

## ANALYSIS OF GENERAL MOTOR ABILITIES DIFFERENCES AMONG THE KABADDI AND KHO-KHO PLAYERS OF OSMANIA UNIVERSITY

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**Abstract:** The specialisation of Indian games is to make players light bodied, agile, ready-witted, supple and daring. The games like Kabaddi and Kho-Kho are most popular in rural India. The objective of this study is to analyze the general motor ability differences among kabaddi and kho-kho players of Vivekananda Government Degree College, Vidyanagar, Hyderabad Telangana state. The selected variables for this study were general motor ability: Muscular Strength, Muscular Endurance and Speed. These variables were tested before and after 12 weeks of plyometric training. There was a significant difference in mean between kabaddi and kho-kho players on general motor abilities, the significance was .000 at  $p < 0.05$  level. **Keywords:** Plyometric, speed, muscular strength, Muscular endurance.

**Introduction:** The most of young person's like sport and other forms of physical activity. They are also concerned with the nation's health and fitness. As a result many young persons are exploring the field of physical education and sport as a possible career. As part of this exploration process they want to know the realm of employment opportunities in physical education and sport and if they can contribute to this profession. They also want to know the developing trends in the field, and what the future holds for the profession and the personal and professional qualities that will help them to attain success if they choose physical education and sport as a career.

Kabaddi and Kho-Kho, Yogasana, Malkhamb, Lathi, Phari-gadga, Atya-Patya, Langadi, Viti-dandu, are peculiar indigenous activities preserved and handed over to the present generation. The specialty of Indian games is to make players light bodied, agile, ready-witted, supple and daring. Kho-Kho is one of the most popular traditional sports in India.

Kabaddi and Kho-Kho is an indigenous game. It is based on the natural principle of physical development. It is vigorous and fosters a healthy combative spirit among the youth. It is not merely running with speed but also a natural instinct to overtake, to pursue, to defence and offensive raids.

The individual who is physically fit has proportionate developed body and the posture i.e usually good. One performs the activities with a high degree of motor proficiency. It is true that any kind of physical work in day today life improves physical fitness. It depends upon the intensity of the working does.

Plyometric exercises are great for increasing overall explosive strength and speed, giving you an acceleration and power advantage over the competition. They teach muscles to produce maximum force in a minimum amount of time by training the stretch reflex of the muscles being used.

In this research study the scholar had experimented with plyometric training on general motor abilities of kabaddi and kho-kho players.

## 2. METHODOLOGY

### Selection of Subjects:

The present study was conducted on forty (40) Vivekananda Government Degree College Vidyanagar, Hyderabad, of Osmania University students ranging age between 18-22 years. The subjects were randomly selected and training was conducted at Vidyanagar, Hyderabad, Telangana, India. The subjects were divided into four equal groups namely: (1) First group was Kho-Kho Experimental Group (N=10) (2) second one was Kho-Kho Control Group (N=10), (3) Third group was Kabaddi Experimental Group (N=10) and (4) fourth kabaddi control group (N=10).

**Table No.1 Physical characteristics results between Experimental and Control groups**

Sl.No	Name of the group	Age(Yr)	Height(cm)	Weight(kg)
1	Kho-Kho Experimental Group	20.70	166.80	56.10
2	Kho-Kho Control Group	22.10	165.30	63.20
3	Kabaddi Experimental Group	20.90	166.20	59.90
4	Kabaddi Control Group	20.70	166.80	57.10

### Selection of Variables:

The research scholar experimented with plyometric training for the improvement of general motor abilities. The Administrative feasibility in terms of availability of instruments, time factor from point of view of subjects were considered for the collection of data. The following variables were selected. **The General motor ability variables:** Speed, muscular strength and muscular endurance.

### Research Design:

The experimental groups were administered 12 weeks duration with different types of Plyometric exercise program for the improvement of general motor abilities among the kabaddi and kho-kho players of Vivekananda Government Degree College Vidyanagar, Hyderabad. A proper warming-up period of 10 minutes duration was given before training sessions (3 days per week). The control group was not allowed to participate in any of the training programme except their daily routine practice. Measurements of general motor ability variables were taken before and after treatment with the informed consent of all the subjects. The training load was increased in a progressive manner, after every two weeks. The motor fitness data was collected by administering 50mts Run test for speed, standing broad jump test for muscular leg strength and push-ups test for muscular endurance.

