Hockey Agility for Young Athletes



A) ***Knock the walls out of weight rooms.***

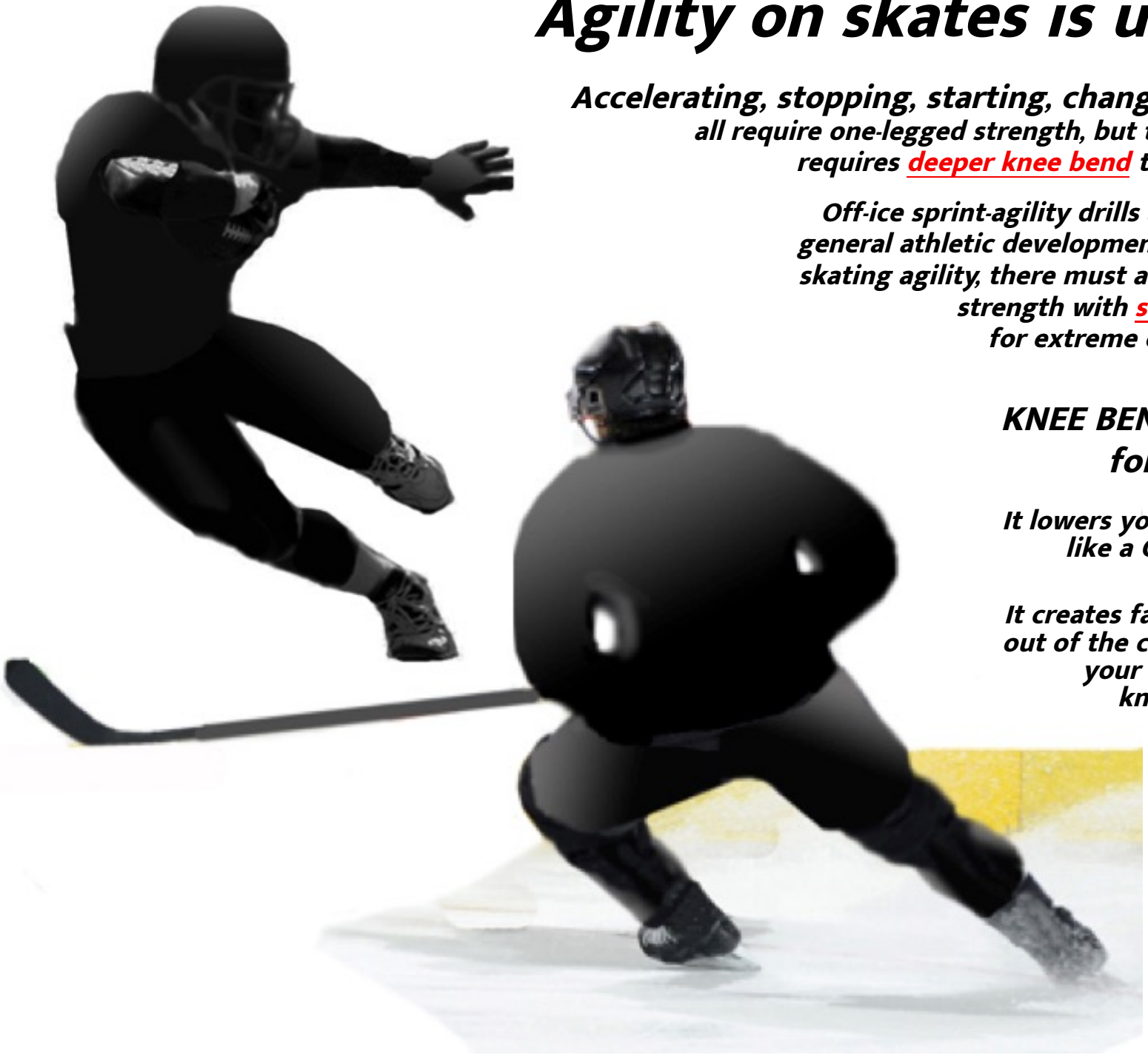
B) ***Build Speed Gyms to combine sprints, jumps and skating skill habits in supersets with strength sets.***

C) ***Play dynamic sports.***

Agility on skates is unique!!!

Accelerating, stopping, starting, changing directions
all require one-legged strength, but to do it on skates requires deeper knee bend than other sports.

