STUDY OF PSYCHOMOTOR VARIABLES OF BASKETBALL PLAYERS

AT DIFFERENT LEVELS OF COMPETITIONS

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ABSTRACT

The purpose of this study was to analysis the differences of psychomotor variables of basketball players at different levels of competitions. This study is a part of doctorate study having a title "Study of Physiological, Body Composition and Psychomotor variables of Basketball Players at different levels of Competitions". Study was conducted on 50 basketball male players (25 inter college and 25 under-19 School male basketball players). In This study psychomotor variables were taken i. Differentiation ability and ii. Orientation ability. With regard to purpose of the study mean and standard deviation were calculated. In order to check the differences 't'-test was applied. Results showed that there exists a significant difference between Inter College and Under-19 School Male Basketball Players among their Psychomotor variables. It showed that Differentiation and Orientation abilities are higher in Inter College Basketball Male Players when statistically compared with Under-19 School basketball male players.

Key Words: Psychomotor, Differentiation abilities, Orientation abilities and Competition.

INTRODUCTION:

Physical activity is an inherent trait of a human living. It develops its own in a natural way. It becomes all the way imperative to identify the nature and the degree of this natural talent and to nurture, modifies and refines it to get the cherished outcomes. The children perform a lot of activities such as running, jumping, throwing, catching, kicking and striking etc. The activities are known as natural or universal skills. The twenty first century is the most rapidly of changing century of all time. Rapidity of changes created unusual demands on individuals and on system of education. Today education must not only include the body and knowledge, but also to develop inquiring minds that will enable them to comprehend and accept what is to come tomorrow. Exploring the possibilities of psychomotor abilities the mystery of body and mind has long occupied researchers within fields such as phenomenology, psychology and cognitive science. The traditional psychological approach is that the relationship is dualistic. The faculty of



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reason is separate from and independent of what we do with our bodies. This means that reason must be independent of perception and bodily movements. Intelligence is here seen as the ability to think abstractly, combine and solve mental problems. The theory was put forth as a way of distinguishing humans from animals, before the emergence of the evolutionary theory, which showed that human capacities grow out of animal capacities. Today it is becoming a well-known and generally accepted thesis that human beings perceive, learn and experience through bodily movement. The theory of motor coordination is the basis for understanding the motor of coordination abilities. Motor coordination is part and parcel of actions regulation. Coordinative abilities have also important and strong links with the motor skills as the motor coordination focus the basis of both. These abilities enable the sportsperson to do a group or set of movement with better quality and effect.

OBJECTIVES:

To Compare the Psychomotor Variables of Under-19 School and Inter College Male Basketball Players.

DELIMITATIONS:

The research was delimited to male basketball players.

The study was delimited to male basketball players who have represented their schools and colleges.

The study was delimited to male basketball players age ranging between 14 to 25 years of age.

The study was delimited to one hundred male basketball players (50 Under-19 School and 50 Inter College Players)

The study was delimited to Psychomotor Variables only. These variables are:

Differentiation Ability Orientation Ability

HYPOTHESIS:

It is hypothesized that there will be significant difference between Psychomotor Variables of Under-19 School and Inter College Male Basketball Players.





SIGNIFICANCE OF THE STUDY:

Results of the study may be helpful in the following ways:

1. The results of the study will add new dimensions of knowledge in the field of physical education and sports with special reference to basketball players.

2. The study will help to quantify the psychomotor status of basketball players.

3. The study also reveals the role played by crucial psychomotor variables for basketball performance.

METHODOLOGY:

SELECTION OF SUBJECTS-

For the purpose of the study 100 Basketball players were selected as subjects (50 under-19 school players and 50 inter college players). The subjects were thoroughly acquainted with the testing procedure as well as the purpose and significance of the study. A thorough orientation of requirements during the testing procedures and performance test were made for successful completion of study. Everything regarding the tests were made clear and finally requested to participate whole heartedly in the present study.

SELECTION OF VARIABLES-

I. PSYCHOMOTOR VARIABLES:

- i. Differentiate ability: It will determine by using 'backward medicine ball throw test and will be recorded in points.
- ii. Orientation ability: It will be assessed by using medicine ball run test and will be recorded in $1/100^{\text{th}}$ of second.

