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## Netball: Importance of Strength and Agility of Players

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### Abstract

Sports in the present world have become extremely competitive. In the physical fitness it is very important for the youth people know that slogan a “sport for all”. It is developed of physical mental, emotional, social and spiritual though the medium of physical activities. This refers to a process of education that develops the human body especially fitness and movement skills. Netball is a team sport that has one of the largest participation rates. Physical qualities play an important role in the requisite performance of netball techniques. Strength and agility are such components of physical fitness that are required in every sportive activity including the game netball. Agility or nimbleness is the ability to change the body's position efficiently, and requires the integration of isolated movement skills using a combination of balance, coordination, speed, reflex, strength and endurance. Netball focuses on an entire squad, not one superstar, and that's just one of the reasons why— whether you're playing or watching— professional and amateur netball players think it's the better sport. It is highly recommended that netball players develop high levels of relative bilateral and unilateral strength and power because it is likely to transfer to sprint and jump performances while improving lower limb contralto reduce the risk of common injuries.

**Keywords:** sports, physical activities, athletic qualities; netball; power; strength; agility, testing

### Introduction

#### General Overview

Sports in the present world have become extremely competitive. It is not the more participation or practice that brings out victory to an individual. Therefore, sports life is affected by various factors, like physiology, biomechanics, sports training, sports medicine, sociology and psychology etc. All the coaches, trainers, physical education personnel and doctors are doing their best to improve the performance of the players of their country. Athletes/players of all the countries are also trying hard to bring laurels/medals for their countries in international competitions. The physical education profession is entering one of the most exciting—dynamic eras in history. Traditionally the physical education profession has been viewed as providing services within the educational field specifically to the schools. Within the last 20 years the scope of physical education has expanded tremendously. Performance of players has dramatically progressed over the past few decades. Performance levels unimaginable before are now common and the number of athletes capable of outstanding results are increasing. One among the contribution factors is that athletics is a challenging field, and intense motivation has encouraged long, hard hours of week. Also, coaching has been more sophisticated, partially from the assistance of sports specialists and scientists. Sports Sciences have progressed from descriptive to scientific. A broader base of knowledge about exciting athletes now is reflected in training methodology. Nowadays people are aware of physical fitness and they know the importance of physical education. Physical education is one part of the education process. In physical fitness it is very important for the youth to know that the slogan is “sport for all”. It is developed by physical, mental, emotional, social and spiritual thought through the medium of physical activities. The word physical refers to the body and indicates bodily characteristics such as strength, speed, endurance, flexibility, agility, explosive power, coordination and performance. It seemingly contrasts the body with the mind. This refers to a process of education that develops the human body, especially fitness and movement skills.

### Netball Game: An Introduction

Netball is a team sport that has one of the largest participation rates, played on a 30.5315.25m court divided into thirds each measuring 10.17m. Netball consists of four 15-minute quarters separated by 5 minutes of rest at half-time and 3 minutes between other quarters. Each team consists of 7 players on the court at one time, with each area of the court accessible to each player determined by position. The seven different positions comprise center court (center [C], wing attack [WA], wing defense [WD]), shooters (goal attack [GA], goal shooter [GS]), and defenders (goal keeper [GK], goal defense [GD]). Thus, players are constantly involved in offensive and defensive maneuvers, affecting the technical, tactical, and physical demands of each position. To perform at high levels, players must be able to cope with the physical demands of the game. During netball matches, published data demonstrate that a high level of aerobic conditioning is required for the sport with average heart rates (HRs) reported to be between 75 and 85% of the maximum HR (MHR) match play. However, although the performance within netball is primarily associated with a player's aerobic endurance (because of the duration of the game, 60 minutes), the performance, crucial moments, and the outcome of a netball match is dependent on the performance of decisive anaerobic activities. Netball matches show players change the intensity of the activity every 6 seconds during the 60 minutes, with anaerobic variables such as the amount of running and sprinting bouts to be 25–202 and 5–81 times, respectively. This has shown to equate to running distances totaling between 143–1,758 and 69–555 m as sprinting. These decisive anaerobic components associated with netball (sprinting, turning, jumping, changing pace, cutting, and accelerating and decelerating the body) are forceful and explosive and require near-maximum levels of muscular strength and power production. Thus, it can be determined that physical qualities play an important role in the requisite performance of netball techniques.

