



Study on the Sport of Volleyball

*Ravindar K and **Dr. Shubhangi S. Rokade

**Research Scholar, Department of Physical Education, SunRise University, Alwar, Rajasthan (India)

*Assistant Professor, Department of Physical Education, SunRise University, Alwar, Rajasthan (India)

e-mail: koppularavindar@gmail.com

Abstract: Volleyball has changed a great deal since William Morgan first invented the game in a YMCA gymnasium more than 100 years ago. However, as you can see from the first line of his rulebook, the spirit of the game has remained the same. Morgan's visionary flexibility in the number of participants and acceptable venues for the sport has resulted in incredible participatory popularity. From backyard grass courts to sand volleyball Olympic venues and major arenas, volleyball is one of the most popular sports in the world. In the United States alone, 6.6 million men and women play volleyball annually.

[Ravindar, K. and Rokade, S.S.. **Study on the Sport of Volleyball**. *Rep Opinion*2023;15(4):14-17].ISSN1553-9873(print);ISSN2375-7205(online).<http://www.sciencepub.net/report>.04.doi:[10.7537/marsroj150423.04](https://doi.org/10.7537/marsroj150423.04).

Keywords: VOLLEY BALL, SPORTS, PLAYERS

Introduction:

William Morgan, director of physical education at the YMCA in Holyoke, Massachusetts, invented volleyball in the winter of 1895 as a less rough alternative to basketball that still demanded the same degree of physical exertion. Volleyball had a structure similar to baseball, with the game being played over nine innings and points scored only by the serving team. An inning consisted of one team serving to the other until the serving side lost three rallies (called outs) followed by the opposing team doing the same. Both teams then rotated and a new inning began. The court was marginally smaller than modern courts (25 feet [7.6 m] square on each side of the net instead of the current 29 feet, 6 inches [9 m]) and the net height was 6 feet, 6 inches (2 m) from the floor. The ball was batted from one player to another and from one side to another without the ball coming to a visible rest. Doing so resulted in an illegal contact and loss of rally, which is a similar violation as in volleyball played today. Several differences exist between Morgan's volleyball and the modern game. First, players were allowed to dribble the ball anywhere on the court beyond the dribble line (a line running 4 feet [1.2 m] from the net) as a method of controlling it on their side. Players were allowed as many contacts as they wished before sending the ball to the opposing court, as opposed to the three contacts current players are allowed. The server was allowed a second serve if he missed the first attempt as in tennis. Any ball striking the net, except on the first service, was deemed illegal and resulted in the loss of rally for the last team that touched it.

Any ball striking the line was considered out of play, while in today's game, the line is considered in

play. You can read all of the original 1897 rules at www.archive.org/details/officialhandbook00athl through their website. Volleyball grew in popularity through the widespread influence of the YMCA as well as through affiliated physical education programs at Springfield College (Massachusetts) and George Williams College (Illinois). The YMCA's international connections took the game to Canada, the Philippines, China, Japan, Burma, and India. Later, volleyball found its way to South America and Europe. According to the Fédération Internationale de Volleyball (FIVB), in 1916, an estimated 200,000 people were playing volleyball in the United States, and the National Collegiate Athletic Association instituted its first volleyball rulebook for intercollegiate competition.

After being demonstrated in an American sports exposure event at the 1924 Paris Olympic Games, the international interest in volleyball continued to grow until it was added as an Olympic sport to the Tokyo Games in 1964. Despite its invention in the United States, other countries dominated global competitions and in the women's competition that year, Japan took advantage of its home court and won the gold over the Soviet Union. The Soviet Union won gold in the men's tournament, however, beating Czechoslovakia. The most indoor volleyball Olympic medals across both sexes belongs to the Soviet Union with 12, a number that climbs to 18 when Russian medals are included after 1996. Japan and Brazil are the next closest with nine. The United States has won three Olympic gold medals in men's indoor volleyball (1984, 1988, and 2008), while the women's team has won three silver indoor volleyball medals (1984, 2008, and 2012).

