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Introduction of Movement Screens



What is a Movement Screen?

Screen:

A strategy used to identify pathological conditions prior to an individual showing specific symptoms of that condition – **Clinical**

Movement Screen in an Athletic Context:

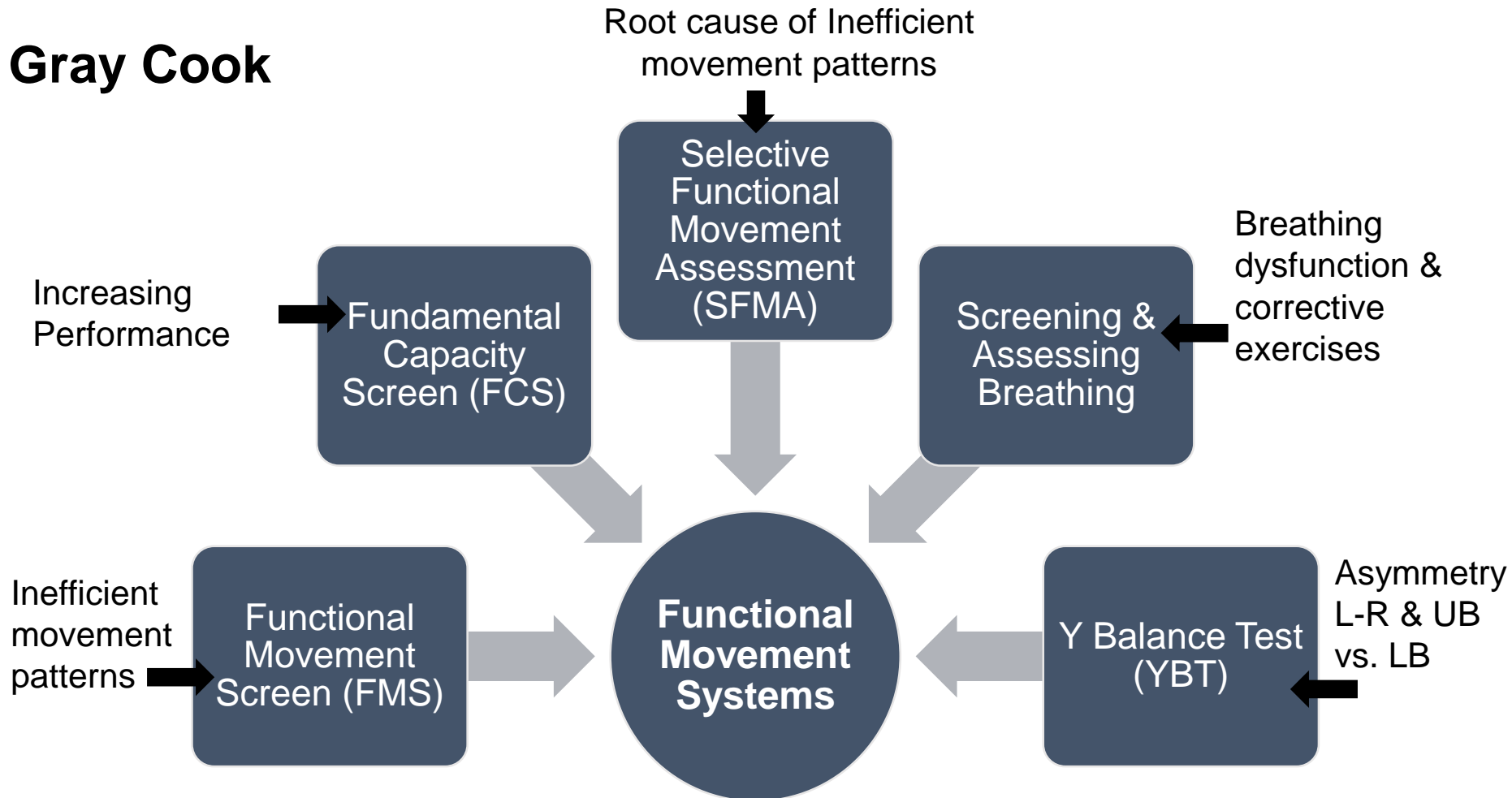
Test(s) that include fundamental movements that are characteristic of majority of sports and athletic disciplines.

