Original Research Paper



Education

EFFECT OF DIFFERENT TRAINING PACKAGES ON SPEED OF SCHOOL BOYS

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ABSTRACT The purpose of the study was to find out the effect of different training packages on speed of school boys. To achieve the purpose of this study, sixty school boys was randomly selected from Navy School, Visakhapatnam, Andhrapradesh, The age of the subjects ranged from 13 to 15 years. Group-I circuit training, Group-II underwent SAQ training, Group-III underwent yoga practice, and group-IV acted as control who does not participate in any training programme. The data collected from the five groups prior to and post experimentation were statistically analyzed by analysis of covariance (ANCOVA). Since four different groups were involved whenever, the "F" ratio for adjusted post mean was found to be significant, the Scheffe's test followed as a post hoc test to determine the paired means difference. The result of the study stated that there was a significant improvement on speed of the different training packages groups when compared to the control group.

KEYWORDS: Circuit, SAQ training, yoga practice and Speed.

INTRODUCTION

A well-designed circuit provides a balanced workout that targets all the muscle groups and builds cardiovascular endurance. Circuit routines can also be designed to correct the muscle imbalance that often occurs in one-sport athletes who specialize in one type of exercise day after day. It can also provide a high-intensity, skills training session or a high calorie-burning workout in a short amount of time. Circuits also provide the perfect cross training for any athlete. There are several reasons why strength training has to be incorporated into SAQ. Applying agility and quickness training for performance is more than just ladder and cone drills. Many sports like basketball, rugby, and soccer involve intermittent patterns or bursts of activity that place large demands upon a complex hybrid of physical fitness abilities. These abilities include speed, agility, and quickness, dynamic balance and flexibility, strength, power, reactivity, anaerobic capacity, and coordination (Thatcher and Batterham, 2004; Wisloff and others, 2004). Successful conditioning programs for these athletes therefore tend to adopt an integrated-style approach where the multiple parameters needed for their sport.

Yoga is the physical, mental, and spiritual practices or disciplines that aim at transforming body and mind. The term denotes a variety of schools, practices and goals in Hinduism, Buddhism and Jainism the best known being Hatha yoga and Raja yoga. The term yoga is derived from the literal meaning of "yoking together" a span of horses or oxes, but came to be applied to the "yoking" of mind and body.

Methodology

The purpose of the study was to find out the effect of different training packages on speed of school boys. To achieve the purpose of this study, sixty school boys was randomly selected from Navy School, Visakhapatnam, Andhrapradesh, The age of the subjects ranged from 13 to 15 years. Group-I circuit training, Group-II underwent SAQ training, Group-III underwent yoga practice, and group-IV acted as control who does not participate in any training programme. The experimental group's subjects were participated in their respective training programme three days per week for twelve weeks, duration of the training programme on 40 minutes (including warm up and warm down) per day. Once in two weeks the training load was increased. Speed was measured by 50 run test. The data collected from the four groups prior to and post experimentation were statistically analyzed by analysis of covariance (ANCOVA). Since five different groups were involved whenever, the "F" ratio for adjusted post mean was found to be significant, the Scheffe's test followed as a post hoc test to determine the paired means difference.

RESULTS

Table - I ANALYSIS OF COVARIANCE ON SPEED OF EXPERIMENTALAND CONTROL GROUPS

	Circuit Training	SAQ Training	Yoga Practice	Control Group	S O V	Sum of Squares	df	Mean squares	'F' ratio
Pre test	7.93	8.06	8.01	7.92	В	0.19	3	0.065	0.38
Mean SD	0.40	0.41	0.42	0.40	W	9.31	56	0.16	
Post test Mean SD	7.54	7.32	7.78	7.85	В	2.58	3	0.86	6.05*
	0.38	0.23	0.48	0.36	W	7.96	56	0.14	
Adjusted Post test Mean	7.57	7.27	7.78	7.88	В	3.20	3	1.07	13.67
					W	4.30	55	0.078	

(The required table value for significance at 0.05 level of confidence with degrees of freedom 3 and 55 is 2.77 and degree of freedom 3 and 56 is 2.77)

The adjusted post test means on speed of circuit training, SAQ training, yoga practice and control groups are 7.57, 7.27, 7.78 and 7.88 respectively. The obtained 'F' ratio value of 13.67 on speed were greater than the required table value of 2.77 for the degrees of freedom 3 and 55 at 0.05 level of confidence. It is observed from this finding that significant differences exist among the adjusted post test means of experimental and control groups on speed.

Since, the adjusted post test 'F' ratio value is found to be significant the Scheffe's test is applied as post hoc test to determine the paired mean differences, and it is presented in table-II.

Table-II SCHEFFE'S TEST FOR THE DIFFERENCE BETWEEN THE ADJUSTED POST TEST PAIRED MEANS OF SPEED

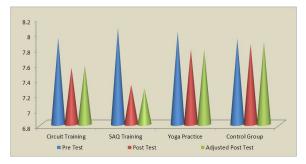
Adjusted l	Post Test M	DM	CI		
Circuit Training	SAQ Training	Yoga Practice	Control Group		
7.57	7.27			0.30*	0.21
7.57		7.78		0.21*	0.21
7.57			7.88	0.31*	0.21
	7.27	7.78		0.51*	0.21
	7.27		7.88	0.61*	0.21
		7.78	7.88	0.10	0.21

^{*}significant

^{*}Significant at .05 level of confidence

Table-II shows the Scheffe's test results that there are significant differences between the adjusted post tests means of circuit training and SAQ training groups; circuit training and yoga practice groups; circuit training and control groups; SAQ training and yoga practice groups; SAQ training and control groups on speed. Also the result of the study reveals that there is no significant difference between the yoga practice and control groups on speed.

Figure - I CONE DIAGRAM SHOWING THE MEAN VALUE ON SPEED OF EXPERIMENTALAND CONTROL GROUPS



Discussion and Findings

The present study result showed that the twelve weeks of the different training packages training influenced to increase on speed of school boys. It is observed from this finding that significant differences exist among the circuit training and SAQ training groups; circuit training and yoga practice groups; circuit training and control groups; SAQ training and yoga practice groups; SAQ training and control groups on speed. Also the result of the study reveals that there is no significant difference between the yoga practice and control groups on speed. The following studies are supporting my study findings.

Devi (2017) investigation is to study the impact of SAQ training method vs sprint interval training method on basketball throw for accuracy of basketball players (men). It was also concluded that sprint interval training is better than SAQ training method in improving basketball throw for accuracy of basketball players (men). *Trecroci and others* (2016) examined the effects of speed, agility and quickness (SAQ) training on acceleration (5 and 20 m), change of direction speed (CODS) and reactive agility in preadolescent soccer players. These findings indicated that SAQ training could positively affect cognitive skills and initial sprint acceleration through the middle childhood, offering useful guidance to soccer coaches.

Conclusion

The conclusion of the study stated that there was a significant improvement on speed of the different training packages groups when compared to the control group. Moreover among the experimental groups the SAQ training group had better improvement on speed.

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