### Netball Requirements

In netball throwing accuracy is more useful to secure more score through the correct passes and town game while it requires physical fitness too. The forward players often need speed, vertical jump, coordination, agility and skill. A tall player will have high reach and collect the ball and throw quickly to pass the teammate. It is one of the basic skills in netball that players must master. The young player should also be encouraged to execute the netball throw by using proper holding of the ball. Their fingers spread over the ball extend the aim to produce the necessary force speed to reach the ball to his team mate. For netball throw speed explosive power reaction time strength and coordination is more important. Netball is a sport which demands a high level of physical fitness. Players need adequate strength, speed, agility, endurance, flexibility, explosive power reaction time to participate without under strain or fatigue. Among all games netball with its humble beginning had progressed rapidly.

Netball is an enjoyable game and has all the elements of a first-rate sport. It is probably one of the leading ball games in the world. It may be called movement oriented as action implies movement. Netball is complete with action within one second many things may happen in this game in comparison with other games. This is one of the reasons why this game has become one of the most popular sports in the world. The game of netball is America's greatest contribution to the world

of sports. The tempo and excitement are more in the play for both players and spectators. Netball is played with skill and fitness, teamwork and strategy making it a fact and thrilling sports. In general, agility is defined as "the ability of a rapidly respond to change by adapting its initial stable configuration" Here, agility or nimbleness is the ability to change the body's position efficiently, and requires the integration of isolated movement skills using a combination of balance, coordination, speed, reflex, strength and endurance. As agility is the ability to change the direction of the body in an efficient and effective manner, and to achieve this you require a combination of balance the ability to maintain equilibrium when stationary or moving (i.e., not to fall over) through the coordination actions of our sensory functions (eyes, ears and the proprioceptive organs in our joints); static balance (the ability to retain the center of mass above the base of support in a stationary position); dynamic balance (the ability to maintain balance with body movement); speed (the ability to move all or part of the body quickly); strength (the ability of a muscle or muscle group to overcome a resistance); and lastly, coordination (the ability to control the movement of the body in cooperation with the body's sensory functions) (e.g., catching ball [ball, hand and eye coordination]).

### Importance of Strength and Agility

Strength and agility are such components of physical fitness that are required in every sportive activity including the game netball. As all we know, team sports like netball have been widely accepted as highly competitive sports throughout the world. Explosive strength and agility are the important motor components that are required in every game for improvement of performances. Agility is the quality of being agile. Agile refers to the ability to move quickly and easily, either physically or mentally. Agility is also the ability of the body to quickly change direction from one place to another. Agility is one of the components of physical fitness. These sports are in great demand for explosive strength of legs, jumping (standing or running), side turning, fast break etc. we need some motor qualities to do the action and reaction in efficient manners rapidly. Brace "the ability which is more or less general and inherent and which permits an individual to learn more skills and be proficient in them." Motor abilities contribute independently and interdependently for successful performance of skill.

Netball is one of the most loved ball sports nowadays. This sport is usually played by women. A netball court is divided into three parts with each section occupied by a member of opposing teams. There are 7 members for each team and each one is assigned a specific position such as Goal Keeper, Wing Defense, Wing Attack, Goal Defense, Center, Goal Attack and Goal Shooter. In netball a player should not dribble instead should pass it to the next player immediately.

- *Positions:* In netball, there are seven positions with specific duties that are restricted to specific areas of the court. In netball, for example, the "center" may run on either side of the court but not in the shooting circle. The player known as the "wing defense" can play on the defending side of the court as well as the middle region, but not on the attacking side.
- *Passing:* In netball, your pass must be longer than three feet (0.9 metres), but not so long that it passes from the defensive end to the attacking end of the court. Finally, in netball, you are not allowed to hold the ball for more than three seconds without passing.

- *Shooting:* Netball players are confined to a shooting circle, and only two players on the team are allowed to shoot the ball – the “goal attack” and the “goal shooter.”
- *Ball Carrying:* Dribbling isn’t something you’ll see in netball. There is no dribbling, and once you have possession of the ball, you cannot move – you must pass.
- Netball is a fast-paced and enjoyable sport. Netball does not permit contact. The reason for this could be that netball is a non-contact sport, allowing for more rational thinking and strategizing as opposed to simply being the fastest and toughest person on the court. Given women’s dominance in the sport, the INF only recognizes women’s netball, while men’s netball teams are far less appealing and receive little attention. Netball is a strategic game with many quick passes.

### **Netball Variations**

Netball has a variety of game variants. Indoor netball, fast5 netball, and children’s netball are the major types of netball.