- Indication of function and control during athletic movements
- Movement dysfunction ➡ training protocols ➡ & improving performance capabilities



History of a Movement Screen

Gray Cook





History of a Movement Screen

Functional Movement Screens (FMS)

- FMS focuses on identifying basic movement dysfunctions and asymmetries to reduce the risk of injury

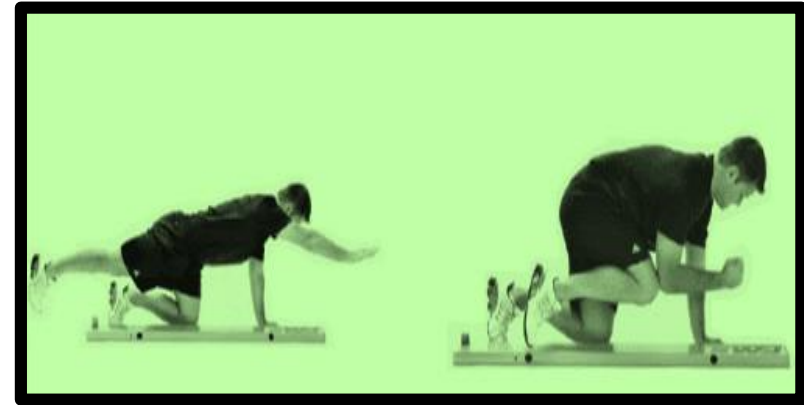
Selective Functional Movement Assessment (SFMA)

- A comprehensive assessment tool to identify the root cause of movement dysfunction and develop targeted strategies
- Tests are designed to identify whether it is a mobility issue, stability/motor control issue, or both.
- requires a healthcare professional such as a PT, Chiro, or sports med practitioners



Functional Movement Screen

1. Deep Squat
 2. Hurdle Step
 3. Inline Lunge
 4. Shoulder Mobility
 5. Active Straight Leg Raise
 6. Trunk Stability Push-Up
 7. Rotary Stability
- Each movement is scored on a scale from 0 to 3, with 3 indicating optimal movement and 0 indicating pain or inability to perform the movement





FMS- Deep Squat

Deep Squat

- Involves flexion and extension of the hips, knees, and ankles
- Requires adequate mobility, stability and neuromuscular control

