



*International Journal of
Physical Education and
Sports Sciences*

*Vol. VI, Issue No. I,
October-2013, ISSN 2231-
3745*

REVIEW ARTICLE

A STUDY OF COLLEGE LEVEL VOLLEY BALL PLAYERS OF KURUKSHETRA UNIVERSITY IN RELATION TO MOTOR ABILITY DIFFERENCES BETWEEN SPIKERS AND SET UPERS

AN
INTERNATIONALLY
INDEXED PEER
REVIEWED &
REFEREED JOURNAL

A Study of College Level Volley Ball Players of Kurukshetra University In Relation To Motor Ability Differences between Spikers and Set Upers

Atul Saharan

Arya College of edu. Bhambhewa, jind (Haryana)

SUMMARY

Volleyball is played by millions of people around the world. In many countries, it has been ranked as a top level competitive sports. The volleyball game has become very popular after the second world-war. This game was designed by Mr. William G. Morgan towards the end of the nineteenth century, to be exactly in 1895, in U. S. A. as a recreational activity for businessmen, (Baacke, 1977). The popularity of the volleyball game increased rapidly because for volleyball a small field and less equipment is required (Vladimir, 1980).

Volleyball is an exciting game basically consisting of physical a ball across the net with rotation of field positions. Therefore ideally every player should master every element required for every position during the game. But no team has been able to achieve this goal. Volleyball is a 6 side game. Two teams line up on a court which is divided by a centre line into two playing areas of equal size. Besides the standard regulations (court 9 mts x 18 mts, Net height 2024 mts. And 2.43 mts, for women and men respectively) each team tries to ground the ball in its opponents court or to force its opponents to make errors. The team which teaches 25 points with a difference of two wins a set. Total five sets are there. Incase of tie (24-24) play is continued until a two points lead is achieved. Play is confirmed (with at least a two points advantage over the other team), however the upper limit of the set is 17 points.

CONCEPT OF MOTOR ABILITIES

Before discussing regarding the motor abilities it is necessary to explain the term physical fitness.

Physical fitness includes coordinative abilities (agility), flexibility, endurance, strength and speed (Singh,1984,Harre,1986). The physical fitness can be differentiated into general and specific physical fitness. Each sports activity demands different types and levels of different motor abilities and when a sportsman possesses these, he is said to have the

specific physical fitness (Singh, 1984). General physical fitness is the level of various motor abilities, regardless of any sports, which the sportsman possess. So motor abilities is the “ The present acquired and initiate ability to perform motor skills of a general fundamental nature, exclusive of highly specialized sports or gymnastic technique. “ In other words it is the ability to perform fundamental motor skills involving all basic performance traits including co-ordination.

Spiker's occupies a prominent place in volleyball. All actions to direct the ball towards the opponents, expect block, are considered to be an attack. So a player who directs the ball towards the opponent's id called Spikers. Scoring a point or gaining service is determined by the Spikers. The Spikers influences the main part of game. An attack can be performed by using various type of spiking e.g. straight spike, wrist outward spike, wrist inward spike, body turn spike, round arm spike etc. A determining factor for successful spike is jumping strength.

Set-upper in volleyball is the backbone of the team and is also called the brain of the team. A specifically designated player who passes the ball intended for one specific purpose, to place the ball above, near and away from the net so that a front row players or a back-line player can jump and spike it, is said to be a set-upper (Mark Tennant 1975). The success of attack depends upon the quality of set-up. So, the role of set-upper in the team is of great importance.

SIGNIFICANCE OF THE STUDY

A nation can't develop without the healthy and strong people and that is why contribution of sports has been widely acknowledged. This is done through imparting regular practice in various games and sports. Motor abilities are the very important part of every volleyball players to perform better weather he is Spikers or set-uppers in the ball. The knowledge regarding the influence of motor Abilities for the

selection of the volleyball players helped to the coaches.

The knowledge regarding the influence of motor Abilities for the selection of volleyball players would be helpful to the coaches. Physical educations and population in general have to judge the motor Abilities in the game of volleyball in which an individual is participating on the basis of their physical fitness index. The result of this experiment would add new objective findings in the literature and coaches in the field of physical education and volleyball. The result and procedure of the study would be stepping stone to research workers in the field of physical education and volleyball to do some more research for better information and also to resolve the controversy in literature.

