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A COMPARATIVE STUDY ON LEVEL OF COORDINATION BETWEEN MALE ATHLETE AND NON ATHLETE COLLEGE STUDENTS

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ABSTRACT

Coordination is a factor that is basic to performance and especially to highly complex movements (it may be defined as the ability of the performer to integrate types of movements in a specific pattern). We need coordination as we are to perform lot of physical; movements to accomplish the daily assignment. To get maximum output with minimum effort, i.e. economical movement, rhythmical movement, graceful and efficient movement we need coordination. The purpose of the study was to compare the status of coordination between athlete and non athlete male and female groups. Forty students was chosen from 4 different group which is athlete male, non athlete male, athlete female, non athlete female from Department of physical education , Kandra college within the age group of 18 to 21 years. Coordination was analyzed by specific test for coordination referred by Barrow Motor Ability Test (1983). Result revealed that both male and female athlete have greater level of coordination than male non athlete and non female athlete, and both male athlete, non male athlete has greater level of coordination than both female athlete & female non athlete.

Key words: *Coordination,athlete, non athlete, performance, complex.*

I. INTRODUCTION

Coordination is another factor that is basic to performance and highly complex movements (It may be defined as the ability of the performer to integrate types of movements in a specific pattern).

The requirement for different activities may be quite different types of coordination, like several other components, is interrelated with other factors and cannot be isolated for measurement. Performing integrated patterns of movement with good coordination involves agility, balance, speed and kinesthetic sense.

The essential quality of this factor concerns the capacity of the student to perform specific movements in a series quickly and accurately. In this case of performer understands and can perform each part of the total movement

and can change rapidly from one pattern to another for efficient execution. The more complicated the movement. The greater is the requirement in terms of coordination. Good coordination is associated with insight into the nature of the movement with kinesthetic sense and with a learners perception of relationships It can be improved through training and practice. The bar snap of distance has been used to measure this factor.

Coordination plays an important role in sports and daily life. The coordinative abilities are important for the learning of sports techniques and for their continuous refinement and modification during the term training process. The motor learning ability depends on large extent on the level of coordinative abilities (Zimmerman & Nicklich 1981). The optimally developed coordinative abilities especially in the childhood are invaluable component for learning of complex technique in advanced stages independent upon the level of required coordinative abilities.

In sports the quality involves ability of a performer to judge accurately the speed and direction of some object and, in most sports; it further involves the ability to adjust the body or parts of the body in relation to the object, These adjustments take several forms: l) hitting or kicking an object from a stationary position, such as hitting golf ball a tee. or kicking a football from a tee; 2) fielding, catching, hitting or kicking a moving object, such as catching a pass in football or making a pass from a moving ball in soccer: 3) throwing, shooting or kicking at a goal or distant target. In this case, the primary objective is the goal or target and not the ball.

Our daily life starts with the rising of the sun and ends at bed time. We need coordination's as we are to perform lot of physical; movements to accomplish the daily assignment. To get maximum output with minimum effort, i.e. economical movement, rhythmical movement, graceful and efficient movement we need coordination. It is the natural tendency of the human being that they want smooth movement in a minimum time and to fulfill that desire coordinative ability has a vital role.

II. METHODOLOGY

In this chapter the objective type questionnaires used for collecting data analytical procedure had been described.

The Subjects

The study was conducted on male and female subjects, viz.

i) Male athlete

ii) Male non-athlete

The third year student of Physical Education department of Kandra College and new entrance

Ist year students batch were considers as the subjects of this study.

Equipment and Tools used

Among the various equipments and tools used in this study were:

i) A required size wall space

ii) A stop watch

iii) A basketball

Statistical Tool used

For the purpose of analysis and interpretation of the results the following statistical tools were used.

Mean =∑x / N

SD = $\sqrt{\sum X^2 / N}$

X=Raw Score

N=Subjects Number

Pooled SD or $\sigma = \sqrt{\sum X_1^2 + \sum X_2^2 \ \ (N1\ \ 1) \ + \ (N2\ \ 1)}$

SE_D or $\sigma_D = \sqrt{\sigma\ 1/N_{1+}}\ 1/N_2$

$t = M_1 \ \ M_2/\sigma_D$

Measurement of Test of coordination

The subject was asked to stand behind the restraining line that is drawn 9 feet from the wall. On the signal to 'begin', he/she posses the ball against the wall in any manner he chooses. He attempts to catch the rebound and pass it again as many times as possible for 30 seconds. For the pass to be legal, both of the subject's feet must remain behind the restraining line. If he/ she should lose control of the ball, he/she must retrieve it and return to the line and continue passing.

The score is the number of times the ball hits the wall in 30 seconds.

III. RESULTS AND DISCUSSIONS

Table No 1

Comparison in means of coordination level between male athlete and non-athlete.

Group	Athlete		Non-athlete		Pooled SD	t
	Mean	SD	Mean	SD		
Male	26.6	±6.74	19.25	±4.963	3.29	7.07*

*Significance at 0.05 level

From the table-1 it is clearly seen that the mean coordination of male athlete is 26.6 with a standard deviation of ±4.96.

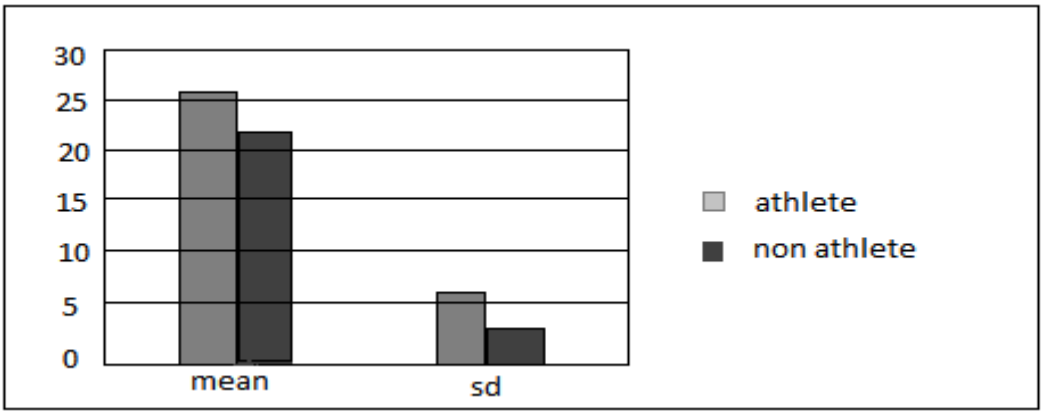

Fig No.: 1.

Comparison in means of coordination level between male athlete and non-athlete.

It is found from the results of table — I there is significant difference between athlete and non-athlete both male and female. Therefore it may be concluded the athletes, irrespective of sex are having better coordination than non-athletes. On the other hand may be concluded that participation in regular training programmed facilitates the athletes in attaining higher level of coordination.

We know the critical value of t with 38 degrees of freedom at 0.05 level of significance is 2.02. Computed value of t (male athlete and non-athlete) is 7.07 which is positive and greater than the critical value oft in 0.05 level of significance.

IV. CONCLUSIONS

Within the limitation of the present study some conclusion were drawn on the basis of results obtained

The level of coordination of the male athlete is greater than the male non-athlete.

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