While most participants compete in indoor volleyball, 4.4 million Americans also competed in sand volleyball. In 1992, beach volleyball was a demonstrated sport at the Barcelona Summer Olympic Games and officially added to the roster of Olympic sports in 1996. In contrast to indoor volleyball, sand volleyball was invented in southern California and continues to showcase the sport's top talent. American volleyball legend Karch Kiraly, with his teammate Kent Steffes, added a beach volleyball gold medal to the previous two he had won with the men's indoor team in 1984 and 1988. In the London Games of 2012, Misty May-Treanor and Kerri Walsh won their third consecutive gold medal in beach volleyball.

Grass tournaments and leagues have led to a variety of tournament formats, themes, and venues. The flexibility of Morgan's original rules regarding the number of players and the venue has facilitated volleyball's growth. Tournaments and leagues can be found for mud, snow, pavement, or water volleyball and for teams of two through nine participants. Sitting volleyball is the established Paralympic version of the sport in which athletes with lower-extremity disabilities can compete on a lower net and smaller court. The ways volleyball can be played is limited only by imagination, and many fun alternatives have been invented.

Rules:

The rules that we are going to use most in this book are those adopted by the National Collegiate Athletic Association (NCAA) and the National Federation of State High School Associations (NFHS). There are some subtle differences between the international game or those used in recreation departments. Volleyball rules have changed significantly in the last 20 years and it is expected that they will continue to change as volleyball grows as a sport popular with spectators and television advertisers. Before competing in a match, it is wise to identify what organization's rulebook is governing the match.

Court Dimensions and Net Height

The standard volleyball court is composed of two squares 29 feet, 6 inches x 29 feet, 6 inches (9 m) divided by a net (figure 1). In men's volleyball, the net height is 7 feet, 11 5/8 inches (2.43 m), and in women's volleyball the net height is 7 feet, 4 1/8 inches (2.24 m). Antennae are attached to the net to mark the outside edges of the sidelines at the net. Any ball that contacts the net outside of the antenna or goes outside or over the antenna as it is played to the other court is illegal and indicates a loss of the rally. Both sides of the net have an attacking line that runs the width of the court 10 feet (3 m) from the net. Back-

row players are not allowed to contact the ball higher than the net to attack or block balls in front of the attack line. All serves must be made with the player making contact between the two hash marks extending past the sidelines at the end line. A referee stand is attached to the stanchion on the pole farthest from the team bench area and scorers' table. Both of the poles and the referee stand should be covered in protective padding. It is also recommended that 10 feet (3 m) of free space beyond each sideline and end line be made available to ensure the safety of players running after errant balls.

Scoring

Until 1998, most volleyball matches were played using side-out scoring in which the serving team was the only team eligible to score points. The length of a match was unpredictable, and matches were rarely broadcast on television because of scheduling difficulties. To make the game more appealing to television producers, the Fédération Internationale de Volleyball made the move to rally scoring in which a point is given to the team that wins the rally regardless of serve. A match is completed when one team wins three out of five or two out of three sets. A set is completed when one team reaches 25 points and has a 2-point lead, except in a match deciding the final set (the third or fifth), when the set is played to 15 points. If a team is not able to establish a 2-point lead when it reaches 25 points (or 15 points in the final set), play continues until a team can gain a 2-point lead. Seldom is a scoring cap enforced and the set can continue ad infinitum until the proper separation is achieved. Most two-of-three-set matches last from 45 minutes to an hour; a typical three-of-five-set match may last 90 minutes to two hours.

