Impact of Muscle Exercise Programme on Forehand and Backhand Drive Skill Performance on Lawn Tennis Player

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Abstract

The aim of this revision was to establish the variation among two groups of tennis players on the uneven of from and skill scores of tennis forehand and backhand drive. The forehand and backhand drives are experienced on the same courtyard at the same time. The student will stand in the getting position at the center mark of the baseline. The teacher will be on the other side of the net striking balls to the student being tested.

Keywords: Muscle Exercise Program, Lawn Tennis Player, Crucial Stroke.

1. Introduction

Muscle exercise is a type of physical exercise specializing in the use of resistance to induce muscular contraction which builds the strength, anaerobic endurance, and size of skeletal muscles.

When properly performed, strength training can provide significant functional benefits and improvement in overall health and well-being, including increased bone, muscle, tendon and ligament strength and toughness, improved joint function, reduced potential for injury, increased bone density, increased metabolism, increased fitness, improved cardiac function, and improved lipoprotein lipid profiles, including elevated HDL ("good") cholesterol. Training commonly uses the technique of progressively increasing the force output of the muscle through incremental weight increases and uses a variety of exercises and types of equipment to target specific muscle groups. Strength training is primarily an anaerobic activity, although some proponents have adapted it to provide the benefits of aerobic exercise through circuit training.

Sports where strength training is central are bodybuilding, weightlifting, power lifting, strongman, Highland games, shot-put, discus throw, and javelin throw. Many other sports use strength training as part of their training regimen, notably American football, wrestling, track and field, rowing, lacrosse, basketball, pole fitness, hockey and football. Strength training for other sports and physical activities is becoming increasingly popular.

Strength training also provides functional benefits. Stronger muscles improve posture, provide better support for joints, and reduce the risk of injury from everyday activities. Older people who take up weight training can prevent some of the loss of muscle tissue that normally accompanies aging and even regain some functional strength and by doing so become less frail. They may be able to avoid some types of physical disability. Weight-bearing exercise also helps to prevent osteoporosis and to improve bone strength in those with osteoporosis. The benefits of weight training for older people have been confirmed by studies of people who began engaging in it even in their 80s and 90s.

Though strength training can stimulate the cardiovascular system, many exercise physiologists, based on their observation of maximal oxygen uptake, argue that aerobics training is a better cardiovascular stimulus. Central catheter monitoring during resistance training reveals increased cardiac output, suggesting that strength training shows potential for cardiovascular exercise. However, a 2007 meta-analysis found that, though aerobic training is an effective therapy for heart failure patients, combined aerobic and strength training is ineffective.
Tennis is a racquet sport that can be played individually against a single opponent (singles) or between two teams of two players each (doubles). Each player uses a racquet that is strung with cord to strike a hollow rubber ball covered with felt or around a net and into the opponent's court. The object of the game is to play the ball in such a way that the opponent is not able to play a good return. The opponent who is unable to return the ball will not gain a point, while the opposite opponent will.

Tennis is an Olympic sport and is played at all levels of society and at all ages. The sport can be played by anyone who can hold a racquet, including wheelchair users. The modern game of tennis originated in Birmingham, England, in the late 19th century as "lawn tennis". It had close connections both to various field ("lawn") games such as croquet and bowls as well as to the older racquet sport of real tennis. During most of the 19th-century in fact, the term "tennis" referred to real tennis, not lawn tennis: for example, in Disraeli's novel Sybil (1845), Lord Eugene De Vere announces that he will "go down to Hampton Court and play tennis."

The rules of tennis have changed little since the 1890s. Two exceptions are that from 1908 to 1961 the server had to keep one foot on the ground at all times, and the adoption of the tie-break in the 1970s. A recent addition to professional tennis has been the adoption of electronic review technology coupled with a point challenge system, which allows a player to contest the line call of a point.

