

Lesson 8

Coordinative abilities

THEORY OF SPORT TRAINING

BASIC PRINCIPLES

COORDINATION

What is it?

COORDINATION

- ✘ General quality to manage and control the movement
- ✘ **Farfel(1975):** the ability to realize simple or complex integrative movements fast and exactly during constant or changing conditions and the ability to learn new skills fast.

COORDINATION

From point of biomechanics :

Mastering the many degrees of freedom involved in the movement.

SKILLS

The abilities to realize the movement, which are learned during training process.

PRECONDITION OF COO-A

- ✘ Good state of central and peripheral neural system.
- ✘ Good state and function of senses - visual, kinaesthetic, auditory
- ✘ Good state of muscular system
- ✘ Good connection of neural-muscular system
- ✘ State of psychological processes

QUALITY OF COORDINATION WE CAN OBSERVE

- ✘ As the fast and correct or appropriate reaction to the stimulus**
- ✘ As an ability to take up or maintain the right position, posture of all body**
- ✘ Coordination of smaller parts of body, and their integration to the harmonized complex movement**
- ✘ In the better and faster learning of new movement in short time and in good quality**
- ✘ In the adaptation to the new and changing inner or outer conditions during movement, during race, competition**
- ✘ In the choice of the right movement programmes and the economy realization**

MOTOR LEARNING

- × Cognitive Phase (generalization)**
- × Associative Phase (differentiation)**
- × Autonomous Phase (automation)**
- × Creative coordination**

COORDINATION

- × General

The ability realize very effectively various skills without sport specialization

- × Specific

The ability of effective and intensive realization various specific movements, technique of chosen sports.

PARTIAL COORDINATIVE ABILITIES

- × Balance
- × Kinaesthetic differentiation
- × Spatial orientation
- × Reaction
- × Rhythm
- × Synchronization of movement
- × Agility

DEVELOPMENT OF COORDINATION

- × Age
- × Frequency
- × Structure of training unit
- × Fatigue
- × Variability, diversity,
- × versatility

THE GROUPS OF EXERCISES FOR CA DEVELOPMENT

- ✘ Activity of single parts of body (mirror movement, asymmetric..)
- ✘ Movement activity in various environment
- ✘ Activity with exclusion of senses
- ✘ Activity of couples or more athletes in group
- ✘ Activity to various stimulus, signals
- ✘ Movement activity in various combinations

BASIC EXERCISES

- ✘ Acrobatic exercises, gymnastic exercises
- ✘ Exercises with sports gear,
- ✘ exercise in another environment – water
- ✘ ABC from another sports – Games, athletics
- ✘ Exercises with hurdles
- ✘ Combative and small games
- ✘ Throws,
- ✘ Carry some gear, equipment, load