



# ***2022 NSCA PERSONAL TRAINERS VIRTUAL CONFERENCE***

**October 25 - 28, 2022 | ONLINE | 2.0 CEUs**



# ***CONFLICT OF INTEREST STATEMENT***

I have no actual or potential conflict of interest in relation to this presentation.

# ***Kettlebell Swing***

## Patience and Power

Brett Jones

LAT, ATC, MS, CSCS

StrongFirst Director of Education

- Patience
- Rhythm
- Dissociation
- Individualized
- Progression

# ***30,000 Foot View***

## Patience

Patience is bitter, but the fruit is sweet.

Jean-Jacques Rousseau

- The key to power

# ***30,000 cont.***

## Rhythm

The best way to learn is through the powerful force of rhythm.

Wolfgang Amadeus Mozart

- There is a rhythm to the swing
- Coordinated by the breath

# ***30,000 cont.***

## Dissociation

The ability to separate the action of the upper and lower body.

- No Frankenstein swings
- Quick hips > slow arms

# **30,000 cont.**

## Individual Hip Hinge

Individualization is to divest the self of false wrappings.

Carl Jung

- N of 1
- Hip structure
- Research
- “Lock and Rock”
- Torso vs. femur

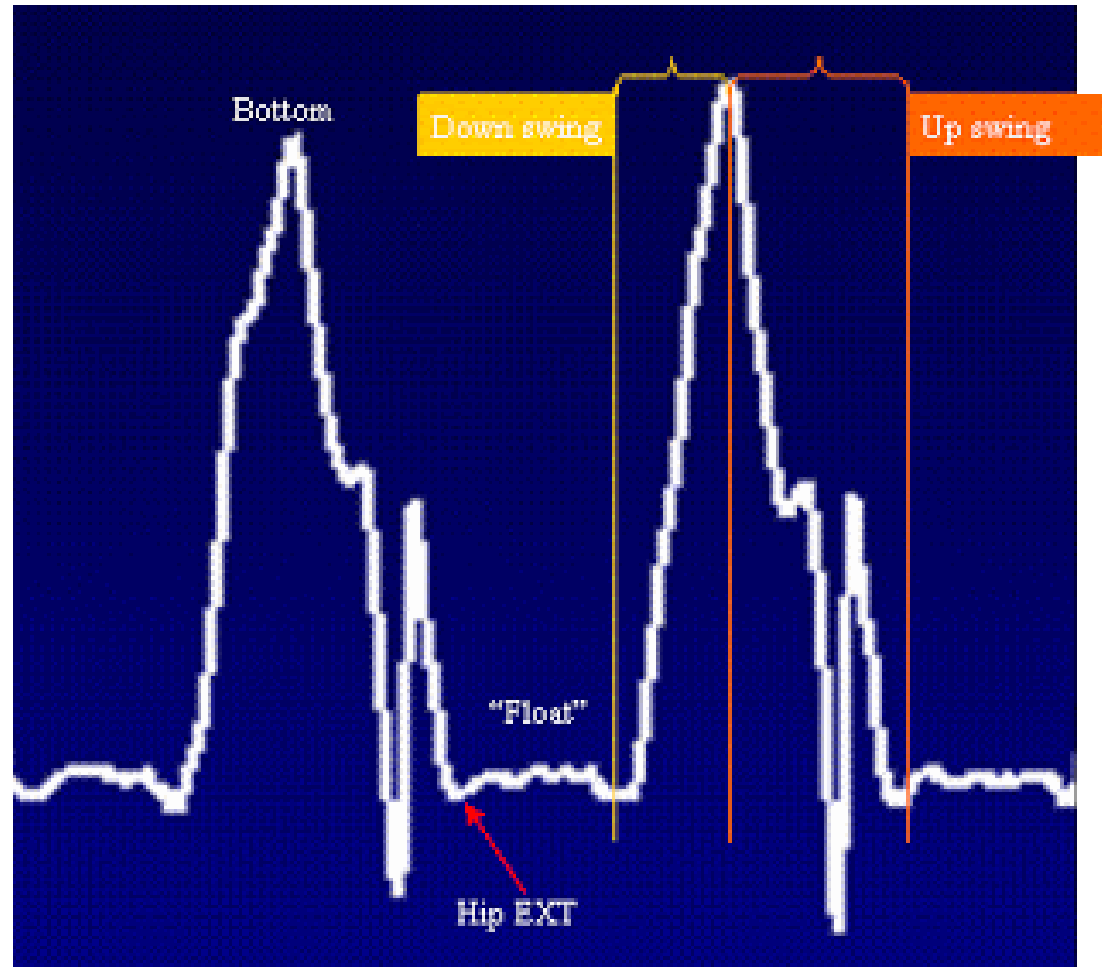
# **30,000 cont.**

## Progression strategies

Get your process right, the results will definitely follow.