Tennis is played by millions of recreational players and is also a popular worldwide spectator sport. The four Grand Slam tournaments (also referred to as the "Majors") are especially popular: the Australian Open played on hard courts, the French Open played on red clay courts, Wimbledon played on grass courts, and the US Open played also on hard courts. The backhand is struck from the non-dominant side of the body by bringing the racquet across the body (showing the back of your hand to the opponent) and swinging the racquet away from one's body in the direction of where the player wants the ball to go. It is generally considered more difficult to master than the forehand. It can be executed with either one or both hands. For most of the 20th Century it was performed with one hand, using either an eastern or a continental grip. The first notable players to use two hands were the 1930s Australians Vivian McGrath and John Bromwich. The Two handed backhand was used more often since it allowed easy access to power and control. Players such as Venus Williams, Serena Williams, Maria Sharapova, and Andre Agassi have used this stroke to its highest potential to win many grand slams. Two hands give the player more power so it provides the player with an advantage on power-focused shots. However, one hand is useful in that it can generate a slice shot, applying backspin on the ball to produce a low trajectory bounce. The player long considered to have the best backhand of all time, Don Budge, had a very powerful one-handed stroke in the 1930s and '40s that imparted topspin onto the ball. Ken Rosewall, another player noted for his one-handed backhand, used a deadly accurate slice backhand with under spin through the 1950s and '60s. A small number of players, notably Monica Seles, use two hands on both the backhand and forehand sides. The forehand is struck from the dominant side of the body by swinging the racquet in the direction of where the player wants to place the shot. It is called a forehand because the racquet is held in such a way that if one was to strike the ball without the racquet, it would hit the palm of your hand. This is the opposite side from a backhand. It is considered the easiest shot to master, perhaps because it is the most natural stroke. Beginners and advanced players often have better forehands than any other shots and use it as a weapon. There are various grips for executing the forehand and their popularity has fluctuated over the years. The most important ones are the Continental, the Eastern, and the Western. The key differences between grips are the different angles they create between the angle of your palm and the angle of your racquet face. You are used to sensing the direction your palm is facing, so your palm makes the most intuitive basis for sensing the direction your racquet is facing. For a number of years the small, apparently frail 1920s player Bill Johnston was considered by many to have had the best forehand of all time, a stroke that he hit shoulder-high using a western grip. Few top players used the western grip after the 1920s, but in the latter part of the 20th century, as shot-making techniques and equipment changed radically, the western forehand made a strong comeback and is now used by many modern players. No matter which grip is used, most forehands are generally executed with one hand holding the racquet, but there have been fine players with two-handed forehands. In the 1940s and 50s the Ecuadorian/American player Pancho Segura used a two-handed forehand to devastating effect against larger, more powerful players, and many female and young players use the two-handed stroke today.

**Methodology**

50 male lawn tennis player age ranged 17 to 22 of Bhiwani District Lawn Tennis Association were chosen as subject for the study. All subject were allocated to the experimental indiscriminately control group each were consisting of 15 subjects. The experimental group was particular specific strength training program of 20 minutes. AlterNet day in the morning for 8 week as a experimental treatment. The training program is collected of 4 specific strength exercises they are as following.

1. **Chin up:** To extend strength endurance of the back and arm musculature, particularly latissimus darts which is a major mover in the creation of velocity during stroke production.

2. **Shuttle run:** The shuttle run is simple way to add some high power drills into a necessary exercise program while you build speed, stamina and endurance.

3. **Medicine ball side throws:** To help you expand strength, coordination, balance, power and core stability. The movements often unite balance strength and exploit a wide variety of muscle groups.

4. **Skipping:** Skipping develops the muscle tone in the legs and lower body and also in the upper body as your shoulders and arms work the rope.

**Data Collection**

To discover out the impact of the precise muscle exercise program on the forehand and backhand drive capability of lawn tennis district level players. Hewitt tennis forehead and
backhand drive test was selected. The test is composed of two test items 1) Forehand 2) Backhand drive test. This test was used to calculate the correctness of a subject’s forehand and backhand of a drive tennis ball.

The data was collected for each variable administering their individual tests the test was administered at tennis court on Bhiwani District Lawn Tennis Association. To make sure that the data was consistent each subject was allowed 10 minutes of warm up time on a court other then test court. The subject specified test demonstrations and each subject were set 10 trials to execute the respective test for each variable. The data was collected giving the experimental treatment and at the end of treatment and end of training phase.

Table 1: Comparison between pretest of control and experimental group

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Significant level 0.5

Table 2: Comparison between post test of control and experimental group

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Result of the Study
The detailed muscle exercise program develops the forehand and backhand drive exactness of district level lawn tennis players. Whereas control group does not enlarge forehand and backhand drive accuracy as experimental group.

Conclusion
The exact muscle exercise program of 8 week on experimental group result following conclusion. It is obvious from the findings that the exact muscle exercise program develops the forehand and backhand drive capability of district level lawn tennis players. Whereas control group does not expand forehand and backhand drive correctness as experimental group.

References
1. From 1984 through 1998, women played first-to–win-there-sets in the final of the year-ending WTA Tour Championship.