STATISTICAL ANALYSIS OF DATA:

With regard to purpose of the study mean and standard deviation were calculated. In order to check the differences 't'-test was applied. In order to check the significance, level of significance was set at 0.05





RESULTS: The results of the Psychomotor Variables have been depicted below:

Differentiation Ability

Table-1

Mean and standard deviation of selected differentiation ability of under-19 school and inter college basketball players

Group	Mean	Standard Deviation	Standard Error Mean	't'-test
Under-19 School Basket ball Players	18.26	2.311	0.327	
Inter College Basket ball Players	14.88	2.876	0.407	6.478
Level of Significance .05				df=98

Level of Significance .05

Table 't'-value at .05(1.980)

figure-1

Mean and standard deviation of SELECTED DIFFERENTIATION ability of under-19 school and inter college basketball players

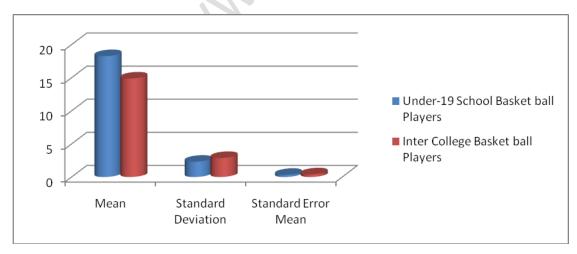








Table-1 shows that the Mean and Standard Deviation values of Differentiation Ability with regard to Under-19 School Basketball Players is 18.26 and 2.311 whereas in the case of Inter College Basketball Players is 14.88 and 2.876 respectively. The calculated t-value (6.478) which is more than the tabulated t-value (1.980) at .05 level. So, it depicts that there is a significant difference between Under-19 School and Inter College Basketball Players for their Differentiation Ability.

ORIENTATION ABILITY:

table-2

Mean and standard deviation of selected orientation ability variable of under-19 school and inter college basketball players

Group	Mean	Standard Deviation	Standard Error	't'-test
		6	Mean	
Under-19 School	11.804	1.24	0.1754	
Basketball Players				
Inter College Basketball	9.477	1.0022	0.1417	10.32
Players				
Level of Significance .05		~		df=98

Level of Significance .05

Table 't'-value at .05(1.980

figure-2

Mean and standard deviation of selected orientation ability variable of under-19 school and inter college basketball players



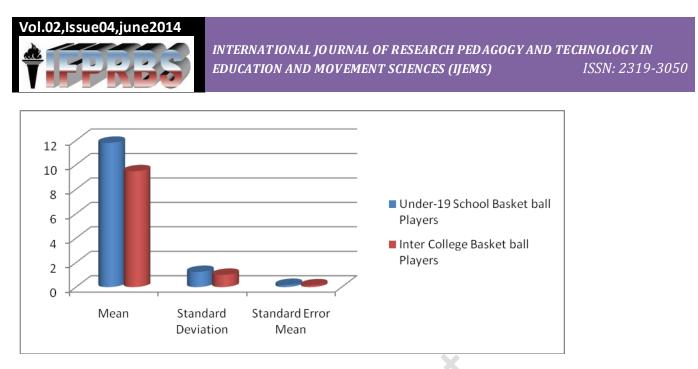


Table-11 shows that the mean and standard deviation values of Orientation Ability with regard to Under-19 School Basketball Players is 11.804 and 1.2400 whereas in the case of Inter College Basketball Players is 9.477 and 1.0022 respectively. The calculated t-value (10.32) which is more than the tabulated t-value (1.980) at .05 level. So, it shows that there is a significant difference between Under-19 School and Inter College Basketball Players for their Orientation Ability.

DISCUSSION:

Differentiation ability has a direct bearing on the performance in basketball game. In as much as the game of basketball it have forty minutes duration of play; the players have to ensure that they possess high degree of accuracy and economy of separate body movements and movement phases so that the energy is preserved till the game finishes. The finding of the present study shows that there were significant differences between all the two levels of basketball players. The findings are in consonance with the study undertaken by Farrow (1975).

The findings of the present investigation show that there exists a significant difference between all the two levels of basketball players for their orientation ability. The findings are supported with the study undertaken by Bakshi (1994) where differences were found between swimmers and track and field athletes for their Orientation ability.

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