# **Original Research Paper**



## **Physical Education**

# EFFECT OF STRENGTH TRAINING WITH AND WITHOUT MENTAL TRAINING ON SPEED AMONG SCHOOL BOYS KHO KHO PLAYERS

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ABSTRACT The purpose of the study was to find out the effect of strength training with and without mental training on speed among school boys kho kho players. To achieve the purpose of this study, forty five school boys were randomly selected from Kanchipuram District, Tamilnadu, The age of the subjects ranged from 15 to 18 years. Group-I acted as strength training with mental training, Group-II acted as strength training without mental training and Group III acted as control group who does not participate in any training programme. The data collected from the three groups prior to and post experimentation was statistically analysed by analysis of covariance (ANCOVA). Since three different groups were involved whenever, the "F" ratio of 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 strength training with mental training group when compared to the strength training without mental training group and control group.

## KEYWORDS: Strength Training, Mental Training, Speed.

#### INTRODUCTION

In general the word training is commonly used term in human language but in broad sense training may be define as an organized and systematic instructional process which aim is to improve the individual's physical, psychological and intellectual performance capacity.

In sports the term training is often used by the players, coaches and scientists but there are some disagreement among the coaches and scientists regarding the exact mean of this term, because the experts those who belongs to sports medicine are in the opinion that sports training is simply a doing of physical exercise, where as some other experts understood the meaning of the word in the form of interval training, strength training, technical training and tactical training.

In the light of the various concepts, meaning of the term and nature of the training, it is essential to the study the some of the important definitions given by the various experts in the field of sports Sports training is a scientifically based and pedagogically organised process through planned and systematic, effect on the performance ability and performance readiness aims at sports perfection and performance improvement as well as at the contest in sports competition.

Mental training is about improving one's attitude and mental skills to help them perform their best by identifying limiting beliefs and embracing a healthier philosophy about their sport. Mental skills, just like physical skills, take repetition, practice, and game-time application to develop. Helping athletes and coaches understanding the mental barriers that limit performance and the benefits of sports psychology intervention is a critical step in the mental training process. Mental barriers include high expectations, perfectionism, fear of failure, lack of emotional control and attention focus. Athletes can

overcome these barriers through sport psychology intervention that aim to enhance confidence, focus, composure, trust and mental preparation.

According to Napersack the health value of mental training has been clearly established. Her relaxation and visualization techniques have been used by persons who suffer from a wide variety of illnesses, including cancer, hypertension, anxiety, post-traumatic stress, depression and other illnesses. This investigation will add to the growing body of knowledge about the effects of distractions on running performance of college age students.

#### Methodology

The purpose of the study was to find out the effect of strength training with and without mental training on speed among school boys kho kho players. To achieve the purpose of this study, forty five school boys kho kho players were randomly selected from Kancheepuram District, Tamilnadu, The age of the subjects ranged from 15 to 18 years. Group-I acted as strength training with mental training, Group-II acted as strength training without mental training and Group III acted as control group who does not participate in any training programme. The experimental groups' subjects were participating in their respective training programme three days per week for twelve weeks, the duration of the training programme of 45 minutes (including warm up and warm down) per day. Once in two weeks the training load was increased. Speed was measured by the 30 Meter Dash Test. The data collected from the two groups prior to and post experimentation was statistically analysed by analysis of covariance (ANCOVA). Since three different groups were involved whenever, the "F" ratio of 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 EXPERIMENTAL AND CONTROL GROUPS

Test	Strength training with mental training	Strength training without mental training	Control Group	sv	ss	df	MS	F ratio
Pre test	4.57	4.62	4.60	Between	0.02	2	0.012	0.09
				Within	5.51	42	0.13	
Post test	4.21	4.56	4.59	Between	1.38	2	0.69	6.64*
				Within	4.37	42	0.10	
Adjusted	4.24	4.54	4.58	Between	1.12	2	0.56	33.41*
				Within	0.689	41	0.02	

(The required table value for significance at the 0.05 level of confidence with degrees of freedom 2 and 41 is 3.23 and degree of

The adjusted post test means of speed of strength training with mental training, strength training without mental training group and the control group are 4.24, 4.54 and 4.58 respectively. The obtained 'F' ratio value of 33.41 on speed were greater than the required table value of 3.23 for the degrees of freedom 2 and 41 at 0.05 level of confidence.

freedom 2 and 42 is 3.22)

\*Significant at .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 a 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

	MD	CI		
Strength training with mental training	Strength training without mental training	Control Group		
4.24		4.58	0.35*	0.12
	4.56	4.58	0.03	0.12
4.24	4.56		0.32*	0.12

<sup>\*</sup>significant

Table-II shows the Scheffe's test results that there is a significant difference between the adjusted post tests means of strength training with mental training group and strength training without mental training. The is no significance difference between the adjusted post tests means of strength training without mental training and control group on speed. Also the result of the study reveals that there is significant improvement on speed ability of the strength training group with mental training better than the strength training group without mental training and control group on speed.

## **Discussion and Findings**

The present study result showed that the twelve weeks of the strength training with mental training influenced to increase on sprinting ability of school boys. It is observed from this finding that significant differences exist among strength training group with mental training, strength training group without mental training and control group on speed.

#### Conclusion

The conclusion of the study stated that the strength training with mental training group has shown significant improvement on the speed among school level boys kho kho players.

And the strength training combined with mental training group was better than the strength training without mental training group on speed among the school level kho kho players.

### References

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