Off-ice sprint-agility drills are important for general athletic development, but to improve skating agility, there must also be one-legged strength with skating knee bend for extreme cornering forces.

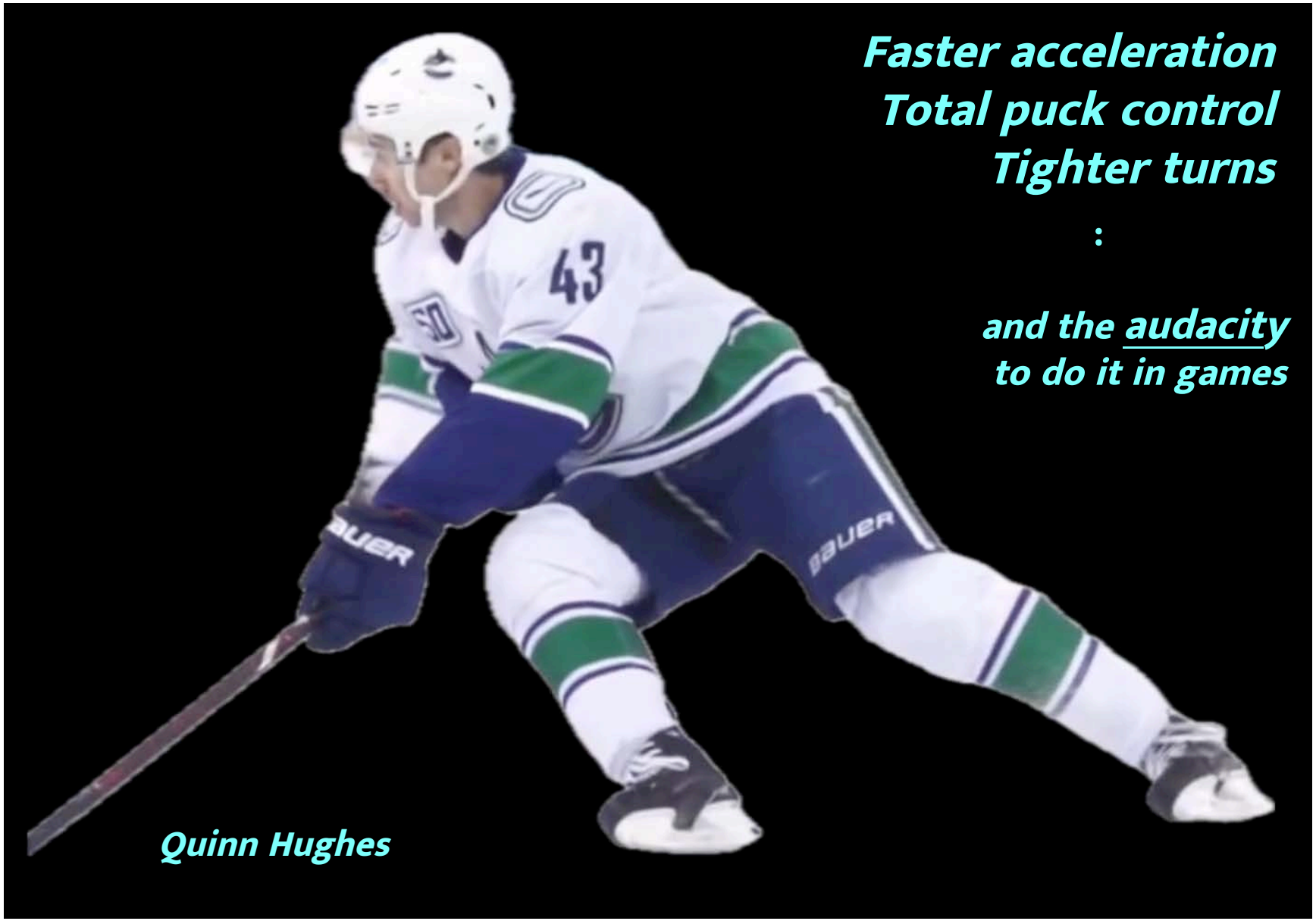


KNEE BEND is essential for two reasons:

It lowers your center of mass like a Gran Prix race car.

It creates faster acceleration out of the corner by starting your first strides from knee bend and lean

Has Anyone Ever Done This Faster?



