


ISSN 2231-6671

International Registered and Recognized  
Research Journal Related to Higher Education for all Subjects

 **HI-TECH**  
**RESEARCH ANALYSIS**

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Hi-Tech Research



Analysis

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ISSN 2231- 6671

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# Hi-TECH RESEARCH ANALYSIS

UGC APPROVED & PEER REVIEWED RESEARCH JOURNAL

Issue : XIV, Vol. - VIII  
Year - VII, (Half Yearly)  
Aug. 2017 To Jan. 2018

**Editorial Office :**

'Gyandev-Parvati',  
R-9/139/6-A-1,  
Near Vishal School,  
LIC Colony,  
Pragati Nagar, Latur  
Dist. Latur - 413531.  
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**Contact : 02382 - 241913**  
09423346913 / 09503814000  
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**Website**

**www.irasg.com**

**E-mail :**

interlinkresearch@rediffmail.com  
visiongroup1994@gmail.com  
mbkamble2010@gmail.com

**Published by :**

JYOTICHANDRA PUBLICATION  
Latur, Dist. Latur - 413531 (M.S.) India

**Price : ₹ 200/-**

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## CIRCUIT TRAINING ON SELECTED MOTOR VARIABLES OF HOCKEY PLAYERS

**Dr. S.K.MD.A.M.K. Jagirdar**  
Head, Dept. of Phy. Education,  
Milliya College,  
Beed, Dist. Beed (MS) India

**Rahul N. Vidate**  
Research Scholar,  
Dr. B.A.M. University,  
Aurangabad, Dist. Aurangabad (MS) India

### Research Paper - Physical Education

#### **Introduction :**

Though many methods prevail to develop the performance in Hockey, the circuit method of training package is an undisputed one. "Circuit training is the programme in which an athlete moves from one exercise station to another in a planned sequence and in the shortest possible time" (Neal 1969).

A typical field Hockey player must train for many years to refine the technique and to develop physical fitness factors especially strength, speed, agility, etc to reach his individual potential. There are many types of training by which an athlete can improve the above said motor qualities. Circuit training has proved to be a very effective method for improve the strength endurance (Don cash seaton et.al., 1983).

#### **Methodology :**

The purpose of the study was to investigate the effects of circuit training on speed and agility of hockey players. To achieve the purpose of the study 23 intercollegiate level male hockey players were selected as subjects.

The age of the subjects ranged from 18 to 25 years. The criterion variables tested were speed and agility, these variables are considered to be very important for a



hockey players. Speed was assessed by 50mts run test and recorded as nearest 1/10th of a second. Agility was assessed by shuttle run test recorded as nearest 1/10th of a second. The data was collected before and immediately after the trains.

The data pertaining to the selected motor fitness variables were analyzed by employing dependent 't' test to determine the final score of the selected subjects n=23. The circuit training package was given to the subjects for a period of only six weeks.

### Results :

**Table 1**

**The analysis of the effect of circuit training on speed and agility of hockey players**

Variable	Mean	Value	't' ratio
Speed	Pretest	6.97	7.40*
	Post test	6.66	
Agility	Pretest	9.96	5.84*
	Post test	9.56	

\*Significant at 0.5 level ( $t_{22} = 2.074$ )

It is proved from table -1 that there would be a significant improvement in all the dependent variables after the experimental period.

Speed is the rate at which a body moves from one location to another (Charles B. Corbin and Ruth Lindsey, 1985). The circuit training programme involved motor movements that had to be executed with high speed over a period of 6 weeks. This might be the reason for the significant improvement of speed.

Agility is the quality of a muscle to contract forcefully in the quickest possible time. (Hardayal Singh, 1991) Circuit training schedule involved various agility oriented exercises that had to be executed in the circuit stations. This might be the reason for the significant improvement of agility.



### Conclusion :

From the findings of the study it was concluded that, performance to a certain extent depends upon the physical and motor fitness qualities in which definite improvements can be achieved through appropriate tr. (C. Bourchers and R.M. Malina, 1999)

### References :-

- 1) Charles B. Corbin and others, Concept of physical fitness, Dubuque : Wm C

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"ग्यानदेव-पार्वती", R-9/139/6, विशाल शाळेजवळ,

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