

1. Motor Skills

- 1.1. Motor skills: voluntary control over movements of the segments to achieve a goal.
- 1.2. Motor learning: the acquisition of motor skills, experienced motor skills, re-conditioning after injury, disease, and neurological plasticity.
- 1.3. Motor control: integration of neuromuscular system for the muscles involved in the performance of a motor skill.
- 1.4. Skills: activity with a specific purpose or goal to achieve, also known as performance
- 1.5. Gross motor skill: the use of large musculature to achieve the goal of the skill.
- 1.6. Fine motor skill: control of small muscles to achieve the goal of the skill and a high degree of precision of hand finger movement.
- 1.7. Discrete motor skill: a simple movement with defined beginning and end points.
- 1.8. Continuous motor skill: respective movement.
- 1.9. Serial motor skills: a series of discrete skills.
- 1.10. Closed motor skills: the performance of when to begin the action.
- 1.11. Open motor skills: the performance in motion which determines when to begin the action.

2. Measurement of Motor Performance

- 2.1. Performance outcome measures: how far, how fast, how many points scored as the outcome for motor skill performance.
- 2.2. Performance production measures: how the nervous, muscular, and skeletal systems function during the performance, such as kinematics, force, and EMG.
- 2.3. Reaction time to movement time and response time
- 2.4. Error measures: Assessing errors for one-dimension movement goals, such as FMS.
- 2.5. Kinematics: force, displacement, velocity, and acceleration (change in velocity during movement)
- 2.6. Kinetics: torque, including fulcrum for the lever, lever arm form the fulcrum to lift or move an object
- 2.7. EMG: activity of the (single) muscle

3. Motor Abilities

- 3.1. Ability: capacity of a person's achievement potential for the performance of specific skills
- 3.2. Motor Ability: an ability specifically related to a motor skill.
- 3.3. General motor ability: the different motor abilities are highly related.
- 3.4. Specificity of motor ability: motor abilities are relatively independent.
- 3.5. Balance and timing abilities

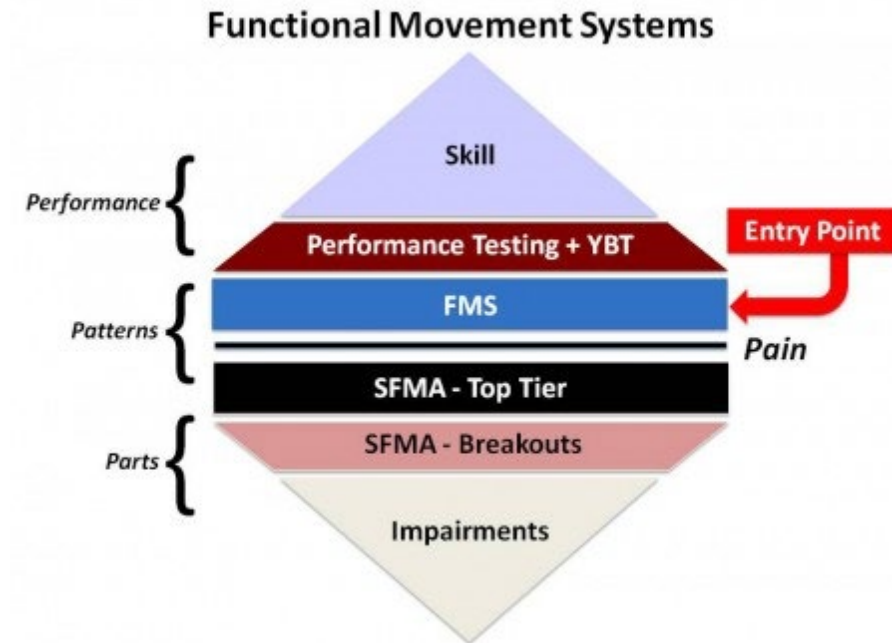
4. Screening

- 4.1. A system: a set of procedures to measure to predict the degree of injury risk, including a method of achieving results (FMS)
- 4.2. A single leg squat or lateral heel touch
- 4.3. Y-balance test
- 4.4. Screening: something missing, potential pain, symptoms, or possible recurrence
- 4.5. FMS: Functional movement screen, a comprehensive assessment tool with 7 movement patterns.
 - 4.5.1.1. Movement with conscious intention in automatic response, habitual movement or compensation.
 - 4.5.1.2. A whole movement pattern is better than the sum of its moving parts in terms of movement patterns.

The Functional Movement Screen



- 4.6.
- 4.7. Selective Functional Movement Assessment



5.

- 5.1. FMS: rating movements
- 5.2. motor control within movement patterns
- 5.3. The area of movement deficiency
- 5.4. Asymmetries
- 5.5. A balance or mobility and stability

6. Corrective exercise: to reset the motor control and recheck with FMS.

- 6.1. Deep Squat: functional patterning, also including hurdle step, inline lunge.
- 6.2. Stability in the entire body tone and mobility of the lower extremities
- 6.3. Shoulder mobility and active straight-leg raise: mobility in the proximal segments
- 6.4. Trunk stability push-up and rotary stability: motor control in core stability muscles.

6.5. Performance and conditioning