Transitions & Cornering

Lower your Center of Mass

Like a sports car compared to a jeep around corners



D mirrors the forward in an OverSpeed drill





You become what you repeat,
so … repeat good knee bend

Knee bend and strength

are required for agility at high speed on skates,
but not necessarily for sprint-agility off-ice.



So beginners should 'train'
in these positions from
the first days of skating.

Try fun games, like
follow the leader

Hockey Agility: Participate in Dynamic Sports

√ *Reactivity to random physical demands,*
√ *Anticipation and reaction time improvement,*
√ *Accelerating-Decelerating your body,*
√ *Forward, backward, sideways sprints,*

√ *Stopping, starting, turning at any speed,*
√ *Explosive strength from one leg at a time,*
√ *Core muscles synergistic with limb movers,*
√ *Dynamic twisting to forehand/backhands.*



... and ...

Hockey endurance is maintenance of all the above.

Popular long, slow 'Cardio' does NOT satisfy any of the requirements.

High Intensity Interval Training (HIIT) can fulfill all.

If you planned for weeks, you couldn't come up with a drill that has more of these game-ready factors than tennis.

Tennis & related game-drills are great off-ice training for hockey agility.

***Tennis requires only two training partners**, so it is a great activity for hockey athleticism ... **if** the skill levels of the training partners are about equal. If not, below are some modification-drills. Of course, there are other sports: basketball, soccer, lacrosse, football; plus games that don't require large teams: raquetball, handball, paddleball.*

***DRILLS:** In the drill shown at right, one athlete at a time chases down 6-8 balls from the coach, who stands at the mid-court intersection of the service lines, with a large basket of balls, hitting to the right, left, and sometimes overhead.*

In one modification, the player stays on the base line; this requires quick sprints for greater distances. Another drill is at the net for reactiveness -- great for goaltenders.

Some drills may not require a lot of tennis skill. Players hit the ball anywhere except to the coach, because (s)he's busy getting another ball out of the basket to keep the tempo up. After 6-8 balls, another player jumps in, so with four athletes the work:rest intervals are 1:3 Keep it up for 40-60 minutes with short water breaks. That's 'Agility-endurance. – more affective for hockey than traditional 'cardio.'

The coach does not need the skill of a tennis pro; just a little better than mine.

***GAME-DRILLS:** (1) Baseline tennis: no serves, so there are long rallies; or (2) Paddleball allows aggressive harder hits, so rallies are shorter, but good training hockey agility in combination with endurance.*





Stopping, starting, sprinting, reacting, twisting-hitting from awkward positions, whole-body strength and sprint-endurance.

It's hard to imagine how to challenge that many athletic attributes in a training drill, and still make it fun.

This is CREATING SYNERGY rather than isolating all these pieces into separate workouts.

There is a myth in some training circles that you become a better athlete by making every muscle stronger – even to the extent of isolating each of those muscles or stimulating electrically.

It's the CNS that must be trained for athleticism.

Train MOVEMENTS not muscles, and train them in a variety of random or chaotic ways, just like hockey competition.

