

The Theory of Sport Training

Basic Principles



LESSON 2

The Aim of the ST

Structure of Sport Performance

The kinds of sports



- Racing, competitive sport (children, youth, adults, recreational, second level performance sport, top sport...)
- Sport for health
- Sport of disable people

The aim of the ST



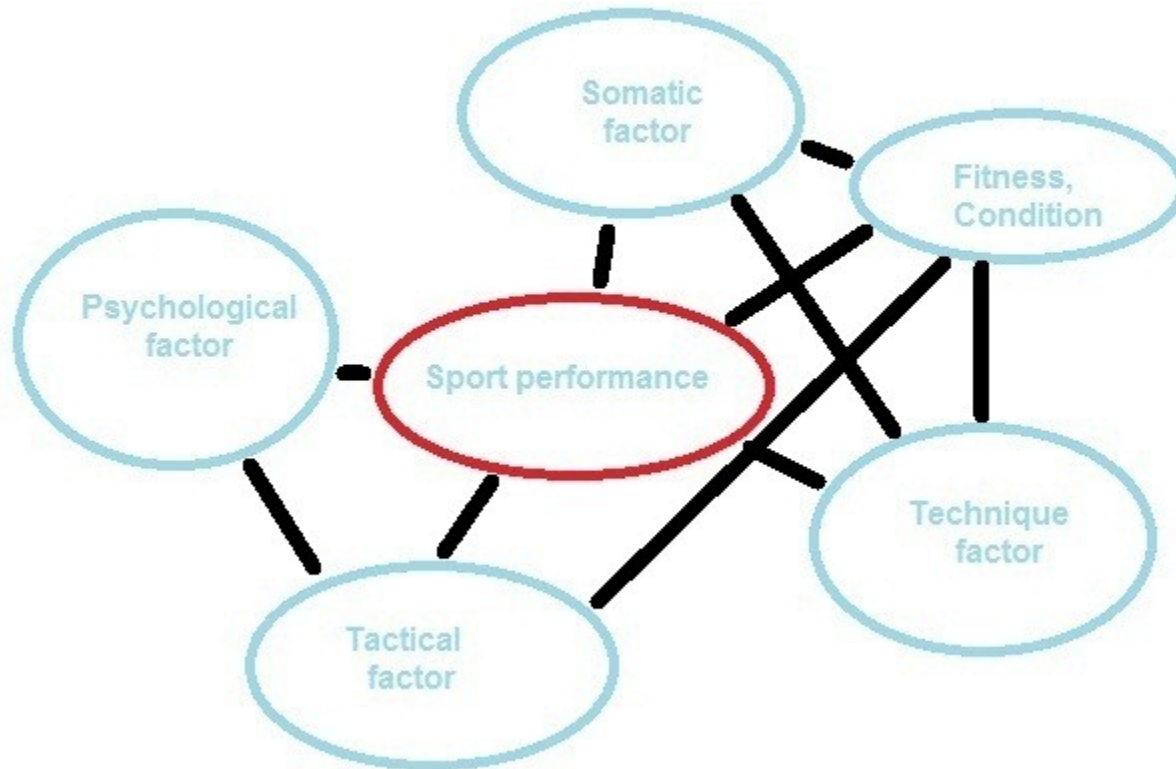
- **Two ways of ST process:**
 - ST for maintaining or improving the health state
 - ST as a training process for competitors, for improvement of performance

The aim of the racing ST



- **The aim of racing, competitive sport**
To reach the individual highest performance in chosen sport or discipline with the help of universal development of athlete
- The task of ST
 - to learn technique skills and ability to use these skills during competition
 - the development of motor abilities with the help of condition training
 - the development of mental side of athlete