1



2

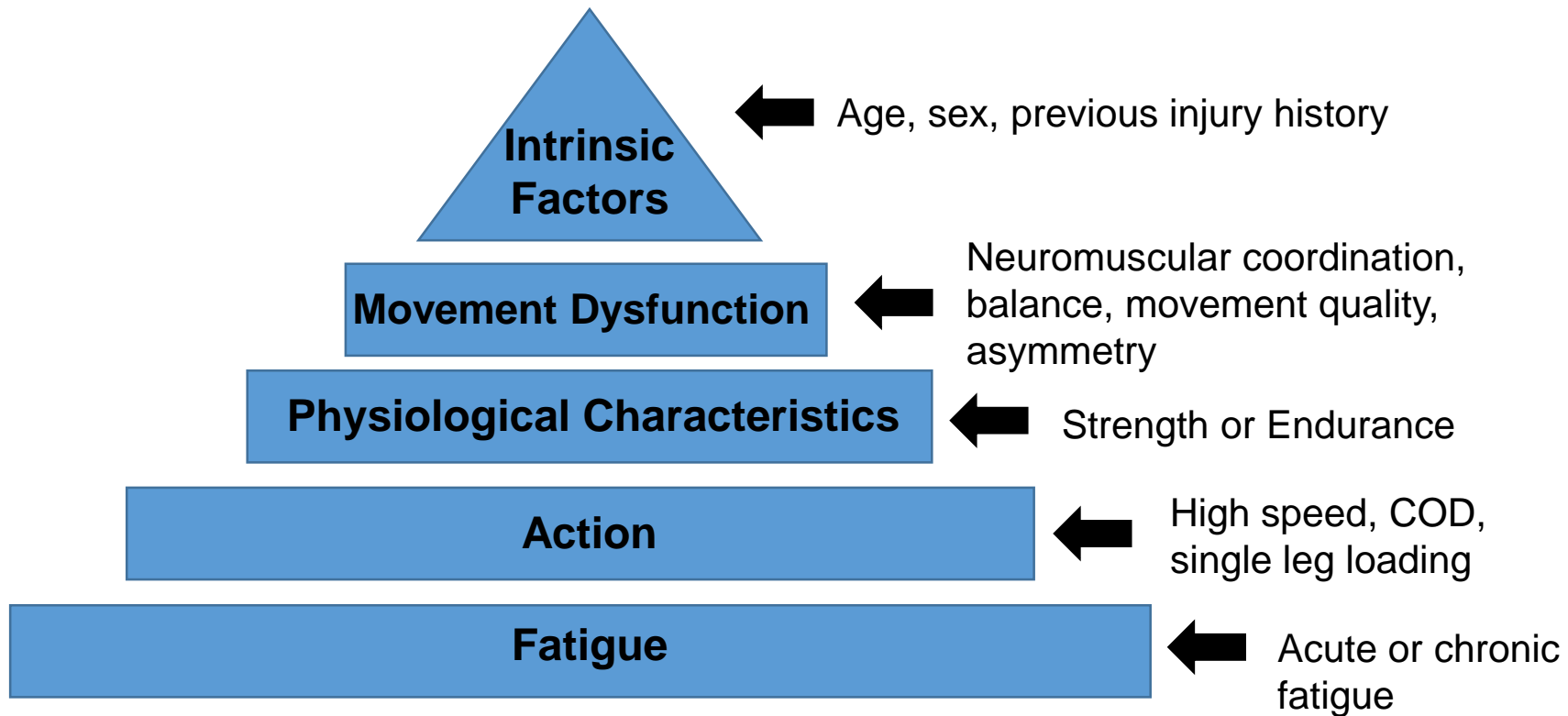


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Injury Risk & Movement Screens



Mechanisms for injury are complex and multifactorial



Other Considerations

- **Feedback**
 - Directions vs. Cueing
- **Environment**
 - Tasks are not indicative of athletic activities based on the environment the individual is in
 - Movement patterns differ based on the environment
 - Target while jumping or having a defender in place
- **Reliable Measures**
 - a measurement or test produces consistent and stable results over time and across different conditions
 - Reliability differs based on exercise (shoulder mobility vs hurdle)



Practical Applications

Movement Quality

- Weaknesses for further evaluation
- Guidance for exercise prescription

Baseline for Reassessment

- Tracking over time
- Injury
- Improved communication and understanding of movement patterns

Simplicity

- Generally requires little equipment
- Cost effective





Guidelines

1. Implement tests that you deem appropriate for your own settings, but clearly define how and what you're using it for
2. Select individual movements that have been validated for injury risk assessment based on their merit and application to sport
 - Single-leg squat & star excursion balance
3. Use clearly defined assessment criteria to improve consistency and reliability
4. Provide feedback to determine if the dysfunction can be cleared through movement correction
5. Consider having same testers and in similar conditions (time or fatigue)
6. Consider videoing to review movements



Movement Screen Recap

Movement Screens Are:

- Tools to help improve performance capabilities
- Weaknesses or movement dysfunctions that can be addressed through training.

Movement Screens Are Not:

- Tests that are going to identify injury
- Injuries are complex

Movement screens can make a positive contributions to teams training environment. Clearly define why and what you're using these screens for, so you can have a rationale and design your own systems around using these tests.





Thank you