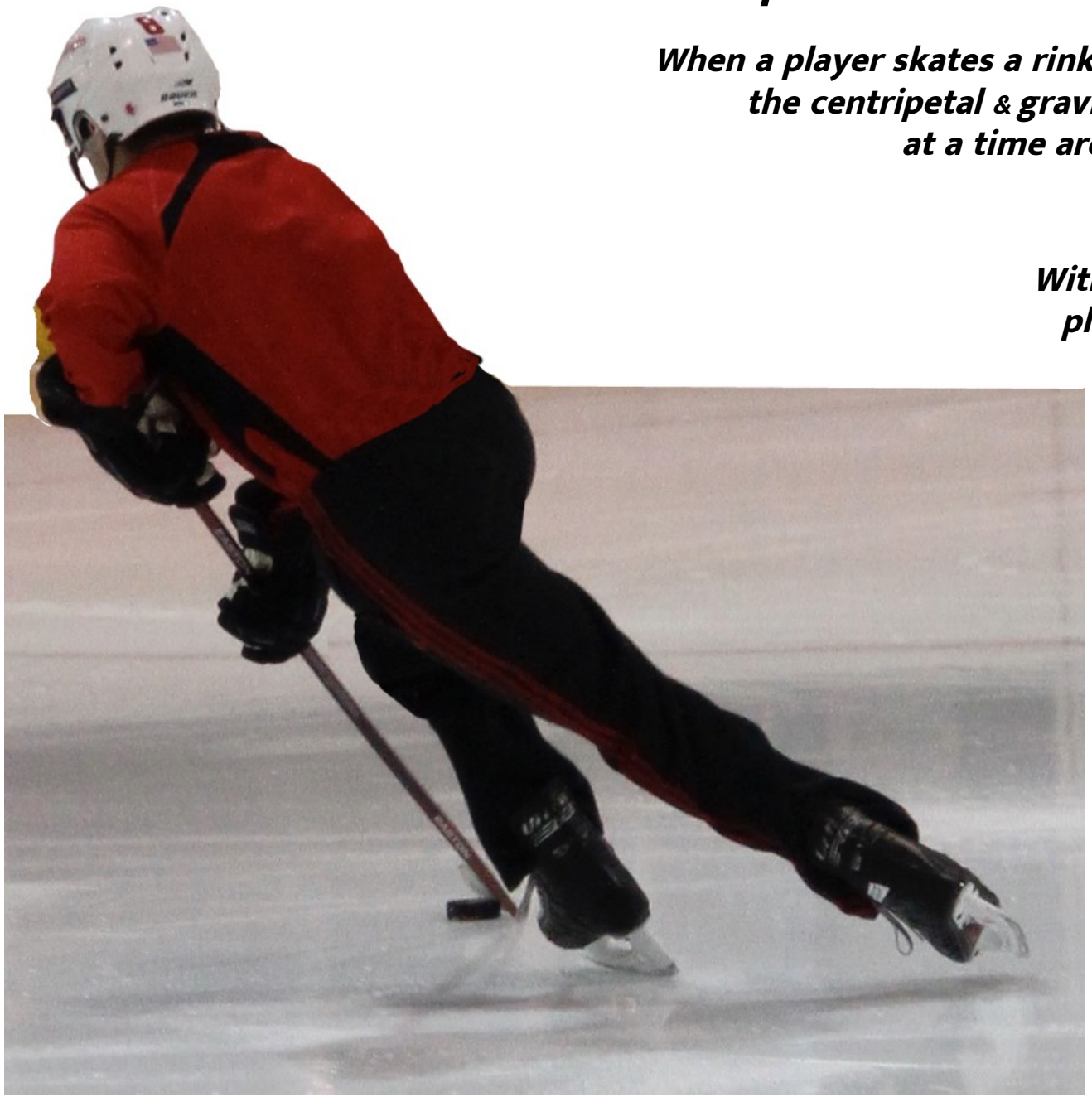






Agility + Core Synergy

This drill has many of the benefits, but not the fun of tennis game-drills. Natalie sprints right and left, chasing a med ball thrown by a partner. Then throws it back with two hands to increase the use of core muscles. Not so popular, of course but excellent core-agility training.



How important is strength for cornering?

When a player skates a rink-wide corner at top speed,
the centripetal & gravitational forces on one leg
at a time are huge, and much greater
if the radius is smaller.

Without one-legged strength
players will just slow down

:

so dryland training
is essential.



Explosive strength for agility on skates

Traditional lifts in the weight room – like squats – can play a role in agility, but must be combined with explosive movement of the body.



Strength is essential for skating speed and agility. The important question is: how to acquire strength.

For this defenseman (6'8", 250#) peak force can exceed 1500 pounds while jumping.

Superset with unweighted jumps. Unload the plyotubes, so arms are free to add force to lower body thrust by active and passive stretch.

Joe Finley will drop the plyotubes and continue the superset with arms-free jumps.

Complicated Neurological Challenges



To build athleticism, add diverse, even chaotic stimuli so the nervous system learns super-quick reactivity – often called, 'Ice Hockey.'

Sample diverse set

- ***Three eccentric squats***
  (partner forces negative half. Not shown)
- ***Two squat-jump throws,***
- ***Three squat jumps – arms free.***

Besides traditional strength exercises, add some that are specific to skating crossover turns.

This drill requires a partner or coach, and the harness is attached around the waist only after players have learned to extend the body and drive-leg in a straight line at final push-off (SLX).