STATEMENT OF THE PROBLEM

From the above explanation, the problem can be stated as under :- **“ A STUDY OF MOTOR ABILITIES OF SPIKERS AND SET-UPPERS IN MALE VOLLEYBALL PLAYERS AT COLLEGE LEVEL”**
OPERATIONAL DEFINITIONS OF THE TERM USED

Motor Abilities

Motor Abilities is “ The present acquired and initiate ability to perform motor skills of a general fundamental nature, exclusive of highly specialized sports or gymnastic techniques”. In other words it is the ability to perform fundamental motor skills involving all basic performance traits including co-ordination.

Spikers

A player who directs the ball towards the opponents is called a Spikers. Scoring a point or gaining a service is determined by the spiker. The spiker influences the main part of game. An attack can be performed by using various types of spiking e.g. straight spike, wrist outward spike, wrist inward spike, body turn spike, round arm spike etc.

Set-uppers

Set-upper in volleyball is the backbone of the team and is called the ‘Brain’ of a team. A specifically designated player who passes the ball intended for one specific purpose, to place the ball above, near and away from the net so that a front row player or a back line jump and spike it, is said to be a set-upper.

OBJECTIVES OF THE STUDY

The present study was conducted with the following objectives:-

1 To study the significant difference between Spikers and Set-uppers of male volleyball player on ‘Age’.

2 To study the significant difference between Spikers and Set-uppers of male volleyball player on ‘Body Weight’ physical characteristics.

3 To study the significant difference between Spikers and set-uppers of male volleyball player on ‘Body Height’ physical characteristics.

4 To study significant difference between Spikers and Set-uppers of volleyball player on ‘Standing Reach’ physical characteristics.

5 To study significance between Spicer and Set-uppers of male volleyball player on different tests of motor Abilities.

HYPOTHESES OF THE STUDY

1 There exists a significant difference between Spikers and Sett-uppers of male volleyball players on ‘Age’.

2 There exists a significant difference between Spikers and Set-uppers of male volleyball players on ‘Physical characteristics. To be more specified the following sub hypotheses were formulated.

Hyp.2.(i)

There exists a significant difference between Spikers and Set-uppers of male volleyball players on ‘Body Weight’ physical characteristics.

Hyp. 2 (ii)

There exists a significant difference between Spikers and Set-uppers of male volleyball players on ‘Body Height’ physical characteristics.

Hyp. 2 (iii)

There exists a significant difference between Spikers and Set-uppers of male volleyball players on ‘Standing Reach’ physical characteristics.

3 There exists a significant difference between Spikers and Set-uppers of male volleyball players on different test of Motor Abilities.

LIMITATIONS OF THE STUDY:-

Only field-test were used to assess the motor abilities of Spikers and Set-uppers.

DELIMITATIONS OF THE STUDY:-

1 The present study was limited to the male volleyball players or different colleges of Kurukshetra University only.

2 The present study was limited to the one selected one selected variable i.e. Motor Abilities.

3 The present study was constituted 44 sample of Spikers and Set-uppers in volleyball, 22 from each group.

RESEARCH METHOD

The purpose of the present study is to investigate motor abilities differences among male volleyball Spikers bad Set-uppers players at different colleges and state level to achieve these objectives survey method was used.

THE SAMPLE

In the present study, the investigator selected different Departments and Colleges as his field of investigation. Due to limited time and resource, the investigator selected sample of forty-four male College and State level Volleyball players (22 Spikers and 22 set-uppers) were taken as sample for the present study.

TOOLS USED

For each and every type of research the investigation need certain instrument to collect new facts or to explore new field. The selection of tools for a particular study depends upon various disposal of the investigator, the availability of suitable test, personal competence of researcher to administer, score and interpret the result. Taking these factors into consideration, the investigator used the following test such as:-

1 To take the age of a particular player, Department/college records and certificates were used.

2 To measure the body weight, a standard test procedure was adopted with portable weighting machine equipment.

3 To measure the body height, a standard test procedure was adopted with equipment of anthropometric rod.

4 To measure the standing reach, a standard test procedure was adopted with equipment of scale marked on the wall.

5 To measure the motor abilities among the Spikers and set-uppers of the volleyball (AAHPER,1965) for physical fitness and Copper Test Battery were used.

