Flywheel Training to Enhance Strength & Coordination

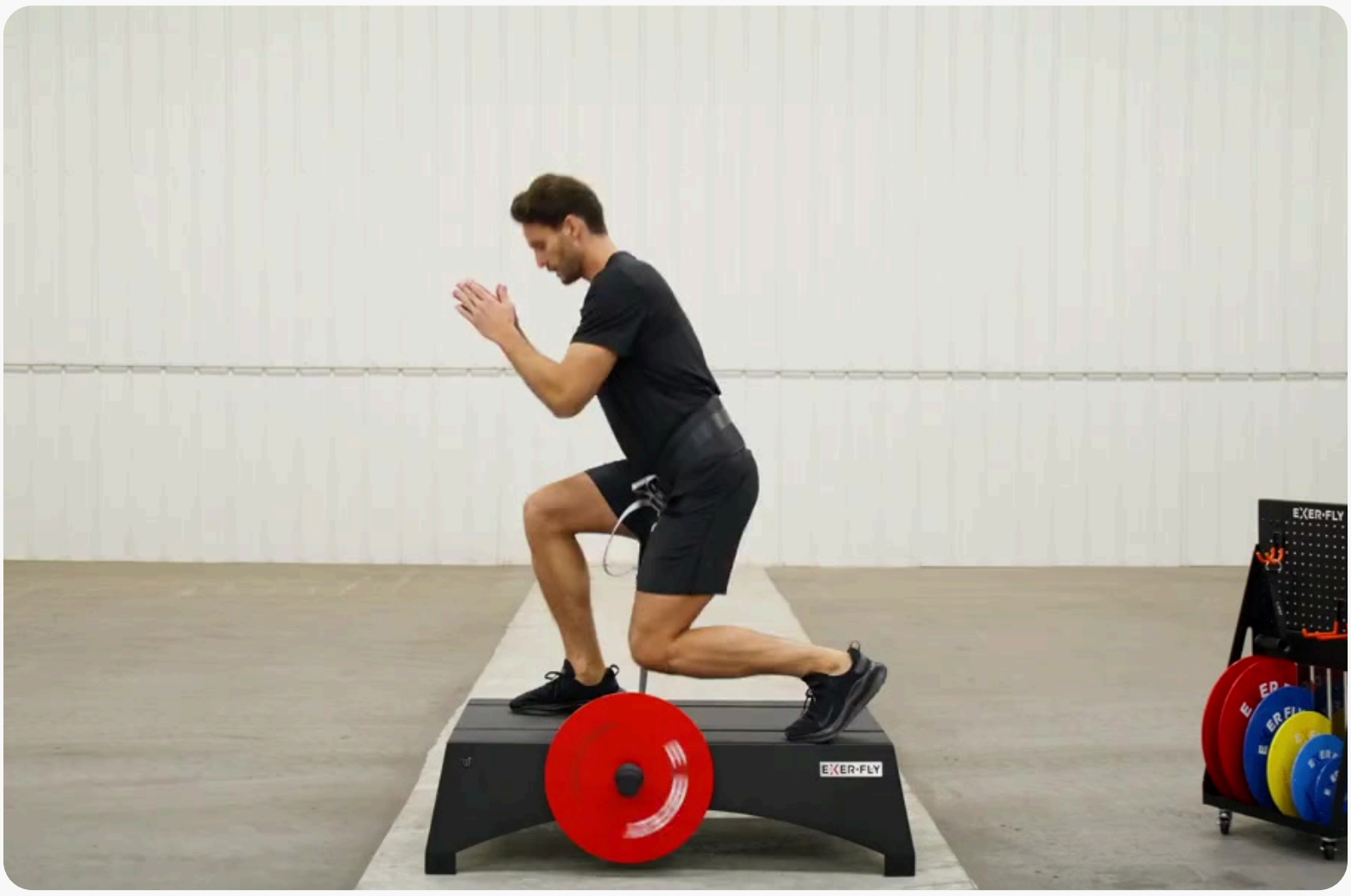
Case Study: Trinity High School, KY →

Background

Many researchers have found that flywheel resistance training (FRT) programs can improve traditional strength measurements such as 1RM (3).

The effect that FRT has on strength is widely accepted and FRT implemented by coaches for this reason (1). **However, one overlooked factor is its ability to improve coordination.**

The improvement in coordination resulting from FRT can possibly be attributed to the rapid transition from concentric to eccentric, inner set differences in range of motion and torque, and/or the large emphasis on eccentric loading (2) that flywheels offer.



The Challenge

A freshmen football player at Trinity High School recently went through a growth spurt. Like many other youth athletes, this rapid growth spurt compromised his body awareness and coordination. Additionally, this athlete had a relatively low strength level, with a front squat of just 165 lbs.

Trinity High School strength staff decided to implement a FRT lower body program. Let's take a look...

