



Performance Of Volleyball Players On The Bases Of Physical Skills And Anthropometric Variables: A Qualitative Study

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Abstract

Volleyball is one of the most globally renowned games in terms of global popularity. In this game both male and female can participate in each team. The game play relies heavily on physical activities such as jumping, landing, and quick movements, often can be causing strain on the musculoskeletal system and leading to injuries. This study aims to define the performance of volleyball players on the bases of their skills and anthropometric qualities and the power, strength and endurance of volleyball athlete among different levels of competition. For this reason, agility training is crucial to improving a player's ability to change direction swiftly as and when required by the game play. Although it is relatively safer than other team sports, actions like jumping, blocking, and spiking can lead to potential injuries. Properly monitoring the training loads and injury prevention during training skills should be the major focus in formulating a holistic training methodology in volleyball training skills. The main goal of this literature study is to evaluate the impact of various training interventions on agility and other performance parameters specific to volleyball players. The range of research approaches and interventions described in this literature review highlights the significance of agility in volleyball training of the players. In many studies, has been founded that the use of tailored skill programs for volleyball players have been shown to have positive effects on agility, strength, and jump performance. Although there are limitations to the study design and sample size, the findings from this review necessitate the need for better scientifically informed skills programs to reduce injury risk while enhancing player's overall performance potential. To conclude, the current literature review highlights the importance of the players in volleyball game, providing insights into effective training strategies and highlighting the low quality of evidence, suggesting the need for well-structured research on the topic. Volleyball games require good motor skills and cardio respiratory skills. Power, strength and endurance become very influential factors in performance and winning the match. This research is completely quality based study; secondary data has been used in this study. In the findings has been

concluded that performance of volleyball player's skill are based on elite athlete, both senior and junior, have many differences from local athletes based on power, strength and endurance.

Keywords: Performance, Skills, Volleyball, Physical skills, Anthropometric

Introduction:

As a vital component of society, sport has a significant and positive impact on a variety of social life domains. Physical activity is referred to as sport, and development is any positive impact on one's health, social standing, or finances. Players that participate in sports develop life skills and strive for academic excellence. Better cognitive functioning, as well as better grades and test scores, school satisfaction, school dedication, university aspirations, and reduced dropout rates, were all associated with sports participation. For all humans, physical activity is essential. It is divided into two sections: competitiveness and recreation. At present competitive spirit and team have gained more popularity as they are highly rewarding. It unites the entire planet under one roof except from this. There is growing evidence that physically fit people live longer and perform better than physically unfit people. A completely fit person possesses the strength, power, speed, agility, endurance, and social and emotional maturity that come with being in his prime. Assessing physical fitness is becoming more and more crucial for organizing and evaluating training programs for athletes as well as helping with sportsmen selection. For improved performance and efficiency, it is crucial that athletes in India have their whole physical fitness level professionally evaluated.

Sports, as a part of human education have always existed in the human society in from one to others. Since time immemorial, even before the dawn of civilization and culture, physical exercises have been a very important aspect of human existence. In the primitive societies the necessity for survival i.e. protection against hostile environment and wild beasts, motivated man to keep himself physically fit and strong enough in comparison to stronger forces of the nature. The human life was hard in most of his working hours where they devoted for hunting animals for food. In those days there were no machines to help man in their work. That was the reason they depends only upon their physical powers and physical skills. Human considered his body to his prize possession and its maintenance and protection were his primary concern. Survival of the fittest was the order of the day. Man lived in such a state for thousands of years. There was neither any organization nor system, to protect poor in the society like present.

Volleyball game occupies a significant place among all other games and sports. In some respects it is unique as a sport. It is an ideal sport and a grand energetic game, giving enjoyment and pleasure, determining fitness and dedication. It requires physical and mental attitudes to be on top goal to tackle all eventualities in the match. In order to achieve optimum performance in game and sports, physical education teachers, coaches and trainees has to understand about all these factors. The factors are physical fitness, technical and tactical level of sportsman, physiological fitness, physiological make up and finally anthropometrics measurement of the performer and contribute to overall performance. Teachers or coaches must train the performer keeping view of these aspects in their training program. Volleyball, which is an excellent sports

event among team sport, has been widely accepted as a highly competitive as well as a recreational game throughout the world. It is now recognized as one of the most breath taking and dramatic sport of the Olympics both from the players and spectators view Point.