### Statistical Technique:

After the data collected, they will be processed and critically analyzed to draw exact conclusions. In the present study, the collected data were analyzed using t ratio to find the mean differences and ANOVA was used to test the variance between groups. The significance was set at 0.05 levels.

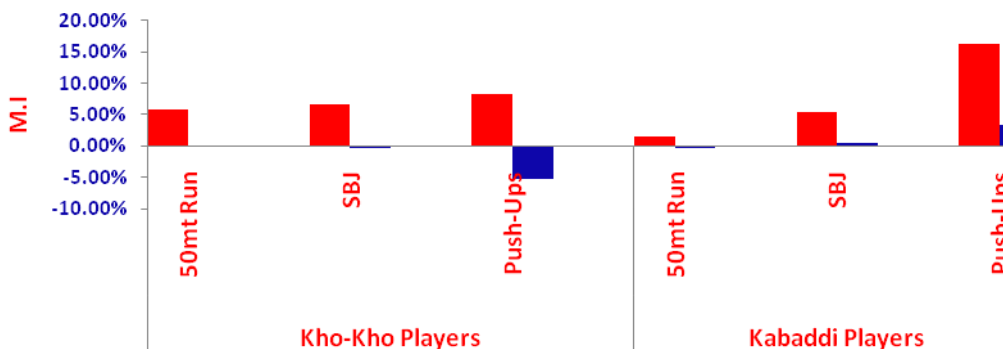
**Results**

**Table No.2 Mean values of research variables between Experimental and Control groups.**

		Kho-Kho Players						Kabaddi Players					
Group		50mt Run		SBJ		Push-Ups		50mt Run		SBJ		Push-Ups	
		Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Exp.	Mean	6.98	6.57	2.54	2.71	29.9	32.4	7.33	7.22	2.24	2.36	25.3	29.4
	M.I%	5.87%		6.69%		8.36%		1.50%		5.35%		16.20%	
Cont.	Mean	7.18	7.18	2.24	2.23	28.7	27.2	6.98	7	2.54	2.55	29.9	30.9
	M.I%	0%		-0.44%		-5.22%		-0.28%		0.39%		3.34%	

Above table shows the mean and Magnitude of increase(M.I) values of motor ability variables between pre-test and post-test of plyometric training and control groups. The experimental subjects were treated with plyometric exercises for twelve weeks training and control group subjects did not treat any specific training except regular respective game activities. After post test experimental subjects' motor ability variable were improved but in the case of control group subjects of general motor abilities did not find much difference. The magnitude of increase in speed (5.87%) and muscular strength (6.69%) was high in Kho-Kho players than kabaddi but in muscular endurance was high (16.20%) in kabaddi players than Kho-Kho players.

Graph No.1 M.I differences between Experimental and Control groups



**Table No.3 Statistical results between experimental and control group.**

Groups	Push ups		F	SBJ		F	50M Run		F
	t	sig		t	sig		t	sig	
Kho-Kho Experimental	-11.18	.000	.864 .469	-9.027	.000	10.166 .002	9.313	.000	5.852 .002
Kho-Kho Control	6.708	.000		1.26	0.239		-0.921	0.381	
Kabaddi Experimental	-22.841	.000		-11.981	.000		17.367	.000	
Kabaddi Control	0			0			-11	.000	

Above table shows the statistical significance between pre test and post test on general motor abilities between experimental and control groups. The significant difference was found between pre test and post test among kho-kho and kabaddi players. Statistical significance was .000,  $p < 0.05$  level. However no significant difference in control groups except push-ups. The one way ANOVA tested the differences between the means of four groups and found



there was significant difference in speed and muscular leg strength but no significance difference in muscular endurance among four groups.

**Conclusions:** the following conclusions are drawn from the present research work. The analysis explains through statistical interpretations were:

1. Muscular endurance was significantly improved among kabaddi players than kho-kho players through plyometric exercise.
2. Muscular leg strength was improved in kho-kho players than kabaddi players with plyometric training.
3. Remarkable speed improvement was found in kho-kho players than kabaddi players.

**Recommendations:**

- 1) Same type of research may be conducted for female kho-kho and kabaddi players.
- 2) The scholar also recommended that research may be conducted on physiological factors between kho-kho and kabaddi players.
- 3) The scholar further recommends that there is a correlation study between motor abilities and playing abilities of kho-kho and kabaddi.

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