Research article

EFFECT OF SPECIFIC SKILL AND NEUROMUSCULAR TRAINING ON SELECTED SKILL PERFORMANCE VARIABLE AMONG STATE LEVEL MALE BADMINTON PLAYERS

T. Ganesh kumar*., & Dr.P.K.Senthilkumar**

* Ph. D Scholar, Department of Physical Education, Tamil Nadu Physical Education and Sports University, Chennai, Tamil Nadu, India.
** Assistant Professor, Department of Exercise Physiology and Biomechanics, Tamil Nadu Physical Education and Sports University, Chennai, Tamil Nadu, India.

Abstract

The purpose of the study was to examine the effect of specific skill and neuromuscular training on selected skill performance variables among state level male badminton players. To achieve the purpose of the study thirty (N=30) state level male badminton players were selected randomly in the Chennai, city. They would be assigned into three group's namely experimental group I (Specific skill training), experimental group II (Neuromuscular training) and group III acted as Control Group. Their ages ranges from 17 and 19 years. They are selected only badminton players. After analyzing the various factors associated with the presented in this study. The following skill performance variable such as fore hand and back hand clear were tested using Poole fore hand and back hand clear test. The collected data were analysed statistically by ANCOVA was used. From the analysis of data it was proved that there were significant improvement on fore hand and back hand clear among state level male Junior Badminton Players.
Key Words: *Specific skill Training, Neuromuscular Training, Fore Hand clear and Back Hand clear.*

Corresponding Author: T. Ganesh kumar
e-mail: *tnganesh0101@gmail.com*

INTRODUCTION

"The Game of Badminton is wonderful sport that requires eye-hand coordination, quick movements, striking and change of direction in pursuit of the shuttle cock. Badminton is a power game requiring quick and powerful movements to all directions to return the shuttle cock to the

opponents' side of the court". According to Groppel and Roetert (1992) and Lei *et al.* (1993), the physical requirements of racquet sports demand efficiency in a number of fitness components. To be able to execute advanced strokes or compete effectively against progressively stronger opponents, a player would need to develop higher levels of the basic physical qualities, such as strength, power, muscular endurance, flexibility, coordination and agility.

To play the game effectively, a player can use various drills and strokes. Thus it is very important for a player to determine in advance which stroke his opponent player will use and where the shuttle will land on his court. He should always remain prepared and be very alert on the court. The player must improve the sprints, leaps, lunges, twists, turns, stretches and hitting actions. A successful player must move quickly when necessary but changes in direction are equally important in the game due to the nature of the movements required in a rally. While some people seem to be naturally fast and agile, these are both skills that can be acquired.

According to Singh (1984) Sports training aims is to improve the fitness of a person and promoting the acquisition of basic movement skills. To achieve this, training should have some basic principles and the most important basic principle of training is overload. Most Physiological systems can adapt to functional demands that exceed these loads encountered in normal daily life. In order to find out the outcome of specific skill and neuromuscular training on selected skill performance variables among state level male badminton players, the scholar being a badminton player has selected this area for his research.

STATEMENT OF THE PROBLEM

The purpose of the study was to examine the effect of specific skill and neuromuscular training on selected skill performance variables among state level male badminton players.

HYPOTHESIS

It was hypothesis that there would be significant improvement on selected skill performance variables due to specific skill training and neuromuscular training among state level male badminton players.

METHODOLOGY

The purpose of the study was to examine the effect of specific skill and neuromuscular training on selected skill performance variables among state level male badminton players. To achieve the purpose of the study thirty (N=30) state level male badminton players were selected randomly from Chennai city. They would be assigned into three group's namely experimental group I (Specific skill training), experimental group II (Neuromuscular training) and group III acted as Control Group. Their ages ranges from 17 and 19 years. They are selected only badminton players. After analyzing the various factors associated with the presented in this study. The following skill performance variable such as fore hand and back hand clear were tested to Poole

fore hand and back hand clear test. The collected data were analysed statistically ANCOVA. The level of significant was set at P< 0.05 level of confidence. Specific Badminton skill training can be initially categorised into on-court and off-court work. On-court work would mean training with badminton movements with a racket and usually with a shuttle. Off-court work

is usually additional work that has the aim of enhancing some particular aspect of fitness. Neuromuscular training is to improve the nervous system's ability to generate a fast and optimal muscle firing pattern, to increase dynamic joint stability, to decrease joint forces, and to learn movement patterns and skills.

RESULTS AND DISCUSSION

TABLE I
ANALYSIS OF VARIANCE COVARIANCE ON SKILL PERFORMANCE VARIABLES OF CONTROL GROUP AND EXPERIMENTAL GROUP

Variables	Test	Ex I	Ex II	CG	SV	SS	df	MS	F
Fore Hand Clear	Pre test	45.00	46.60	45.20	B	15.20	2	7.60	1.49
					W	138.00	27	5.11	
	Post test	55.80	55.60	45.90	B	640.47	2	320.23	**72.72***
					W	118.90	27	4.40	
	Adjusted	56.03	55.22	46.05	B	607.41	2	303.70	**79.88***
					W	98.851	26	3.80	
	Mean Gain	-10.80	-9.00	-0.70					
Back Hand Clear	Pre test	45.80	47.30	45.90	B	14.07	2	7.03	1.60
					W	118.60	27	4.39	
	Post test	56.20	57.00	44.90	B	915.80	2	457.90	**47.10***
					W	262.50	27	9.72	
	Adjusted	56.30	56.81	44.99	B	872.14	2	436.07	**43.96***
					W	257.923	26	9.92	
	Mean Gain	-10.40	-9.70	1.00					

*Significant at 0.05 level of confidence for (df) 3 at 56 = 2.70 and for (df) 3 at 55 =2.72

The results presented in Table I showed that the pre, post and adjusted post test mean value on fore hand clear and back hand clear for specific skill training group, neuromuscular training group and control group. The calculated F ratio of 72.72 and 47.10 was greater than

the required table value of 2.70 which indicated that there was significant improvement on fore hand clear and back hand clear after twelve weeks of specific skill training and neuromuscular training programme.

TABLE II
SCHEFFE'S POST HOC TEST ANALYSIS ON SKILL PERFORMANCE VARIABLES OF CONTROL GROUP AND EXPERIMENTAL GROUP

Variables	Ex 1	Ex 2	CG	MD	CI
Fore Hand Clear and Back Hand Clear	56.03	55.22	-	0.81	2.26
	56.03	-	46.05	**9.98***	2.26
	-	55.22	46.05	**9.17***	2.26
	56.30	56.81	-	-0.51	3.65
	56.30	-	44.99	**11.32***	3.65
	-	56.81	44.99	**11.82***	3.65

*Significant at 0.05 level

The post hoc analysis of adjusted means proved that there were significant differences between the control group and specific skill training group, control group and neuromuscular training group were greater than the required confidential interval value. However, there was no significant difference between specific skill training and neuromuscular training group as the mean difference was lesser than the confidence interval value.

CONCLUSION

It was concluded that there was significant improvement on fore hand clear and back hand clear volleying ability among state level male badminton players. Lee et. al (2005), in their study the result showed that the top three most popular shots used were clear, lift and net. The results of the present study also confirmed the same by adding the forehand clear and back hand clear among state level badminton players, badminton serving ability place a vital role especially in the game of doubles.

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