Volleyball has developed into a highly competitive sport which requires a high level of physical, physiological and psychological fitness also. Volleyball is the game which requires specific body morphology which may best suit to demand of game. The game is itself having a high level of competition requirement quick sudden movements and fast reaction. Modern game of Volleyball is characterized by absolute self control and maximum concentration. Volleyball is a complex game of simple skills. The Volleyball court is a rectangular field with the size of 9×9 m on each half separated by a net of 2.24 m in height in the middle. Two teams in the match, as opponents, exercise various skills and tactics to attack and to defend. The ball is served into play through attack. The players try to make the ball fall down onto the ground of the opposite side. To defend, they try to prevent the ball from falling down onto the ground of their own side.

Volleyball is a sport played by two teams on a playing court divided by a net. The objective of the game is to keep an inflated ball aloft, preventing it from contacting the ground or playing surface on our side of the net, while attempting to score points by putting the ball into play on our opponent's side of the net with such force or skill cannot be returned. The modern game requires true teamwork, and is an elegant blend of power and fitness, speed and quickness, jumping and leaping. In Volleyball the spiking is most attractive skill of the game as well as spike plays an important role in winning the competitions. In Volleyball, technical and tactical skills, anthropometric characteristics and individual physical performance capacities are most important factors that contribute to the success of a team in competitions.

In the last fifteen years the sport of Volleyball has become popular all over the world. The increasing number of high quality professional teams has made official matches more intensive and spectacular. Today, competitions such as the World Championship, the world cup, the World League and the Olympic Games entail several exhaustive matches played very close to one another. As a result, top ranking players are forced to improve their quality of technique with high intensive intermittent movement in dynamic competitive institutions. The game of Volleyball offers opportunities for the development of strength, endurance, speed, agility, and neuron-muscular skills as well as immediate action along with many precise educational outcomes. The game of Volleyball requires a conditioning program, which develops flexibility, muscular strength, power and agility all of which must be integrated to achieve the optimum skill performance from each player.

Psychology as a behavioral science has made its contributions for improving sports performance. It has helped coaches to coach more effectively and player's to perform more proficiently. This psychological aspect of sports is gaining much attention among sports administrators. A rapidly growing area of interest in sports psychology concerns the use of stress management, procedures such as bio-feedback and relaxation training to endurance athletes to improve their performance by reducing anxiety, aggression and to improve

motivation level. Volleyball is a highly competitive sport which requires a high level of physical, physiological and psychological fitness. Modern game of Volleyball is characterized by skill, accuracy, technique tactics and differentiation, which can be facilitated by absolute self control, concentration and maximum motivation level at the ground.

Background Of Volleyball:-

Volleyball is a excellent game that offers many benefits. It is an intense and quick- paced game that demands skill, strength, agility, teamwork, and intelligence from its players due to its intense competitive nature. At its most basic, it's a simple, enjoyable game that anyone, even small children and novices, can easily pick up and enjoy. Boys and girls, as well as men and women, can play together for enjoyment.

One of the most prosperous, well-liked, competitive, and leisurely sports in the world is volleyball. It moves quickly, is thrilling, and features explosive action. However, volleyball is distinct from other rally games due to a number of important overlapping aspects that work in concert with one another. Rivalry reveals hidden talents. It demonstrates the highest level of talent, spirit, originality, and beauty. All players in volleyball, with a few exceptions, are able to attack and block at the net as well as defend or serve from the back court. One of the most popular team sports in the world is volleyball. Volleyball is the most popular indoor competitive sport in numerous countries. In terms of participation worldwide, it comes in third place (Welch, 1966).

Review of Literature:-

Ayat (2022), study was to determine the association between the motor reaction speed and the performance level of volleyball defensive and receiving skills in order to establish a training program. Data was gathered from 28 volleyball players at the Sport School in Hadayek al-Qubba, Cairo, in 2021–2022, using the experimental method employed by the researcher. The research's findings showed that the suggested training program helps volleyball players improve their motor response speed. It also showed a strong relationship between the players' ability to receive and defend the ball and their motor response speed.

