

Analysis of Volleyball Service Skill Test in Two different Situations

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Abstract

Generally the physical fitness and skill tests are being used to assess the individual ability of sports persons. And normally these tests are conducted in rested condition; however Coaches use it just to assess the level of their players. The purpose of this study was to assess the serving ability of two university representing players in rested condition and after physical exertion condition. Twenty four men volleyball players from Tamil Nadu Physical Education and Sports University Chennai, (N=12) and Ramakrishna Mission Vivekananda University Coimbatore (N=12) whom were under training to participate in the south zone inter university tournaments. Service test was conducted in rested condition (NC), followed by physical exertion (PEC) physical exertion consist of skill related movements which were repeated in five sets and two movements each. The court was divided in to parts and marked with values. Each subjects were given ten service attempts in both rested and after physical exertion. The values were recorded and analyzed. The result reveals that there were considerable differences exists between rested and physical exertion condition.

Key Words: Testing procedure, Talent assessment, Measurement and evaluation.

Introduction

Ever since the concept of measurement in physical education started the physical fitness and different sports skills have been measured in the rested condition only. One of the characteristic of these skill tests is that the subjects were asked to perform in rested state. The detailed information on how to execute the skill including the mechanics and technique were given. The subjects were given few practice trials, if necessary, and then they have to perform the skill. No one had thought of assessing the fitness and sports skills in game like situation. The coaches of young players often use test to assess their level, and to obtain information that will be helpful in predicting the players' future success. Even now the elite players are exposed to different skill tests to assess their ability in game like situation around the world.

The purpose is that just to assess the service test in volleyball to predict the performance level of the University level players. The advantage of this testing method is that the serving ability and accuracy is assessed in Rested Condition, (RC) and Physical Exertion Condition (PEC).

In this typical game situation the player performs service after involving defensive or offensive manures, for that it is planned to perform physical exertion before executing service. That is what I need to. Pack (1974) stated that the fatigue caused by physical exertion primarily

affects the central process involved between information receipt and intimation to the movement. Generally body activity and moderately high fatigue will impair performance requesting strength, endurance and rapid movements. Practice in fatigue condition will aid the athlete in adjustment to perform the skill under such condition. The ultimate aim of a coach is to match this condition in game situation. So coach should test the players not only rested condition but also after physical exertion condition to get the exact result.

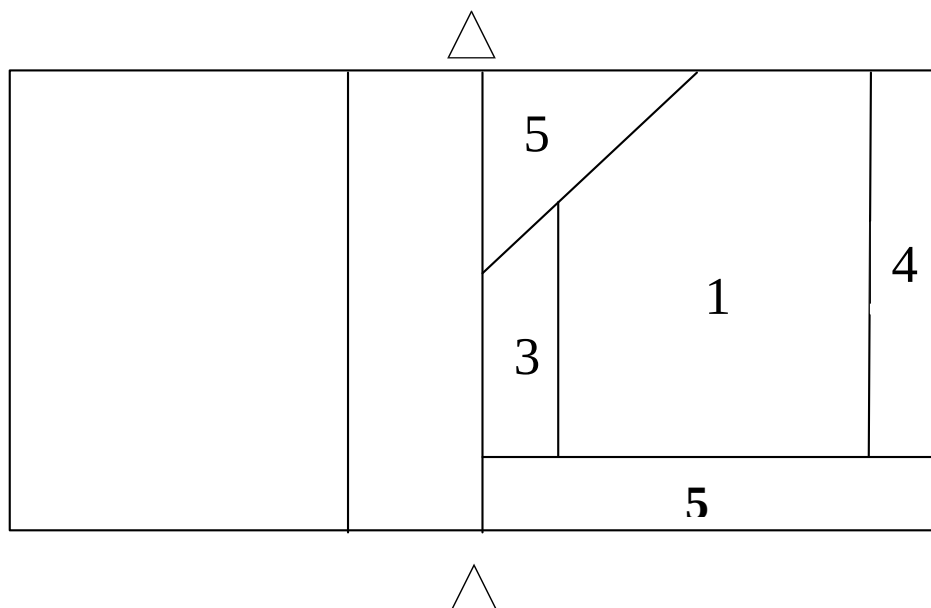
Review of Literature

Bartlett et.al(1963) evaluated a test composed of serving, receiving a ball with in form arm pass, and setting the ball for attack-hit. Thissen-Milder and Mayhew(1991) developed a battery that combined a) specific volleyball activities such as spiking receiving the ball with in forearm pass and passing the ball at a rectangle target apparatus marked on the wall b) physical test, c) motor test. Ronnie Lidor (2007) studied on accuracy in volleyball service test in rested and physical exertion conditions in elite and near elite adolescent players, concluded that no difference between the players' service scores in rested and physical exertion conditions were found.

