills training with yogic practices group and control group on flexibility are graphically represented in the Figure-I.

Figure I

Bar diagram for showing the pre, post and adjusted mean value of experimental groups and control group on flexibility



The goal of the investigation is to find whether there is any effect on flexibility in the effect of skills training with and without yogic practices and further to find improvement on training group. The obtained 'f' ratio showed that there was significant difference between experimental group –I, experimental group-II and control group in performance of flexibility. The skills training with and without yogic practice group had shown a significant improvement on flexibility among Badminton players.

Conclusions

1. The experimental groups namely skills training and skills training with yogic practices groups had significantly improved on flexibility. The control group did not show any significant improvement on flexibility because they were not exposed to any special training.
2. A significant improvement between experimental groups and control group on flexibility.
3. The results show there is a significance difference between the experimental groups in the selected dependent variables and the skills training with yogic practices method outperformed the skills training method on flexibility.

References

1. Gorostiaga, E. M., Granados, C. R. I. S. T. I. N. A., Ibanez, J. A. V. I. E. R., Gonzalez-Badillo, J. J., & Izquierdo, M. I. K. E. L. (2006). Effects of an entire season on physical fitness changes in elite male Badminton players. *Medicine and science in sports and exercise*, *38*(2), 357.
2. Hermassi, S., Chelly, M. S., Tabka, Z., Shephard, R. J., & Chamari, K. (2011). Effects of 8-week in-season upper and lower limb heavy resistance training on the peak power, throwing velocity, and sprint performance of elite male Badminton players. *The Journal of Strength & Conditioning Research*, *25*(9), 2424-2433.
3. Memmert, D., & Roth, K. (2007). The effects of non-specific and specific concepts on tactical creativity in team ball sports. *Journal of Sports Sciences*, *25*(12), 1423-1432.
4. Parimalam and Pushparajan, (2012) Effect of specific basketball training program on physical fitness and skill performance variables of inter collegiate women basketball players, IJALS, Volume (6) Issue (1) Feb - 2013. Research Article, ISSN 2277 – 758X.