Team Members, Lineup, and Substitutions

A standard indoor volleyball match is played with six players on the court who are designated by serving order. The server is the player located in the right back. Players rotate clockwise every time a team wins the serve from its opponent and must maintain the order in which it started the match (figure 2). Players must be in service order when the ball is served by either side, but once the ball is in play they can move to any position on the court. Playing rules prevent back-row players from attacking or blocking balls above the height of the net in front of the attack line, so it is best if back-row players remain in the back row while the rally is played. Substitutions are allowed; however, once a substitution is made, that player is limited to playing in the same position in the serving order for the duration of the set. Players are allowed to reenter the game as often as they choose, but most rules limit a team to 12 or 15 total

substitutions each set. While the official rules of volleyball require six players, the game can be played with any number less than that. As long as both sides are equal, you can play 5v5, 4v4, or even 1v1, with each player getting to make three contacts in a row. Clearly establish the rules before play and have fun with the variations.

Playing the Ball

Volleyball, above all else, is a rebound team sport. The ball must never come to a visible rest while being played. When a ball is caught or thrown or when contact with the ball is longer than an instant, the contact is illegal and results in a point for the opponent. It is also a team game and a single player cannot contact the ball two times in a row. The only time a double contact is allowed is when playing the ball from a serve or an attack and the attempt is a single move to the ball. At no time can a player make an attempt to play a ball, make contact, and then make a successive contact through another attempt. If during the course of a single attempt to play a served or attacked ball the passer makes contact with her arms and then her shoulder, the double contact is allowed. Only front-row players are allowed to attack the ball over the net in front of the attack line. For a back-row player to attack the ball, he or she must jump from behind the attacking line before playing the ball. Landing in front of the attacking line is legal. When blocking, players may contact the ball only when a portion of the ball has entered airspace over the net or on their side, unless the opponent has used all three of their contacts. For instance, a blocker cannot reach across the net and disrupt an opponent's set unless the ball has crossed into the plane above the net. However, if the opponent has used all three contacts and the ball has not yet reached the plane, a blocker may reach into the opponent's court and contact the ball. Touching the ball on the block does not count as one of the available three contacts each side is allowed. It is illegal to attack or block a serve. Simultaneous contact between two players is counted as only one contact.

End of Rally

A rally ends and a point is awarded when one of the following occurs:

- The serve does not cross the net or lands out of bounds without touching a receiving player.
- A team is out of rotation when the ball is served.
- A ball is terminated to the floor.
- A ball cannot be returned by a team after touching one of the players.
- A team uses four distinct contacts (not including a block touch).

- A team commits a ball-handling or protocol violation.

- A team contacts the net while playing the ball (unless the force of the ball contacting the net forces it into the offending player).

- A player crosses over the center line completely (within the antennae) or interferes with the opponent's ability to play the ball.

In rally scoring, a point is scored at the end of each of these rallies. A replay can be called in the following situations:

- Simultaneous net contacts by opposing players.

- Interference by something or someone on the playing court (typically a ball rolling on the court from an adjacent court).

- A player injury during a rally when continuing the rally would put the player's safety at risk.

A replay results in no point being scored and the last team to serve retaining that right. A point can also be scored when the first referee assigns a red card to a team or coach. Red cards can be assessed for unsportsmanlike or disruptive behavior, improper substitution or time-out requests, or the use of aids considered illegal. A yellow card may be used at the referee's discretion as a warning for any of these actions as well.

Warm-Up

A dynamic warm-up is recommended prior to beginning any exercise program and volleyball is no different. Gradually increasing the intensity of movement from light (e.g. jogging in place and arm circles) to moderate (e.g. driving the knees up and down and throwing the ball with a partner) will help to increase blood flow and prepare muscles and joints for activity. Since volleyball is a strenuous sport on the shoulder, it is advisable to devote a little extra time to this important joint. Working with a partner, toss the ball to yourself and attack it to your partner's feet, gradually increasing the force and speed of your arm swing. You can finish your warm-up with some light stretching.