Sachin Tendulkar

- Leg raise, toe touch, TSPU
- Deadlift
- Dead swing
- Towel swing

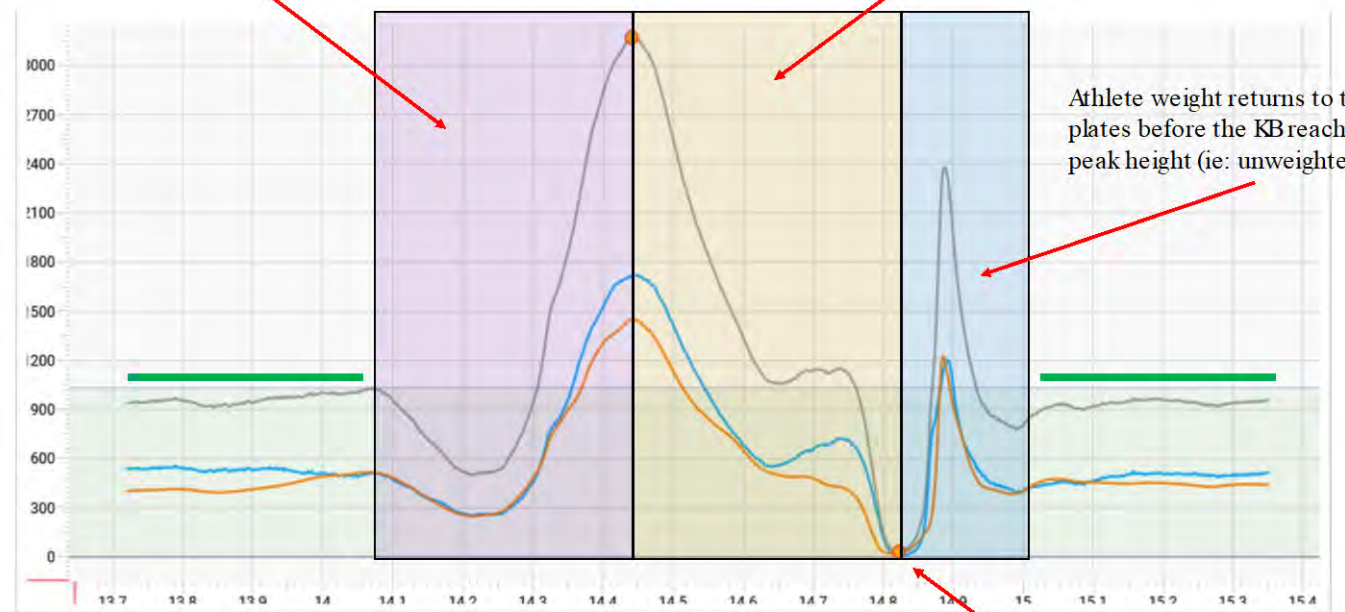


**Example of a smooth efficient swing.**

Image courtesy of Karim Derqaoui of VALD

ECC Phase (KB drops downward + triple flexion occurs)

CON Phase (KB rebounds upward + triple extension)



— KB unweighted phase (shoulders flexed to 90°)

*Likely the point where the KB and athlete COM reach peak vertical velocity (but never leave the plates)*

# *Hinge Strategies*

## From RDL to Athletic

Hamstring EMG activity in three different swings

- Del Monte, MJ, Opar, DA, Timmins, RG, Ross, JA, Keogh, JWL, and Lorenzen, C. Hamstring myoelectrical activity during three different kettlebell swing exercises. *J Strength Cond Res* 34(7): 1953–1958, 2020
- Implications in ACL prevention/rehab

Let's take it to the gym!

# RESEARCH

[http://journals.lww.com/corr/Abstract/2004/09000/Acetabular\\_Labral\\_Tears\\_Rarely\\_Occur\\_in\\_the.24.aspx](http://journals.lww.com/corr/Abstract/2004/09000/Acetabular_Labral_Tears_Rarely_Occur_in_the.24.aspx) Clinical Orthopaedics & Related Research: [September 2004 - Volume 426 - Issue - pp 145-150](#)  
doi: 10.1097/01.blo.0000136903.01368.20

Leah M. Ochoa et al. "Radiographic Prevalence of Femoroacetabular Impingement in a Young Population with Hip Complaints Is High", Clin Orthop Relat Res. Oct 2010, Clin Orthop Relat Res. 2010 Oct; 468(10): 2710–2714. Published online 2010 Jan 27. doi: [10.1007/s11999-010-1233-8](https://doi.org/10.1007/s11999-010-1233-8)

Thompson, Brennan J. et al. "Barbell Deadlift Training Increases the Rate of Torque Development and Vertical Jump Performance in Novices" Journal of Strength and Conditioning Research, January 2015 Vol. 29 - Issue 1: p 1–10

# Perspective

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](http://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 lifts, 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 lifts (specifically the hamstring induced "hip snap" to the bar) stronger hams via neurological pathways actually increases 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.

Thank you

NSCA

Pavel

Gray Cook

You the Attendees

