

Presented by:

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This workshop will dive deep into the evidence base for the critical and undeniable benefits of "Instability Resistance Training (IRT)," an important form of strength training for long-term health. With a focus on grip strength, core stability and joint mobility as our three pillars, you'll understand why IRT is impactful for your clients and athletes, and how to incorporate it into client programs. We'll also tackle strategies to enhance mental performance and mindfulness for an improved mind-body connection. You'll walk away with a new set of tools to develop research-based, innovative and enjoyable client programs.

I. Objectives:

- A) **Learning:** Understanding the research of IRT and how it underscores the need to redefine strength and how we approach training our clients.
- B) **Communication:** Delivering the "Why" to our clients.
- C) **Implementing:** Program designs and movement selection (putting it all together!)

II. The Research is in: Moving with unstable load enhances mental and physical gains rather than facing declines that occur during the aging process.**1. The Effectiveness of Resistance Training Using Unstable Surfaces and Devices for Rehabilitation**

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3325639/>

Instability training stimulates activation and muscle contraction with a reduction in force. Safe and effective for rehabilitation.

2. Instability Resistance Training Improves Working Memory, Processing Speed, and Response Inhibition in Healthy Older Adults: A Double Blinded Randomized Controlled Trial

<https://www.nature.com/articles/s41598-020-59105-0>

Free-weight instability resistance training enhances executive functions and achieves physical gains at a lower load. Safer for older clients.

3. Instability Resistance Training Optimally Impacts Balance and Joint Stability

https://www.researchgate.net/publication/8079290_The_Impact_of_Instability_Resistance_Training_on_Balance_and_Stability

4. Aging With Strength and Grace - IDEA Fitness Journal - Winter 2023 Written by Zachary Mang, PHD

“The greater stability and balance requirements of FWT may lead to greater motor unit recruitment, muscular activation and synchronization “ (i.e. muscle groups firing together) (Schwanbeck et al.2020). Instability free-weight training closely resembles our activities of daily living.

The Research is in: Grip Strength is a critical path to any other kind of strength

1. A biomarker for longevity and long term health

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6778477/>

2. An indicator of heart health

<https://www.health.harvard.edu/blog/grip-strength-may-provide-clues-to-heart-health-201505198022>

3. Associated with cognitive health

<https://www.frontiersin.org/articles/10.3389/fnagi.2021.625551/full>

III. Let's Summarize the Research:

A) **The Challenge:** During the aging process individuals experience a decline in:

- * Neuromuscular control
- * Motor performance & cognition
- * Physical functionality - specifically locomotion, leading to falls.

B) **The Solution:** Proper Resistance Training that requires an element of body stabilization, will slow down age-related declines through enhanced executive functions which improves movement efficacy.

C) **The Why: Key Benefits of IRT**

- 1) Challenges both physical strength and mental performance.
- 2) Enhances muscle activation via increased processing speeds, proprioceptive information, and higher levels of the control system.
- 3) Improves cognitive performance.
- 4) Improvements in Strength, Balance, and executive functions appear under lighter loads than stable based resistance training. This makes it safer for older adults or any athlete that is recovering from an injury or severe asymmetry in a set area of the body. (Thinks training Specificity!)

5) Creates movements within your training program that resemble the instability within your activities of daily living, enhancing your motor control, proprioception, and efficiency with functional task performances. **Move Strong, Move Well, and Move Often!**

IV. IMPLEMENTING INSTABILITY RESISTANCE TRAINING

- Program Specificity
- Training Movements for all environments. Address Stability, Strength, Balance & Proprioception
- Versatility
- Programming template with a sliding scale.
- Grip & Stability are critical components

THE 3 BENEFITS and PRINCIPLES OF REINVENTING STRENGTH

- 1) Pillar 1: Find Your Gecko Grip
- 2) Pillar 2: Build Your Sturdy Trunk
- 3) Pillar 3: Grease Your Joints and Enhance Their Integrity

Understanding and Coaching the Differences of Flexibility & Mobility, Balance & Stability

V. Building IRT Loaded Movement Programs:

1. Start with MACE: Mobility / Activation / Correction / Engagement
2. Always return to the 6 Fundamental Movements
 - a) Squat
 - b) Hinge
 - c) Push
 - d) Pull
 - e) Crawl
 - f) Rotation

Layer in Movement Complexes from the onset and become increasingly sophisticated.
When in doubt, keep the load light (Start at Block Zero & earn the progression.)

VI. Your Charge for Tomorrow!

1. **Redefine Strength.** Introduce your new principles of loaded movement and instability into your own routine and your clients' programs. Shift your vocabulary to **Move** Weight instead of Lift It. Redefine how your clients think of "strength" to include strong grip, stable trunk, and joint integrity with proper mobility.

2. **Relocate Strength.** Take strength training out of the gym and into the home, onto the porch, to the park, to the beach, or on a bench. Make it accessible! Laugh a little!

3. **Reconsider the Business of Strength.** Consider a Strength-Based Group Fitness or Personal Training Program as an exclusive offering and revenue generator. Take IRT Strength from a niche type of workout to a broad-based, versatile program offering.

Results will be copious and immediate!

1. Limitless Physical and Recovery Benefits
2. Mental Health and Emotional Competency
3. Revenue Generating Opportunities

Reach out anytime!**Sarah Apgar**

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Notes
