# A Study on the Perception of Sport and Team Level on Skill Evaluation of Performance in Volleyball Players

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Abstract – Volleyball is a sport where the rally lasting many seconds and the break lasts double or longer than the rally. In the course of this rally, the volleyball player is essential in his skills (serve, reception, set, strike, block and defense) and vision of values. The goal of the analysis was to establish performance appraisal standards to determine the success of players during volleyball based on the Volleyball Information System requirements guidelines. The research focused on six variables: serving, assaulting, blocking, passing, setting and dig.

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## **INTRODUCTION**

Volleyball is a competitive sport in which a net divides two teams of six members. Each team attempts to score points by basing a ball on the court of the other team according to coordinated guidelines. Volleyball is basically a transfer game from one of the above skills to another, with choreographed squad interaction between ball positions. The teams selected to represent are the system, the offensive method, the coverage method and the defense system. The Volleyball Exercises are advanced exercises which strengthen the skills of volleyball teams and players. There are various volleyball exercises which teams and players may use to improve and grow their skills in every region, such as passing, serving, attacking, positioning, blocking, and digging. Including newcomers to wellseasoned professionals, exercises will allow both participants to achieve repeats in different strengths and roles.

#### ORIGIN OF THE GAME

William G. Morgan created the game Volleyball in 1895 at YMCA, Holyoke (Massachusetts), USA. Morgan originally released the game with the term "Mintonette." The game was primarily designed as a fun sandbox for the aged, because it was less aggressive and less painful. He built it from his own methods in athletic training and his actual knowledge at Y.M.C.A. In early 1896 a meeting had been held at the Y.M.C.A. College in Springfield, putting together many of the physical education administrators from the YMCA. In his presentation Morgan said the aim of the game was to keep the ball from one side to the

other on a high net. Professor Alfred T. H Alstead had been observing the presentation and listening to Morgan's clarification and wanted to direct emphasis on the action, the "ball's battle," and offered to substitute the name of "Mintonette" with "Volleyball," which Morgan and the conference approved. After the conference, a committee was appointed to study the rules for the promotion and teaching of the game. A short study was written in 1896 on the nature and laws of the game, and was later edited and written as the North American YMCA Athletic League's first formal manual.

The rules of the game were very clear at first. The key goal was to hold the ball in the air. The rules differed from position to position, players were not moving, and net contact, field size and number of players were not limited based on room and players available. There was no marketing of the game for the first 20 years.

# **GAME PATTERN OF VOLLEYBALL**

In peak results, the squad must monitor the abilities such that the series is not split when attempting to get the opponents to do this. The game Volleyball has a certain play pattern defined in fig. 1. The playing pattern mentions three distinct phases that arise in a series during play. Complex 1, complex 2 and complex 3 phases are identified.

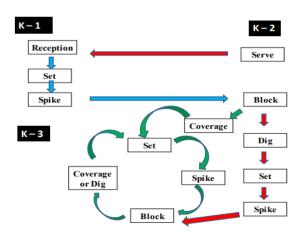


Fig1.1 Structure or Game Phases of Volleyball

Complex 1 involves collecting, setting and assaulting. Complex 2 involves serving, blocking, scraping, setting and spike. Complex 3 requires Block Cover, Collection, Bolt, Block or Coverage. The abovementioned pattern of play requires skill regulation. A few experiments were performed on the relevance of these strategies, leading to the final result of a game, taking into consideration operation and receipt, blocking performance and assault to consider the value of each ability involved. Spiking and blocking, spiking, service and blocking services as well as counter-attack, attack and good service receipt or setter output as predictors for winning a match. All skills are listed below,

# **IMPORTANT SKILLS IN VOLLEYBALL**

Volleyball is practiced solely on the basis of six essential skills teamwork. These competencies are developed below,

#### Serve

The serve is the first assault of the unit. It has two key aims: stopping the opponents from serving reception assault by slowing down and scored a point directly. One point identified with the serving is labelled "Ace." Technically, the purpose of the service is to begin playing, but also to launch an offensive. You can only gain a point by serving so it is necessary to hold the ball in motion and at the same time actively serving in an effort to gain one point or to drive the opponent to an unacceptable location.