Structure of Sport Performance



Somatic factor

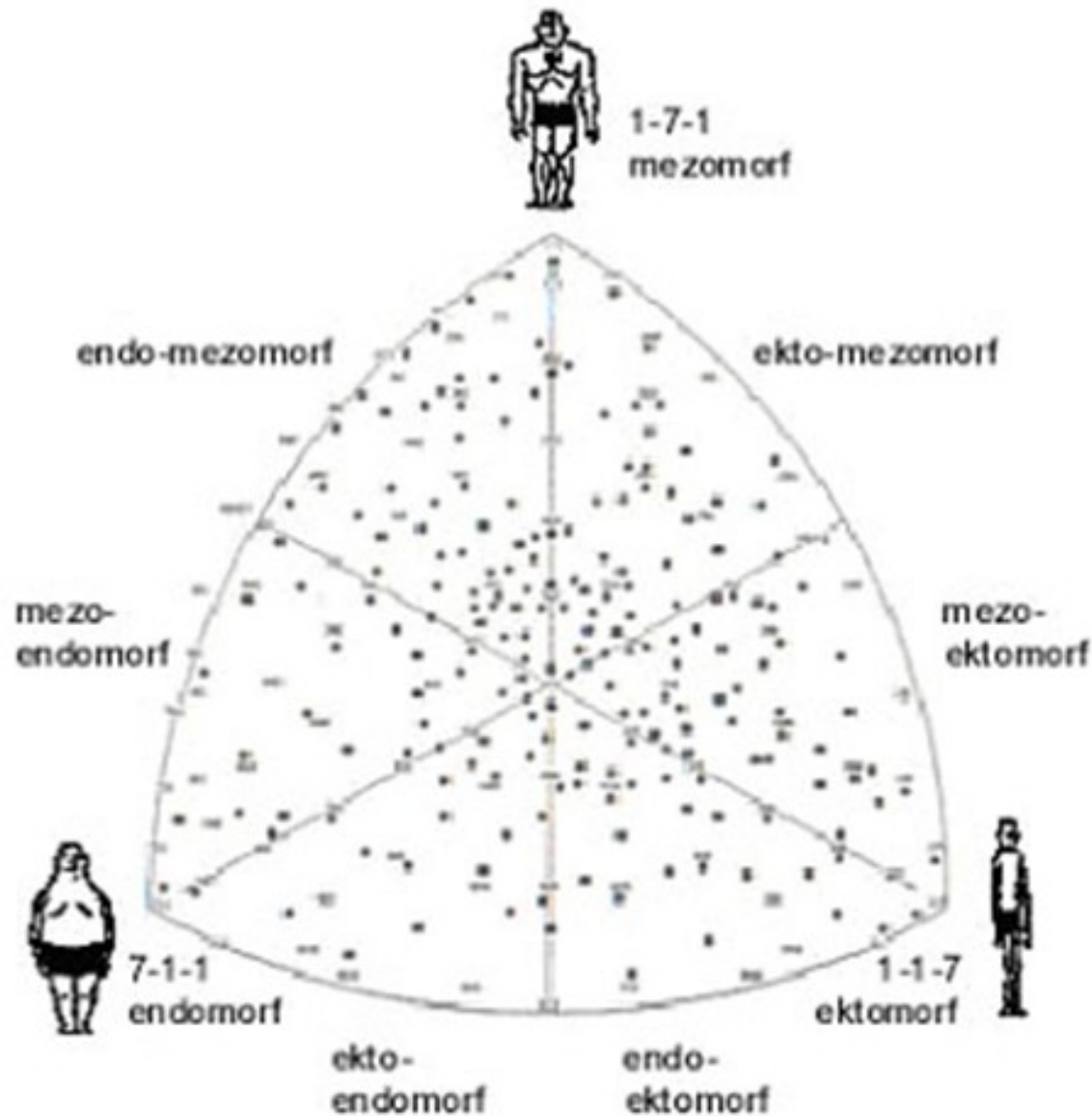


- Building of body
 - external appearance of athlete (somatotyp), anthropometric dimension – H, W, Length of extremities
 - composition of body – internal environment

Factor of technique

- The ability to learn new movement structure and use its during competition

Sheldon somatograf



Condition factor



- Precondition to realize movement, motor abilities

Tactical factor

- The ability to use the experience and knowledge to gain advantage over opponent

Psychological factor

- The development of individuality, social abilities etc.

Classification of the SP



- Speed – strength performance
- Aesthetic – technical performance
- Endurance performance
- Games
- Combat sports
- The sport performance connected with the handling of some apparatus, animal or sport equipment
- Sensorymotor performance

Speed – strength performance



- Sports ?
- The aim: get over the distance as fast as possible, take the highest, longest jump, lift the most weight barbell
- Motor abilities – strength, speed, co-ordination
- Motor skills – simple structure, locomotion, (cyclic, acyclic, combined), the number of skills- small, variability ???
- Physiology – great energy cost during short time, nBM – 10 – 30000%
- Psychology – big concentration of volitional effort in short time

Aesthetic – technical performance



- Sports ?
- The aim: solution of difficult movement task
- Motor ability: co-ordination, flexibility, strength, speed,
- Motor skills: great number of skills with difficult structure, variability ???
- Physiology: not very high energy cost, aer-anaer. metabolism, load – middle, nBM – 2 – 5000%
- Psych. –creativity, courage

Endurance performance



- Sports?
- The aim: get over the given distance in shortest time
- Motor ability: endurance, strength
- Motor skills: small number, structure simple , variability ???
- Physiology: middle energy cost per minute, but total cost during the whole time of race is enormous
2-5000% nBM, aer. metabolism,
- Psych: long term volitional effort and concentration, get over fatigue, persistence of effort

Games, collective sport performance



- Games??
- The aim: get over active opponent
- Motor ability: all
- Motor skills: high number, structure – very complicated, variability high
- Physiology: load middle and changing, aer-anaer.metab., 1 – 2000% nBM
- Psych: creative tactical thinking, team motivation (team spirit), anticipation, accept the social rule of team

Combat sports, individual sports



- Sports ?
- The aim: get over active opponent
- Motor ability: all
- Motor skills: great number, structure – very complicated, variability ???
- Physiology: small to high energy cost, 400-1500% $\dot{V}O_2$ max, aer- anaer. metabolism
- volitional activity, the ability get over pain, control of aggression, decision under deficit of time, anticipation

The sport performance connected with the handling of some apparatus, animal or sport equipment

- Sports ?
- The aim: get over distance, optional exercise in shortest time
- Motor ability: all
- Motor skills: from low to very high number, structure – very various, variability ?
- Physiology: energy cost 500-1000% nBM, most aer. than anaer. met.
- Psych: decision under time deficit, get over the fear, scare, courage, risk, danger, solve the unexpected problems

Sensorymotor performance



- Sports ?
- The aim: the most accurate hit of the target
- Motor ability: co-ordination
- Moto skills: small number, structure simple, variability???
- Physiology: energy cost low, 400-700% nBM,
- Psych: high level of concentration,