



"Impact Of Sports On Motor Fitness"

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INTRODUCTION

The popular saying that "progress is the most important product" has great significance in physical education. Sport scientists strive to optimize sports performance to achieve the goal, they must consider motor fitness. The motor fitness is a prerequisite of learning sports techniques for their continuous refinement and modification during the long term planning as well as short term process. The motor learning mainly has two types one is sports type another is stunt type. In this study we have taken only sports type of motor learning. Here motor fitness refers to "Ease with which an individual learns new motor skill".

Review of literature:

1. (Kocher, 1976; Nagendra and Telles, 1997). Memory is major factor which may affect the performance of wall volley, lying tennis ball catch and basketball accuracy. The present finding is supported by earlier finding of Schmidt (1977).
2. (Kennison and James.E. (1967), Nielson and Genald (1964). Motor fitness test (Ball Bounce) can be improved through practice of Asanas. It is due to the fact that significant improvement of short and long term memory is brought by practicing yoga regularly.
3. (Deasi (1979), Gharrote (1976). Earlier researcher reveals that yoga practices help to improve the skill accuracy. Through yogic asana the efficiency of motor abilities



of skill may improve significantly. These findings are supported by findings of

4. **Freeman, (1965)** first proposed that muscular tension level, when increased lower the threshold of excitability in the higher nervous centre, and as a result, accuracy in complex performance may be exhibited.

5. **Sahu(1985)**. Through yogic practice perception of depth can be improved significantly. Perception is a major factor which may affect the performance in accuracy.

LEARNING AND PERFORMANCE

“That learning takes place through practice” on the first inspection appears to be a simple concept. However, members of the psychological community have been occupied for the past 100 years examining the nature and conditions of practice and precisely how practice produces permanent behavioral changes.

At times the terms learning and performance have been used interchangeably in the literature. Performance, however, is immediate and short-term in nature and subject to certain factors that fail to influence the long-term changes that take place during the learning process. Learning, however, must often be studied indirectly by inspecting measures of performance.

NEED AND IMPORTANCE OF MOTOR FITNESS

Scientific findings were available with regard to exercises training as a whole, and very few studies have been done on yogic practice and exercises to see the impact on motor fitness.

Helping the teachers of physical education and coaches through informing them the importance of motor fitness in performance of sports and games.

1. Motor Fitness is also helpful to the coaches and physical education teachers to provide basic knowledge of yoga and its effect on motor performance.
2. Motor Fitness provides critical knowledge regarding the improvement of motor performance through exercise.
3. It is useful for coaches and physical education teachers in teaching and refinements of motor skills.
4. It is a great help to teachers of physical education and coaches through giving



them the knowledge of yogic asana, exercises and combination of asanas and exercise which help in improvement of Motor Fitness

MOTOR PROGRAMME

Performing a certain movement is only possible if a suitable motor programme for it exists. Motor programme is a multitude of commands that travel from the central nervous system to the muscles, and which are defined prior to the movement. The psychologist distinguishes between short-term and long-term motor memory. Short-term motor memory registers visual, auditory, kinesthetic and other stimuli from the environment. It is useful for the current process of movement control.

MOTOR FITNESS TEST

Motor fitness test (Ball bounce) depends upon the proprioceptors which include specialized sensory receptors in muscles, tendon, joint and the vestibular apparatus of the inner ear. The stretch receptors in muscles are the primary source responsible for kinesthesia. They convey information about the position, movement and balance of body by interceptors such as muscle spindles, tendon joint organs. The impulses are received, integrated and correlated in the brain, below the level of consciousness (no activity of the cortex) and appropriate motor impulses are passed on the concerned muscles for action.

MUSCLE FIBER HYPERTROPHY

Muscle function can be described in terms of strength and endurance. Strength can be defined in several ways depending on the specific method of measurement. In absolute terms, muscle strength is related to the diameter of the muscle fiber. Muscle fiber hypertrophy has been consistently shown to occur with strength training. This occurs in all fibers types but somewhat more in fast-twitch fibers and it appears to result from an increase in myofibrils in a given muscle fiber. Muscles fibers with large diameters (type II) have more myofibrils and more actin-myosin bridges to produce force.

CONCLUSION

The strength of the whole muscle is related to the cross-sectional area of the muscle when measured perpendicular to the length of the muscle fibers. The cross-



sectional measurement changes with contraction and relaxation.

It is well proved that strength and endurance can be improved by practicing exercises. Motor skill like wall volley test, lying tennis ball catch and basketball shooting test are largely based upon strength and endurance ability.

Athletes, physical education teachers, coaches and sports scientist always search for way to improve performance through efficient, effective procedures. Not only does this study reinforce the effectiveness of exercises and asanas techniques for increasing the motor fitness but may provide information on ways in which the time can be saved and at the same time motor fitness can be improved effectively in large extents.

Reference

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