The test were applied in two phases one in the morning another in the evening.

TEST CONDUCTED IN THE MORNING:-

- (1) Standing Vertical Jump.
- (2) Vertical jump with Approach.
- (3) Basketball Throw.
- (4) Bent Knee sit ups for 30 seconds.
- (5) 9-3-6-3-9 meters test for agility.

Tests Conducted in the evening

- (1) 40 Meters Sprint
- (2) Block jump
- (3) Three consecutive long jumps with both feet together.
- (4) Forward bend and reach test.
- (5) 2.4 Kilometres run

The subject was given uniform warning up to about 15 minutes before the tests. Sufficient recovery period was also given in between the trials. The subjects did the test wearing sports shoes and kit. Every test was first demonstrated to the subjects by the investigators and the subjects were also given necessary instruction. The subjects were allowed to have one or two trials if needed.

STATISTICAL TECHNIQUE USED

For the analysis of the data in present study the measure of central tendency i.e. Mean and Measure of Dispersion (Standard Deviations) were applied. For collecting the quantitative responses on various components of motor abilities and for comparing the significance differences between motor abilities components of Spikers and Set-uppers male volleyball players, t-test was used.

MAIN FINDINGS

The main findings of the present study are given below.

1. There exist significant difference Spikers and Set-uppers male volleyball players on 'age'.
2. There exists a significant difference on 'Body Weight' physical characteristics between Spikers and Set-uppers male volleyball players.

3. There exists a significant difference on 'Body Height' physical characteristics of Spikers and Set-uppers male volleyball players.

4. There exists a significant difference on 'Standing Reach' volleyball players.

5. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Standing Vertical jump' test on motor abilities.

6. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Vertical jump With Approach (cm)' test on motor abilities.

7. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Basketball throw' test on motor abilities.

8. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Bent Knee Sit-ups For 30 Sec.(no.)' test on motor abilities.

9. Spikers and Set-uppers in volleyball have no significant difference with respect to their '9-3-6-39 Meters Test (Sec)' test on motor abilities.

10. Spikers and Set-uppers in volleyball have no significant difference with respect to their '40 Metres Sprint (sec)' test on motor abilities.

11. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Block jump (cm)' test on motor abilities.

12. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Three Consecutive Long jump(m)' test on motor abilities.

13. Spikers and Set-uppers in volleyball have no significant difference with respect to their 'Forward Bend and Reach(cm)' test on motor abilities.

14. Spikers and Set-uppers in volleyball have no significant difference with respect to their '2.4 kilometres run' test on motor abilities.

EDUCATIONAL IMPLICATION

The most outstanding characteristic of any research is that it must contribute something new to the development of the area concerned. So the investigator has to find out the educational implication of his study.

The present study has its implication for physical educators, coaches, physical trainer, selection committee, volleyball players and population in general who judge the Motor abilities in the game of volleyball.

The present study has its implication for physical educators and coaches. The knowledge regarding the

influences of motor abilities for the selection of volleyball players would be helpful to coaches.

For the present study has its implication for physical educator and population in general who judge the motor abilities in the game of volleyball in which an individuals is participating on the basis of their motor abilities index.

For the present study has its implication for volleyball players because the layers can become aware of their weakness and overcome it through the knowledge of different motor abilities skills. It is also very useful for players to perform better in the field.

The result of this experiment would add new objectives findings in the literature and coaches in the field of physical education and volleyball.

SUGGESTION FOR FURTHER STUDY

1. A study can be made taking in to consideration to some other correlated variables like sex, locality, etc.

2. A similar type of study can be undertaken on a longer sample for more comprehensive results and better generalization.

3. A similar study can be conducted in other part of country.

4. A correctional study of difference variables between Spikers and Set uppers can be taken up.

5. A study can be conducted with large sample of different districts in any part of country.