S. Trecroci (2021), study was to look at the connection between young volleyball players' physical performance and fundamental cognitive processes. A total of forty-three female volleyball players, ages 11.2 ± 0.8 years, underwent cognitive performance tests that included the visual search task, the flanker task, which measures executive control, perceptual quickness, and simple response time (clinical reaction time). Additionally, a battery of tests was utilized to evaluate motor skills (change of direction, vertical jump, and balance) and volleyball-specific skills (precision of setup, passing, and serving). A significant positive connection ($r = 0.45$, $d\text{-value} = 1.01$) was observed between the cumulative score that summarizes cognitive functions and the cumulative score that summarizes physical performance unique to a given sport, according to Pearson's r correlation analysis. Moreover, there were discovered to be small-to-medium associations ($d\text{-values}$ ranging from 0.63 to 0.73) between motor and cognitive abilities. These results imply

that volleyball players with higher basic cognitive functions also have better physical performance tailored to the sport, based on the cumulative scores. Our results support further research into the relationships between cognitive and motor abilities in the context of athletic performance.

Budhe (2020), this study is to compare the motor fitness components of various athletes. In the highly competitive sports environment of today, motor fitness components are essential to success. The researcher chose thirty-eight ($N = 38$) male individuals, ages 18 to 28, with the following characteristics: mean $\pm$ SD: age 20.31 ± 1.82 years, body height 160.62 ± 7.61 m, body mass 55.07 ± 8.13 kg. All analyses were conducted using SPSS version 14.0, the Statistical Package for the Social Sciences. One-way Analysis of Variance (ANOVA) was used to examine the significance of differences in the means of each group for each selected variable. In all analyses, the 5% critical threshold ($P < 0.05$) was deemed to indicate statistical significance. To put it briefly, the results showed that there were negligible differences between inter-varsity handball, volley ball, and basketball players on the sub-variables of motor fitness components, such as flexibility, balance, agility, and speed.

Govindaiah et. al. (2019), the aim of the study is to determine how university men's volleyball players' playing ability and various motor fitness metrics relate to one another. Thirty-five university-level volleyball players, ranging in age from 18 to 25, who had represented their respective universities in the South Zone Volleyball Tournament 2018, were chosen at random to serve as study participants. In terms of the motor fitness variables, the independent variables included muscular strength, explosive power, speed, agility, flexibility, and endurance. The Coaches Rated Scale, which uses a 10-point rating system, was used to evaluate playing skill, which was seen as a dependent variable. The relationships between the chosen dependent and independent variables were ascertained using the data that was gathered. The relationship between the chosen variables was ascertained using the Karl Pearson's Product Moment Coefficient of Correlation. The significance threshold was set at 0.01 and 0.05. The findings showed a positive association between men's volleyball players' playing ability and the following characteristics: flexibility, muscular strength, explosive power, agility, and cardiovascular endurance. For volleyball players to advance in their playing abilities, motor fitness is paramount.

Research Objectives:- The main objective of this research is to evaluate the physical skills based performance of volleyball players

Research Methodology:- In this research data is completely based on secondary data. And this paper is descriptive and qualitative.

Conclusion:-

The systematic review of various studies explores the performance of volleyball players on the bases of physical skills and based on anthropometric variables. The volleyball players' agility and emphasizing their significance. While the interventions varied from traditional resistance training to innovative approaches, many studies reported positive effects on agility performance. Despite limitations like sample

size constraints and variability in study populations, these findings underscore the need for tailored training programs to enhance volleyball players' agility. Volleyball elite athlete needed physical pre-condition are supported by the techniques and strategies of the volleyball game. Power and strength muscle, especially upper and lower extremity, were important to the result of serve, pass, spike and block. The high capacity of aerobic ensures the availability of oxygen and energy to maintain performance during long matches. The difference level of competition is forcing on the athlete to enhance their ability in preparation for a balanced match. This research is concluded that the performance of volleyball players has been districted with the elite and non-elite athlete were different based on muscle strength, muscle arm power and aerobic endurance. Nut the skills of the volleyball players has unique role to perform in any match.

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