Serving is the only talent in volleyball where the ball is entirely controlled by the particular athlete. The aim of the service is to bring the ball into action and, at most, to score a goal. The best way to award an object is to find things impossible to get around.

The Service is the only talent in volleyball where a single individual manages the ball absolutely. There are three key roles for the operation.

- 1) Attack used to score a point directly (ace),
- 2) An assault to cause the opposition to go bad and in turn become predictable.
- 3) A procedure for playing the ball

#### **Pass**

The pass is the first touch after the service with the ball. The main purpose of the transfer is to direct the ball in a specified goal region to the setter. The capacity of a squad to perform an successful attack after receipt of the service is highly based on the precision and consistency of the pass. If the move is not successful, the setter choices are decreased, causing a sluggish and repetitive assault.

The move is the main technique for efficient team play and must be perfected before other abilities can be used effectively. The object of the move is to guide the ball to the team leader.

Passing is used for accessing facilities with its various variants. Passing is one of Volleyball's most valuable techniques and is crucial to the performance of a game. Efficient passersby have a clear eye, time they glance at their friends before and after the game.

#### Set

The package is a ball which is aimed at a unique hitter with a particular trajectory and pace in order to attack it effectively. Typically, but not usually, the package is a second player ball assault after a move or dig.

The goal of the collection is to bring the ball in a place to hit the object. A concern of a setter is consistency in terms of height and positioning in order to keep the hitter accurate. A second priority is that this precision is paired with the capacity to determine accurately whom to pick the form of package to do so easily to disappointingly.

#### **Attack**

The term attack involves a team's combined offensive activities and a player's independent, productive activities to score a point. The attack is the key offensive tool with the intention of scoring a goal. There is a selection of possibilities for the attack.

The attack is also known as a spike or strike and is the most common and thrilling talent in volleyball. The player springs into the air to reach the advancing ball across the net in a rather challenging way while overcoming opposite blockers.

#### **Block**

The block is the first line of defense for a squad. Blocking is a very dramatic and explosive man oeuvre which fulfils several functions. The key role of the block is to catch the invaded ball by either returning the ball to the court of the losing team for a point or side or by deflecting the ball up and back to the safety of the player. Another essential six feature of the block is the filtering of a certain region of the court, which determines the orientation of the assault by the attacker and thus limits the court room the protection must occupy. Without the scanning of the block, the floor protection can only assume where the assault is targeted and the ball is far less effective. A reliably efficient block will also have an outstanding intimation factor; if the hitter is blocked again and again, it lacks faith and is vulnerable to errors.

The first line of defense is the block. The key goal of the block is to avoid the ball and send it to the side of the player for an immediate point or side outside. The second goal is to compel rivals to strike the ball in the court you are ready to protect.

This is the first defense in volleyball – it's the act of leaping up and putting your hands above and over the web to hold the ball in the side of the opposition squad.

"Blocking takes the best shot of a hitter, or takes the court down." The key purpose of the blocking method is to divert the assault on the opponents to their courts and to slow down, degrade or alter the assault on the strongest diggers.

# Dig

The first line of defense is the block and the second line are defense on the floor; the two are interlinked. The block reacts to the assault and block of the competitor. The key objective of the floor safety is to dig an attacked ball, which penetrates or passes the barrier, and to move it to the primary objective.

The dig is the second line of security. After the game is done, the participant gets a second shot to hold the ball going.

Dig is a protective individual ability demonstrated by a team to redirect the ball from the forearms of the team. The defensive player reads the other player, moves around the blocker and prepares to avoid the ball struck by an opponent off the floor.

The above six abilities play a significant role in the volleyball game. The ultimate goal of success is to excel in a market where only the best and dominant application of these competences, entirely dependent on performance criteria, can accomplish.

Volleyball is basically a transfer game from one of the above skills to another, with choreographed squad interaction between ball positions. The selected teams are decided by the method, the attack framework, the coverage method and the defense system.

# **Team play**

The serving reception method is the framework utilized by the reception squad to try to move the ball to the assigned handler. Systems may consist of five recipients, four recipients, three receptors and often two recipients. The most common higher-level configuration is a 3-recipient configuration consisting of two left sides, and a libero getting per rotation. This helps intermediates and right sides to specialize more in hitting and blocking.

