Re-developing the Hip Hinge

Diane Vives, MS, CSCS, NSCA-CPT
Brett Jones, MS, ATC, CSCS

M & Ms

- M&Ms and Checklists
- Specifically Brown M&Ms
- Checklist Manifesto
  - Atul Gawande
Real Hip Hinge

Performance Testing + YBT
FMS
SFMA - Top Tier
SFMA - Breakouts
Impairments

Set a Baseline for Fundamental Movement
1. Squatting
2. Stepping
3. Lunge
4. Reaching
5. Leg Raising
6. Push-up
7. Rotary Stability
Patterns in the exercises

- KB Deadlift – ASLR, Toe Touch, TSPU

Move, Perform, Achieve

SKILL

PERFORMANCE

MOVEMENT

Plyometric

Power

Agility

Speed

Strength

Proprioception

Mobility/Stability

DL vs. Squat

- Another cut at training the brakes is Bud Charniga’s excellent article Key Muscles for Weightlifting, available to read on his website dynamic-eleiko.com. Bud cites several articles by leading sports scientists that demonstrate the importance of strengthening the antagonist muscles, specifically the hamstrings, for improving weightlifting performance. Even though the quads are the dominant muscle group in the lift-off and explosion phases of the lift, research shows that squatting by itself to improve performance only slows the athlete down. However, strengthening the hamstrings not only improves the automatic, stretch reflex portion of the lift (specifically the hamstrings induced “hip snap”) but also helps protect the lower back. Even stronger hamstrings actually increase the speed strength expression of the quads. Bud cites a study by Frolov from the 1981 Weightlifting Yearbook which points out athletes with stronger hamstrings relative to quad strength performed better in the vertical jump and that those weightlifters that had superior vertical jumps also enjoyed higher performances in the barbell snatch.
DL vs SQ

(Charniga and Frolov)

• Training Antagonist = Stronger Performance
• Squatting Alone Slows Performance
• “Hip Snap”
• Vertical Jump

Programming

• Where do you put the crosshairs
• Weak link strategy
• “A dab will do”
• Incorporating KBs

("Barbell Deadlift Training Increases the Rate of Torque Development and Vertical Jump Performance in Novices” Thompson et al., JSCR, January 2015 Vol. 29 - Issue 1: p 1–10)

Why KBs

• Thick handle and offset center of mass
• Alignment of Center of Mass
• Unique force production and redirection
Deadlift first…

It’s a Hip Hinge

Foot Position
Foot Position

• FAI?
• When the hip stops the back starts
• Injury?
• Natural foot-hip-back

Individualizing Foot Position

“Lock and Rock Method”

Key Points – DL

• Foot position
• Neutral spine
• Breathing – Intra abdominal pressure
• Push the feet through the ground – don’t pull
KB Deadlift

The Set Up-
Note the Deadlift position!

Barbell Sumo DL

KB Swing

shoulder above hips?

shoulder above hips?

shoulder above hips?

shoulder above hips?

shoulder above hips?

shoulder above hips?
**KB Swing**

**Squat**
- Start with Goblet Squat
- Key Elements
- Carry Over

**Key Points - Squat**
- Foot position and Stance
- Neutral spine
- Pull into the bottom position
- Keep tight
References and Resources

doi: 10.1097/01.blo.0000136903.01368.20
  - Functionalmovement.com
  - StrongFirst.com
  - "Kettlebells From the Ground Up 1 & 2, Functionalmovement.com
  - Video - https://www.youtube.com/watch?v=hmNKLpyi4mA