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## Effect of SAQ training with resistance training on balance and quickness among kabaddi players

**G Kanagaraj and Dr. S Sethu**

### Abstract

The main aim of this study is to find out the effect of SAQ training with resistance training on balance and quickness among Kabaddi players. To achieve the purpose, 24 Kabaddi players were selected from Thoothukudi District Kabaddi clubs and their age ranged from 18 to 24 years. The subjects were randomly divided into two groups with 12 subjects each namely experimental and control groups. Experimental group underwent SAQ training with resistance training programme for a period of 12 weeks. Balance and quickness were selected as dependent variables. The dependent variable balance was measured by stroke stand test and quickness measured by hexogen test. Pre and post-tests randomized control group design was used as experimental test. The collected data from the subjects were analyzed with the dependent t- test and analysis of covariance. The level of significance 0.05 was fixed. It was concluded that balance and quickness had significantly improved due to 12 weeks of SAQ with resistance training and control group didn't produced any changes on balance and quickness. Experimental group differed with control group while improving the selected dependent variables.

**Keywords:** SAQ with resistance training, balance and quickness

### Introduction

The SAQ training method more frequently uses the programmed than random type conditioning after the SAQ continuum (Yap, & Brown, 2000) [3]. Speed is the rapidity of movement (Baechle, & Earle, 2008) [4]. Agility is the ability to maintain and control correct body position while quickly changing direction through a series of movements (Twist, & Benicky, 1996) [5]. Quickness is the ability to read and react to a situation; it is a multidirectional skill that combines explosiveness, reactivity, and acceleration (Moreno, 1995) [6].

Resistance training is a modality of exercise that has grown in popularity over the past two decades, particularly for its role in improving athletic performance by increasing muscular strength, power and speed, hypertrophy, local muscular endurance, motor performance, balance, and coordination (Kraemer & Ratamess, 2000) [7]. It is the magnitude of the individual effort and systematic structuring of the training stimulus that ultimately determines the outcomes associated with resistance training. Thus, resistance-training programs need to be individualized (e.g., based on individual goals) in order to maximize the outcomes (Fleck, & Kraemer, 2014) [8].

### Purpose of the Study

The purpose of this study is to find out the effect of SAQ training with resistance training on balance and quickness among Kabaddi players.

### Methodology

To achieve the purpose, 24 Kabaddi players were selected from Thoothukudi District Kabaddi clubs and their age ranged from 18 to 24 years. The subjects were randomly divided into two groups with 12 subjects each namely experimental and control groups. Experimental group underwent SAQ training with resistance training programme for a period of 12 weeks. Balance and quickness were selected as dependent variables. The dependent variable balance was measured by stroke stand test and quickness measured by hexogen test.

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Pre and post-tests randomized control group design was used as experimental test. The collected data from the subjects were analyzed with the dependent t- test and analysis of covariance. The level of significance 0.05 was fixed.

**Analysis of Data**

**Table 1:** Summary of the mean, standard deviation and dependent t- test on balance and quickness between experimental and control groups among Kabaddi players

Variable	Test	Experimental Group		Control Group	
		Mean	Std. Deviation	Mean	Std. Deviation
Balance	Pre test	78.42	3.00	79.83	1.80
	Post test	130.75	3.31	79.92	2.27
	T test	39.63*		0.17	
Quickness	Pre test	15.28	0.18	15.58	0.17
	Post test	13.30	0.19	15.54	0.17
	T test	25.02*		0.72	

\*Significance level at 0.05 with df t (11) is 2.20

The above table shows that the obtained t-test values for experimental group on balance and quickness are 39.63 and 25.02 respectively, which are greater than the tabulated t-test value of 2.20 with df 11. It indicates that there is a significant improvement on balance and quickness due to the effect of SAQ training with resistance training among Kabaddi players and further Control group has no significant improvement on the selected variables.

**Table 2:** Summary of the Adjusted post-test mean values and F-ratio on balance and quickness between experimental and control groups among Kabaddi players

Variable	SS	df	MS	F Ratio
Balance	7621.52	1	7621.52	378.33*
	423.05	21	20.15	
Quickness	2.16	1	2.16	112.82*
	0.40	21	0.02	

\*Significance level at 0.05 with df f (1, 21) is 4.32

The above table shows that the obtained F-ratio values for balance and quickness are 378.33 and 112.82 respectively, which are greater than the tabulated F-ratio value of 4.32 with df 1 and 21. Therefore, it indicates that there was a significance difference between the experimental and control group on balance and quickness among Kabaddi players.

**Discussion on Findings**

The results of the studies that there was a significant improvement on balance and quickness due to the effects of SAQ training with resistance training among Kabaddi players and significant difference exists between experimental and control groups while improving the selected variables such as balance and quickness.

The results of the present study is also supported with the following studies. According to Azmi, & Kusnanik, (2018) [1], aimed to analyze the effect of speed, agility and quickness training program to increase in speed, agility and acceleration. DeBolt, L. S., & McCubbin, J. A. (2004) [2]. Examined the effects of an 8-week home-based resistance exercise program on balance, power, and mobility in adults.

**Conclusions**

1. There was a significant improvement on balance and quickness due to the effects of SAQ training with resistance training among Kabaddi players
2. There was significant difference between experimental

and control groups on balance and quickness among Kabaddi players

3. Control group had no significant improvement on balance and quickness.

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