Offensive schemes are the classes utilized by the opponent to aim to bring the ball in the opposition court (or collect points). Training also involves specified team roles of experience (see Sport section below). The 4-2, 6-2 and 5-1 structures are common formations (see the Formations, below). There are numerous attack strategies that teams can use to hold the opposition defense out of control.

Coverage schemes are the formations utilized by the offence in the event of a blocked attempt to defend their courts. Managed by five offensive players who do not target the ball explicitly, players travel in designated places around the intruder to dig a ball from their own court. The 2-3 system and the 1-2-2 system are common formations. Instead of a scheme, certain teams have a random coverage of the players closest to the runner.

Defensive schemes are the formations utilized by the defense to defend the attacker against the ball. The method specifies the players are liable, based on the position of the losing side, for which parts of the court. The 6-up, 6-back-deep and 6-back-slide protection systems are common. There are also numerous blocking techniques that teams can utilize to interrupt the offences of the competing teams.

Other teams can put their 5 other players on a screen while one player is ready to serve, to mask the vision of the receiver squad. This behavior is only unlawful if the server uses the computer and thus decisions are taken at the discretion of the official to determine the effect that the computer has on the willingness of the receiver team to move the ball. The most common screening style includes a W formation that takes as much horizontal space as possible.

#### SPORTS PERFORMANCE

"Sports success is the consistency of effort and outcome of sports practice or a dynamic series of acts assessed or analyzed on the basis of socially accepted criteria"

The success of an individual during a game is the end result of all influences. These variables may be separately analyzed and compared to decide the effects on overall results. The key element in sport success is the state, condition, technology / coordination, strategies and personality.

# PERFORMANCE EVALUATION IN VOLLEYBALL

Performance is a product of different variables in the process. These considerations fell into diverse fields such as biology, education, health, psychology, technology and tactics. Therefore, it is not quite easy to analyses all these variables during the game. Numerous ability assessments are available in the volleyball sector. Players created the volleyball ability test in order to assess overall volleyball skills, the volley-ball skills have adapted to evaluate volleyball and volley-ball ability, and the volleyball skills test has been established to assess volley-ball skills within a given age range in order to determine the potential 8.

However, all these measures just assess ability, precision or performance. These assessments are not necessary to assess player performance. As these assessments are not affected by external variables such as physiological (geographical adaptability), environmental (opponent, public), psychological (stress, fear, decision-making, game pressure), technological (knowledge and skills mastery), operational (political and technical) and competitive experience. It is daunting complicated to develop an assessment process or parameters that will address all these aspects during play. Therefore, a performance assessment or performance appraisal tools are the basis for the need to evaluate the Player's performance in the actual game, since the literature rating scale addresses a device for the measurement of the extent to which a person has such behavioral characteristics and qualities that cannot be readily defined through objective assessments.

## **RATING SCALES**

Rating is some form of coding (qualitative or quantitative) of perceptions, behaviours and cognitions (Barrett, 2001). The evaluation scale is a performance calculation, requiring a rational judgement focused on a checklist of parameters

Rating Scale Types

There are four major categories of literature scoring, as

- a) Numerical rating scale,
- b) Graphic rating scale,
- c) Descriptive graphic rating scale,

d) Ranking method.

# a) Numerical Rating Scale:

One of the more basic types of rating scales is where the rater checks or circles a number to define the point of which a trait is present. In general, a verbal definition is provided for of series of numbers which remains constant from one characteristic to another. The quantitative rating scale is useful for classifying features or characteristics into a small number of categories of 9 and where there is a common consensus on the categories described by each number.

## b) Graphic rating scale:

Each function is accompanied by a horizontal line in the graphic rating scale. In order to show the existence or absence of such characteristics, the test is shown by putting a check or cross on a diagram. Different types of marked on the line, but if the rater wants, it is free to search between them. To define particular types, usage of individual terms such as never, always, often etc. has no benefit over the use of numbers used in the previous form. Raters have no consensus on the definition of such a word, although sometimes and sometimes. A conduct summary that clearly shows the presence or absence element is important.