Officiating

The officiating crew includes the first referee, second referee, line judges, and the scoring table. While it is possible to play volleyball without an officiating crew, officials that take their responsibilities seriously can positively influence pace of the game and the fairness of the outcome. The first referee is the lead official and she executes her responsibilities from an elevated stand located at the net opposite the team bench and scorer's table. Before the match, the first referee examines all equipment to ensure it meets competition standards, discusses with

team representatives match expectations and changes, and organizes the warm-up protocols agreed to by each team. During the match, the first referee blows her whistle to authorize serve, signal rotation, and ball-handling and net violations (at the top of the net only). It is her decision, with help from the second referee and the line judges, whether balls land in or out of bounds and which team was the last to touch the ball in play. The first referee sanctions all misconduct and team delay penalties, signals for time-outs and substitutions, and can suspend play if the crowd becomes too disruptive. Figures 3 and 4 show the most common hand signals officials and line judges use during a volleyball match. The second referee is located at the net pole closest to the scorer's table and team benches and is primarily responsible for ensuring that protocols are followed. The second referee is responsible for ensuring the score is accurate, checking serving order and rotational alignments of the receiving team, and identifying center-line and net violations. The second referee can assist the first referee in ball-handling violations and block touches but should never blow his whistle except for the situations that are clearly under his purview. On occasion, the first referee will ask the second referee to confer over a call, but it is always the first referee's responsibility to make judgment calls.

Conclusion:

Studying the history of volleyball games in India suggested that the government could not encourage the fundamental standard of volleyball games. The biggest challenge for gaming is to discover sponsors such as cricket, soccer, basketball, kabaddi, etc. It's quite hard to inspire the game in the youth especially in rural areas of countries especially districts without the sponsors of sports. Furthermore, the relevance of volleyball today and the operational facets of the Sports Authority of India have not been studied. Furthermore, The latest thesis has therefore been performed by the researcher to investigate the history and growth of volleyball.

References:

[1]. García-de-Alcaraz, A. G., Valadés, D., and Palao, J. M. (2016). Evolution of game demands from young to elite players in men's

- volleyball. *Int. J. Sports Physiol. Perform.* 12, pp. 788–795. DOI: 10.1123/ijsp.2016-0027
- [2]. Sheppard, J. M., Gabbett, T. J., and Stanganelli, L. C. R. (2009). An analysis of playing positions in elite men's volleyball: considerations for competition demands and physiologic characteristics. *J. Strength Cond. Res.* 23, pp. 1858–1866. DOI: 10.1519/jsc.0b013e3181b45c6a
- [3]. Hughes, M., and Franks, I. (2004). *Notational Analysis of Sport. Systems for Better Coaching and Performance in Sport.* M. Hughes, & I. Franks eds, 2nd Edn. London: Routledge
- [4]. Hughes, M., and Franks, I. (2008). *The Essentials of Performance Analysis.* London: Routledge
- [5]. Koch, C., Mauthner, T., Tilp, M., and Schrapf, N. (2009). Evaluation of visual position estimation in beach volleyball. *Int. J. Perform. Anal. Sport* 9, pp. 332–343. DOI: 10.1080/24748668.2009.11868490
- [6]. Zemková, E., Vilman, T., Cepková, A., Uvacek, M., Olej, P., and Simonek, J. (2017). Evaluation of a test module to measure relevant components of ball release height in jump throws in team handball. *J. Hum. Sport Exerc.* 12, pp. 29–40.
- [7]. Natali, S., Feriali, D., La Torre, A., and Bonato, M. (2017). Physical and technical demands of elite beach volleyball according to playing position and gender. *J. Sports Med. Phys. Fit.* 59, pp. 6–9. DOI: 10.23736/S0022-4707.17.07972-5
- [8]. Giatsis, G., and Zahariadis, P. (2008). Statistical analysis of men's FIVB beach volleyball team performance. *Int. J. Perform. Anal. Sport* 8, pp. 31–43. DOI: 10.1080/24748668.2008.11868420
- [9]. Costa, G. C., Afonso, J., Brant, E., and Mesquita, I. (2012). Differences in game patterns between male and female youth volleyball. *Kinesiology* 1, pp. 60–66.
- [10]. Couvillon, A. (2004). *Sands of Time. The History of Beach Volleyball.* VO:3. Hermosa Beach: Information Guides.

3/20/2023