



Motor Behavior

Fundamentals and Application





Speaking the same

—
language









Terms to know

- Practice
- Training
- Focus
- Instruction
- Cue
- Feedback
 - Augmented
 - Sensory



And....

What the heck is motor learning?



Practice

Goal: Improve skill or problem solving ability

Result: Learning effect

Training

Goal: Improve capability to execute skill

Result: Performance effect

Focus



FOCUS!!!

Components of focus

Who?

What?

Why?

When?

Where?

In what way?

Internal

Individual thinks about their
specific body movements

External

Individual thinks about
something outside of their body
or the result of their movement

In your sport experience....

Which do you hear more internal or external?

So which one do we
think enhances
performance?

Internal or External?

External!

But Why?

Wolf's Constrained Action Hypothesis: By using an external focus we allow our bodies to be put on autopilot without interruption from thought

Research supports that an external focus improves:

- Better performance
- Better motor learning
- Reduces interference
- Reduces cognitive load

How?

- Greater efficiency in muscle fiber recruitment patterns
- Improved kinematic and kinematic jumping measures
- Enhanced effectiveness of stretch-shortening cycle and movement coordination patterns
- Enhanced force production

In what capacity?

- Continuous skills
- Discrete skills
- Total body movements in the horizontal and vertical planes
- Running economy in distance runners
- Sprinting performance
- Object manipulation
- Balance
- Accuracy

Instruction

When: Prior to the motion
beginning

Content: How to perform action

Feedback

When: After the motion is
completed

Content: What was performed
and adjustments/praise

Instruction

Considerations: Use an external focus, keep it positive, and keep it clear and concise!

Feedback

Considerations: Use an external focus, keep it positive, and less is more!

Goal of Practice

Encourage independence

How can I use this?

Thank
You!

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