## c) Descriptive graphic rating scale:

This measurement type utilizes detailed phases to assess the points on a graphical scale. The explanations demonstrate the actions of individuals in various sports on the scale.

### d) Ranking method:

No typed scale is required for certain ranking procedures. The shortest form of classification is perhaps the most appropriate and well known of them. This method clearly rates the pupils (or product) to be measured in the other method in which the rater estimates include the characteristics to be evaluated. Number of judges will then aggregate ratings into a cumulative or average score. A realistic adjustment to the normal system of grading allows the rater to classify the student into a variety of classes dependent on average consistency, accompanied by letter grades including A, B, C, D and E. these classes are allocated.

## Need to develop Rating Scale in Volleyball

As described in this article, since its creation the game has seen many transformations. Initially, the game was conducted by utilizing the "Side out Method," which extended the game time, if the serving team didn't control the rally, the score would not be better and service would have to shift without a score rise. Therefore, the Rally Point Method was

adopted to reduce the match length and render the game more appealing. Because of the rally method, the game became more efficient, quicker and more appealing to the public, but the danger also increased.

This has correspondingly raised both physical and psychological burden on a player. So, it is important that resilient players who can perform under intense pressure are established. A rise in the risk factor has also led 10 players to rise their success in the game. In essence, "accessible or unrestricted observation" has made the success appraisal challenging. Unique standards-based performance appraisal software or manual evaluation systems were therefore needed. Different academic studies have contributed to the creation of a range of measurement and interpretation methods in volleyball. Any of them, though, include only the study or quantification of particular abilities.

A method of notational analysis to assess the volleyball setting efficiency. The aim of this analysis was to evaluate the probability of some consequences in each scenario. Setting within three to five feet of the range of 25 separate setting conditions culminated in the maximum likelihood of a point and the lowest possibility of a point for the competitor. Low sets, whether within or outside, often resulted in a high chance of winning one stage. The lowest likelihood of victory and maximum probability of a point for the competitor is large sets, whether inside or outside in accordance with the hitter.

Technical-tactical volleyball success assessment platform. This method analyzed the numerous components of scientific and operational facets. This allows for an identification of each player's total performance level and individual output through behavior and part. The efficiency of sequential behavior of set-to-counter attacks was measured on the basis of a 5-point numerical rating system by a 3member panel of professional coaches. During their analysis, it was noticed that, the greater the efficiency of setters, the higher the efficiency of attackers. Florence submitted his thesis on women's volleyball abilities assessment. He practiced the Women's Volleyball Team at Brigham Young University, where he registered and tested all his skills (Pass, Place, Strike, etc.). Each of these general trends preceded events: serving-outcomes, pass-set-attack outcomes and block-dig-set-attackoutcome. Many of these experiments have focused on human volleyball abilities or multiple trend findings. However, relatively few experiments have produced an assessment system to measure the players' full success in a volleyball match.

Performance assessments and analyses are the most critical mechanism for raising the quality of each game and a range of federations have worked hard to improve tools focused on knowledge from different volleyball coaches and veterans.

It analyses skills output according to location, speed, ball trajectory, method of execution, etc. The programme is primarily used for all national teams but is inexpensive on the lower stage. Players, the programme for success measurement during the match is accessible on the market. Both are easy to navigate on a P.C. Even on Android smart phones. This cannot, however, be used manually for performance measurement. VIS was created by the FIVB to produce data for events focused on the FIVB, including World Championships and beach events. VIS is really strong programme to produce statistical details and provide media and participants with knowledge regarding tournaments, results for individual players and teams across any capacity and total capabilities. It uses a scale of three measures, on which talents are separated into two groups. Nonscore and scoring. Score skills are ones that gain a clear point such as serve, strike or block, while nonscoring abilities help to score a point, such as transfer, set or dig. VIS is a three-point evaluation, measuring performance, usual and fault scoring abilities and non-scoring abilities in terms of excel, usual and fault.

## **CONCLUSION**

Volleyball is a globally highly common activity for participation. It is strongly controlled by sequential action management. The success of the players in one phase is determined by their output in the previous process. It indicates that all skills are necessary for assessing or assessing overall success during the game To build a success assessment scale in India, the study issue was taken by researchers as the 'Creation of a volleyball performance assessment framework'.

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