- *Netball Indoors:* Played entirely indoors (which is amusing) and frequently surrounded by a net. This net keeps the ball from leaving the court, which speeds up the game and reduces downtime. There are various types of indoor netball, one of which involves 7 people at a time and is known as “action netball.” The difference between this game and regular netball is that it is divided into 15-minute halves with a 3-minute break in between. This version is most popular in South Africa, England, New Zealand, and Australia.
- *Fast5:* Fast5 is the more commercial netball variant, with a focus on television and fast-paced play. The game is much shorter, with each quarter lasting only six minutes and a two-minute break in between. Substitutions are not prohibited, and coaches may freely give tactics or instructions from the sidelines during playtime. A fun twist on this type is that each team can declare a “power play” quarter in which the entire 6-minute period is worth double points for each goal scored.

In sum, in netball, players must stay within a specific area based on their position. Netball is a non-contact sport. This is due to the fact that in netball, the opposing player should be about 0.9 metres away from the player with the ball. In netball, a player should not dribble but should immediately pass the ball to the next player. Netball relies on tactics more than timeouts and shooters require accuracy, not a backboard. Line the players up side by side and they might all be tall and boast pinpoint accuracy, but their games are worlds apart. Netball focuses on an entire squad, not one superstar, and that’s just one of the reasons why – whether you’re playing or watching – professional and amateur netball players think it’s the better sport. Netball players have their set position and zones on the court. These restrictions mean they have to be smart about how they move the ball down to the shooting circle. You can’t simply have players running up and down to the hoop, you need to be able to utilize every player across the court to work the ball in, get the goal and seal the victory. Netball’s more of a team sport, you don’t get superstars in one position, you have to have a whole team to win the ball. The netball court is a ball-hog-free-zone. It’s a true team sport, which requires players to back each other up and utilize the whole squad. Essentially, it symbolizes netball = #squadgoals.

### **Conclusion**

It is highly recommended that netball players develop high

levels of relative bilateral and unilateral strength and power because it is likely to transfer to sprint and jump performances while improving lower limb contralto reduce the risk of common injuries. Netball players should use HIT (High Intensity Training) methods to improve their aerobic and anaerobic endurance in line with the physiological demands of competition.

### **References**

1. Thomas C, Comfort P, Jones PA, Dos'Santos T. Strength and conditioning for netball: A needs analysis and training recommendations. *Strength Cond J.* 2017;39:10-21.
2. Soh KG, Husain R, Soh KL. Fitness profile among Malaysian netball players. *Asian J Phys Educ Recreat.* 2006;12:40-4.
3. Fox A, Spittle M, Otago L, Saunders N. Activity profiles of the Australian female netball team players during international competition: Implications for training practice. *J Sports Sci.* 2013;31:1588-95.
4. Sinclair C, Coetzee FF, Schall R. Physical and physiological profile of U18, U19, U21 and senior elite netball players. *S Afr J Sport Med.* 2020;32:1-7.
5. Mandal S, Roy S. A comparative study on agility and strength between basketball and netball male players. *Int J Phys Educ Sport Health.* 2017;4:361-2.
6. Arazi Hamid and Asadi, Abbas. “The Effect of Aquatic and Land Plyometric Training on Strength, Sprint and Balance in Young Basketball Players”, *Journal of Human Sport and Exercise.* 2011;6(1):101-11.
7. Buck Laiy T. *Winning Basketball* (New York: Mc Graw Hill Book Company. 1959, 56-58.
8. Chittibabu B, Akilan N. “Effect of Basketball Specific Endurance Circuit Training on Aerobic Capacity and Heart Rate of High School Male Basketball Players”, *International Journal of Physical Education, Fitness and Sports.* 2013;2(4):5-8.
9. Hobson Howard A. *Scientific Basketball* (New York: Yale University, Prentice Hall Inc. 1949, 49.
10. Hossein Shirvani and Nezhad Monireh, Masuodi., “Effects of Short-Term Plyometric Training Program on Hemorrhheological Parameters in Male College Basketball Players”, *Annals of Biological Research.* 2012;3(6):2813-20.
11. Lingeary FA. *How to Play and Teach Basketball* (New York: Association Press. 1941, 29.
12. Santos Eduardo JAM and Janeira, Manuel AAS. “The Effects of Plyometric Training followed by Detraining and Reduced Training Periods on Explosive Strength in Adolescent Male Basketball Players”, *Journal of Strength and Conditioning Research.* 2011 Feb; 25(2):441-52.
13. Slobodan Jaric, D Ugarkovic and M Kukulj, “Anthropometric, strength, power and flexibility variables in elite maleathletes: Basketball, handball, soccer and Volleyball players”, *Journal of Human Movement Studies.* 2001 January; 40(6):453-464.
14. Tavino, Lawrence P, Bowers Charles J, Archer, Clark B. “Effects of Basketball on Aerobic Capacity, Anaerobic Capacity, and Body Composition of Male College Players”, *The Journal of Strength and Conditioning Research.* 1995 May, 9(2).