

LESSON NO: 9

CONCEPT OF COORDINATIVE ABILITIES:-

Coordinative abilities are those abilities which stabilized and generalized pattern of motor control. These abilities help the sportsman to do a group of movements with better quality and effect. Coordinative basically depend upon the CNS (Central Nervous System). In sports, the coordinative abilities comes under the following ability:-

- 1) Differential ability:- It is the ability to determine the position of the body & its parts in time & space in relation to the gravity, object. This ability helps to achieve high degree of accuracy and economy of separate body movement in a motor task.
- 2) Orientation ability:- It is the ability of a player to adjust himself as per the time and situation of the place.
- 3) Coupling ability:- It is the ability of a player to move his physical organs in order to execute the movement according to demand. For example: Coordination between hands and eyes, feet and eyes. etc. For example, in volleyball the spiker/smasher spikes/smashes the according to the lift of the ball and blockers coordinating the movements of his hands, head and feet.
- 4) Reaction ability:- It is ability to react immediately, quickly and effectively to a given signal. Reaction ability are two types. Simple and Complex reaction ability.

- 5) Balance ability:- As the ability to maintain balance during the complete body movement & to regain balance quickly after the balance disturbing movement. For example in football sliding tackle, during phase of tackling maintain body movements and after tackle immediately come to the initial position.
- 6) Rhythm ability:- To observe or perceive the rhythm of a movement & to do the movement with external rhythm - with music or drum beats.
- 7) Adaptation ability: It is the ability to adjust or change the movement effectively on the basis of changes demand or anticipated changes in the situation.

METHODS FOR THE IMPROVEMENT OF COORDINATION ABILITIES

1. Practising physical exercises (Simple & complex) combination of eyes-hands, feet and eyes and eyes-feet and hands exercises. Running directions changes frequently with high speed.
2. Correct and conscious movement to achieve effective result and economy of movement.
3. Additional means to improve the motor sense (reaction time) by using eyes-hands, eyes-feet reaction timer.
4. Make variation in exercises. Combination of static and ballistic exercises.
5. Degree of difficulty of the exercises need to be increased gradually.
6. Fewer repetitions are used to maintain accuracy of the skill/exercise (More repetition may increase fatigue which affect accuracy of the movement)

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FOLLOWING EXERCISES MAY BE PRACTICED

- i) Aerobic exercises with tapping of hands and legs,
- ii) Acrobatic exercises (jumps, take-offs, skips, linked exercises)
- iii) Exercises with apparatus (rotation exercises, shapes) (exercise with hurdles, hoops, keezum, dumbbell etc)
- iv) Exercises with tools (skipping ropes, balls, cones, coordination ladder, step up box.
- v) Making variations in stride running.
- vi) Exercises related to overcoming hurdles (hurdle tracks)
- vii) Minor resistance exercises -
- viii) Shuttle run with and without object.
(small distance with frequent changing the running directions)
- viii) Boomerang run

NOTE! - Please go through the notes. Please ask question if you are unable to understand specific term or paragraphs.