

The Impact of Science and Technology on Sports Skills

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Abstract

The human body has its limitations. Man cannot function like a machine. With the help of science and technology, there have been widespread changes in all areas of human life and human life is made faster and happier. Mathematics, Physics, Electronic, Computer, Medical Science and Sports Engineering etc subject related to science stream is connected in sports field to develop higher level of sports performances. There are different types of skills to perform the game. Speed, Stamina, Endurance, Flexibility, Muscular Power and Strength is needed when performing game skills on higher level. Body mind coordination is a most important part to perform higher level of sports skill. Sports engineering includes designing of equipments, building facilities, analysis sports skill performance, regulating standard ensuring safety equipment for players and developing easy training method for coaches. Mathematics, Physics, Electronic, Computer, Medical Science and Sports Engineering these subjects are very much useful to players for choosing perfect sports skill, training method, proper coaching, level of physical fitness, body mind coordination and body movements to perform higher level of Sports Skills.

KeyWords: Science, Technology, Sports Engineering, Sports Skills

Introduction:

There has been widespread progress in every area of human life. In ancient times, struggle was the foundation of human life. The human body has its limitations. Man cannot function like a machine. With the help of science and technology, there have been widespread changes in all areas of human life and human life is made faster and happier. Sports and Physical Activities are the basic and entertaining part of human life. Sports are entertaining components of human life. The field of sports and physical activity is wide and varies widely between individuals. The field of sports and physical activity is very broad and involves a lot of sports. There are different types of skills to perform the game. Body mind coordination is a most important part to perform higher level of sports skill. Speed, Stamina, Endurance, Flexibility, Muscular Power and Strength is needed when performing game skills on higher level. Although there are limitations to the movement of the human body, it is possible to achieve the highest level of skill as per sports with the help of science and technology.

Purpose

The purpose of this research is to know the impact of science and technology on sports skills.

- Science & Technology

The scientific approach is a factor involved in every field, and the field of sports is no different. Mathematics, Physics, Electronic, Computer, Medical Science and Sports Engineering etc subject related to science stream is connected in sports field to develop higher level of sports performances.

- Mathematics

In mathematics, mainly in two subjects, one specially assists in periodic examination of the field of skill in mathematics and the other in geometry mathematics. The mathematics subject helps to determine the skill level and it is easy to analyze based on the information received. Geometry provides assistance in analyzing the various sports arenas and the latest developments in the field of sports as well as analyzing sports skills.

- Physics

Work and energy are among the most important concepts of physics. Both work and energy play an important role in sports. In physics, work is defined as the result of a force moving an object at a certain distance. First, the athletes transform chemical energy into kinetic energy of their body while running. Applying Newton's kinetic rules to physical activity certainly raises the level of skill in the game.

- Electronics & Computer:

The unique combination of Electronic and Computer subject is very helpful in modern technology. High resolution Camera & Video recording Camera is very important to catch live action of players while performing sports skill at higher level. These photos and video clips replay is very helpful to rectify to find the faults and findings at the time of performing sports skills. At the time of matches or live sports action camera and video clip is a proof for judgment. In cricket, controversy has surrounded bowling an illegal delivery of the ball or detecting a 'leg before wicket' infringement. This has been attempted to be resolved using line judgment

technology such as the 'Hawkeye' system. Hawk-Eye is a complex computer system used officially in numerous sports such as cricket, tennis, badminton, football and volleyball, to visually track the trajectory of the ball and display a record of its statistically most likely path as a moving image. Many movements in sporting activities require the motion to be captured with excessive-velocity cameras so to seize essentially the most precise element of every action. In addition, the usage of eye monitoring apparatus is fitting usual in the subject of activity analysis and performance.

- Medical Science

Microbiology, Biochemistry, Medicine, Nutrition, Physiotherapy, Physiology, Anatomy and Kinesiology these medical science related subjects are very much helpful to analysis the body condition, function of body organs, fluid level of various organs, deformities in body and body mind coordination of players at the time at the time of performing sports skills. Sometimes mentally and physically fit player unable to perform his higher level high level sports skills. Kinesiology is defined primarily as the use of muscle testing to identify imbalances in the body's structural, chemical, and emotional energy. They look for ways to improve the efficiency and performance of the human body while at work or at play by studying the factors that influence human movement. Medical Science related subjects are helpful to analyze real fact of body condition related to sports skills. After the analysis of body condition the player got correct reason for not performing his sports skills. According to analysis the training program and skill development program is done by the coaches for the betterment of sports skills.

- Sports Engineering

In the field of sports engineering is rapidly develop worldwide. Sports engineering is unique combination of Mathematics and Physics. Sports engineering includes designing of equipments, building facilities, analysis sports skill performance, regulating standard ensuring safety equipment for players and developing easy training method for coaches. Sports Equipment size, weight and other specifications are different as per players. One Football player wear a shoe number 9 at the time of tournament. In match he kicks football with his right leg, football cover 50 feet distance then he kicks football with his left leg, football cover 60 feet distance. In this condition left leg may be powerful than right leg for kicks the football, standing position of player, wind direction and as per sports engineering shoe number 9 is not perfect fit to his both legs. If the shoe is manufactured under the supervision of sports engineering as per the specific size of legs of players, player may be kick football with his both leg and football covers same distance.

Conclusion:

Mathematics, Physics, Electronic, Computer, Medical Science and Sports Engineering these subjects are very much useful to players for choosing perfect sports skill, training method, proper coaching, level of physical fitness, body mind coordination and body movements to perform higher level of Sports Skills.

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