Program

Length:
4 Weeks

Flywheel Exercises
Squat: 1 x p/wk
Split Squat: 1 x p/wk

Reps & Sets
3 sets of 8 – 6 reps

Intensity
Velocity Zone:
Accelerative strength
(0.75 - .50 m/s)

Note: These exercises were performed alongside his normal training. The FRT specific exercises replaced the traditional resistance counterparts (i.e. flywheel belt squat vs barbell front squat).

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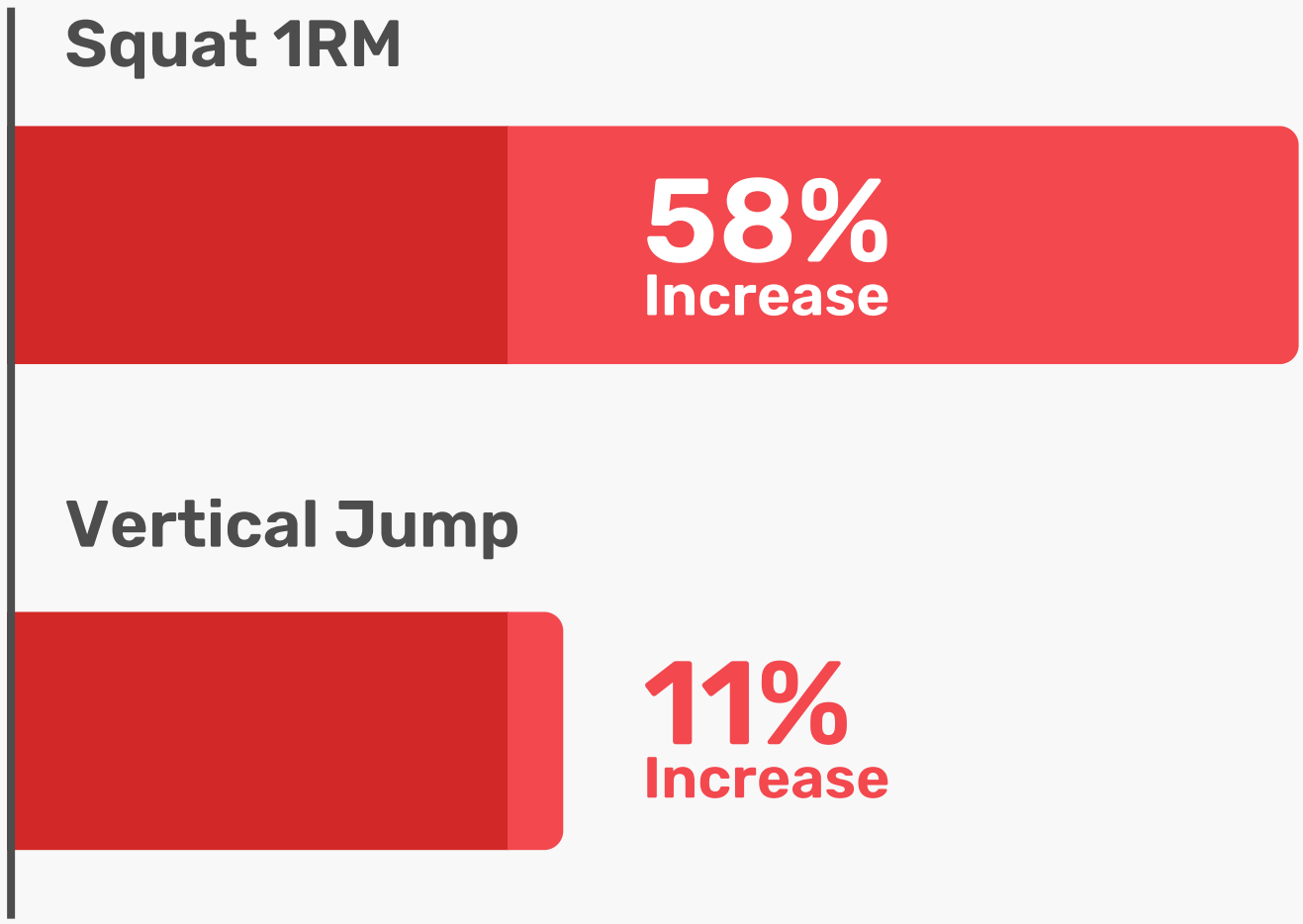
Outcomes



Plus, increased coordination, squat technique, and stability, anecdotally.

The Numbers Speak Volumes.

This 58% increase in Squat 1RM proves even more impressive considering the athlete did not perform any barbell squats throughout the entire program.

Moreover, one of their biggest takeaways was the **substantial improvements in coordination and movement quality.**

Mike Snyder
Trinity High School

After implementing the Exerfly ultimate with a few of our freshman that recently went through growth spurts we got exactly what we wanted! During the post-test they looked smooth, strong and it really locked in their movement patterning.