Methodology

The test should stimulate a situation that the player will probably encounter during the game. As said earlier in a typical volleyball game situation the players perform the service after physical exertion such as moving rapidly. Twenty four players were selected from Tamil Nadu Physical Education and Sports University and Ramakrishna mission Vivekananda University men Volleyball teams. They were under preparative training to participate in the South Zone Inter – University competition. They were informed about the proceedings of this study and they willingly accepted to be a part of it. Accuracy of service was selected as depended variable, since it is provided information on the ability of the players to aim successfully at the opposite court. The designated area reflects less difficult areas, and more difficult areas and scores also given accordingly. Subjects were asked to execute ten consecutive services to the designated areas in the opposite court (as marked in the Figure – 1). The server was assisted by another player by supplying balls and was allowed eight seconds to make each service hit as per the rules of the Game. The points were recorded according to the target hit. The same service test was conducted immediately after physical exertion. The subjects were allowed to perform ten consecutive services to the designated target, however before executing the service they have to do blocking action the net near at zone 2, dig at 3 meter line. Repeat this blocking and digging movements for about 5 times then they have do service.

Figure- 1
Volleyball Court Marked with Values



Statistical Analysis

Analysis of Variance repeated measure was used to assess the serving ability of the players in two different conditions. Pearson Product movement Correlations were used to assess relationship between the total scores of the service test and number of high successful scores performed by all the players.

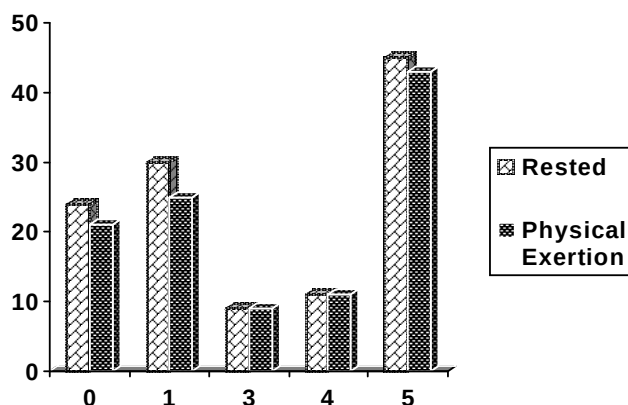
Table -I
Means and Standard Deviation of the Total Service Test

Service mode	Mean	Standard deviation
Resting condition	32.52	3.65
Physical exertion condition	30.08	1.97

Pearson Product movement Correlations revealed a moderate correlation ($r = 0.69$) between the total scores and number of service hit at high score area.

Figure-2

Percentage of Service that Hit the Different Target Areas



Discussions

The players of the both teams preferred to aim and execute the service at high point area; however by aiming the target they more likely miss the court and got less or even O points. Despite 51% of the services successfully hit the high value target. Previous service skill tests in volleyball required players to serve the ball in a rested condition, here they were asked to serve not only in a rested state but also immediately following physical exertion. It is suggested that it would more effective if it could be conducted under physical exertion conditions, because often players are required to serve the ball in similar situations during a game, particularly when they come for service after block or dig. Coaches can use these results obtained from the study, and encourage their players to aim the target and to minimize the errors.

The physical exertion condition is more reliable and realistic. Serving the ball immediately following physical exertion may appropriately reflect the skills needed from players during actual game situations. Players should prepare themselves to serve the ball after being involved in intense dig or block / attack-hit. This kind of test can provide coaches with relevant information they seek when assessing their players' ability well under real game situations. We expect the players can perform and achieve the target in an easy way during the rested condition than after physical exertion condition. Of courser it was true and the players were not challenging enough to achieve the best.

Conclusion

Generally Sports skills are being tested in the resting period just like physical fitness components are tested. However it is essential to evaluate the skills in Game like situation, in order to assess the player's actual ability. More over it helps the coach concerned to evaluate the player and even concentrate on the particular skill for effective execution, if the individual is not up to mark. This study certainly will help the coaches to assess the individual skill performance in Game like situation rather resting period.

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