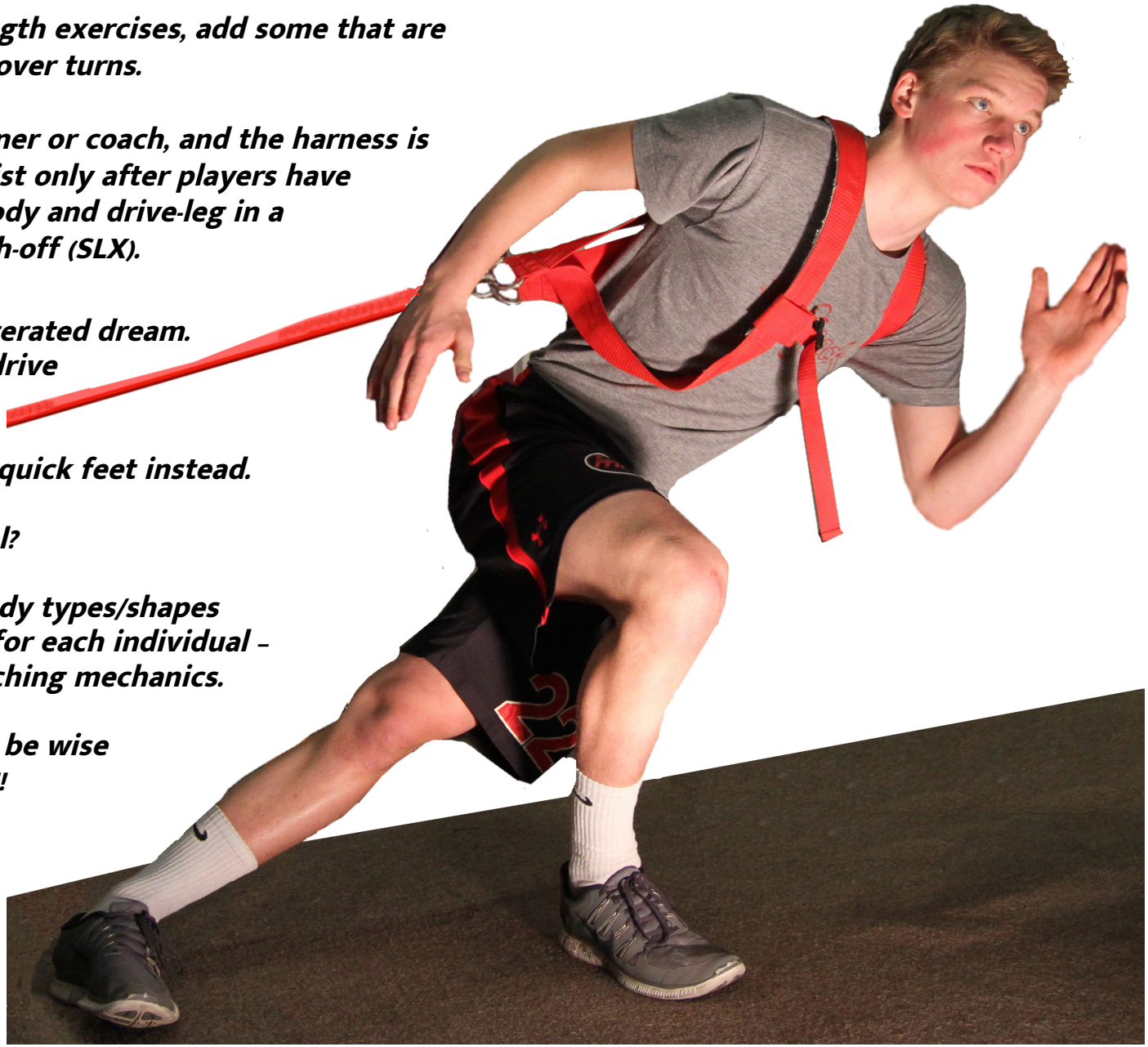
SLX is actually an exaggerated dream. Skaters don't normally drive under to this extent.

Many great skaters use quick feet instead.

Is there a 'perfect' model?

Given the millions of body types/shapes 'perfection' is different for each individual – like golf swings – or pitching mechanics.

However, players would be wise to study Quinn Hughes!!!




NHL'ers doing Hill Crossovers with 80# PlyoTubes.
Knees bent!!!
Intervals: 10-15 seconds
with 60 second rest
Include intervals with arms
free to swing naturally
Jordan Leopold and Andrew Alberts, NHL'ers grinding uphill

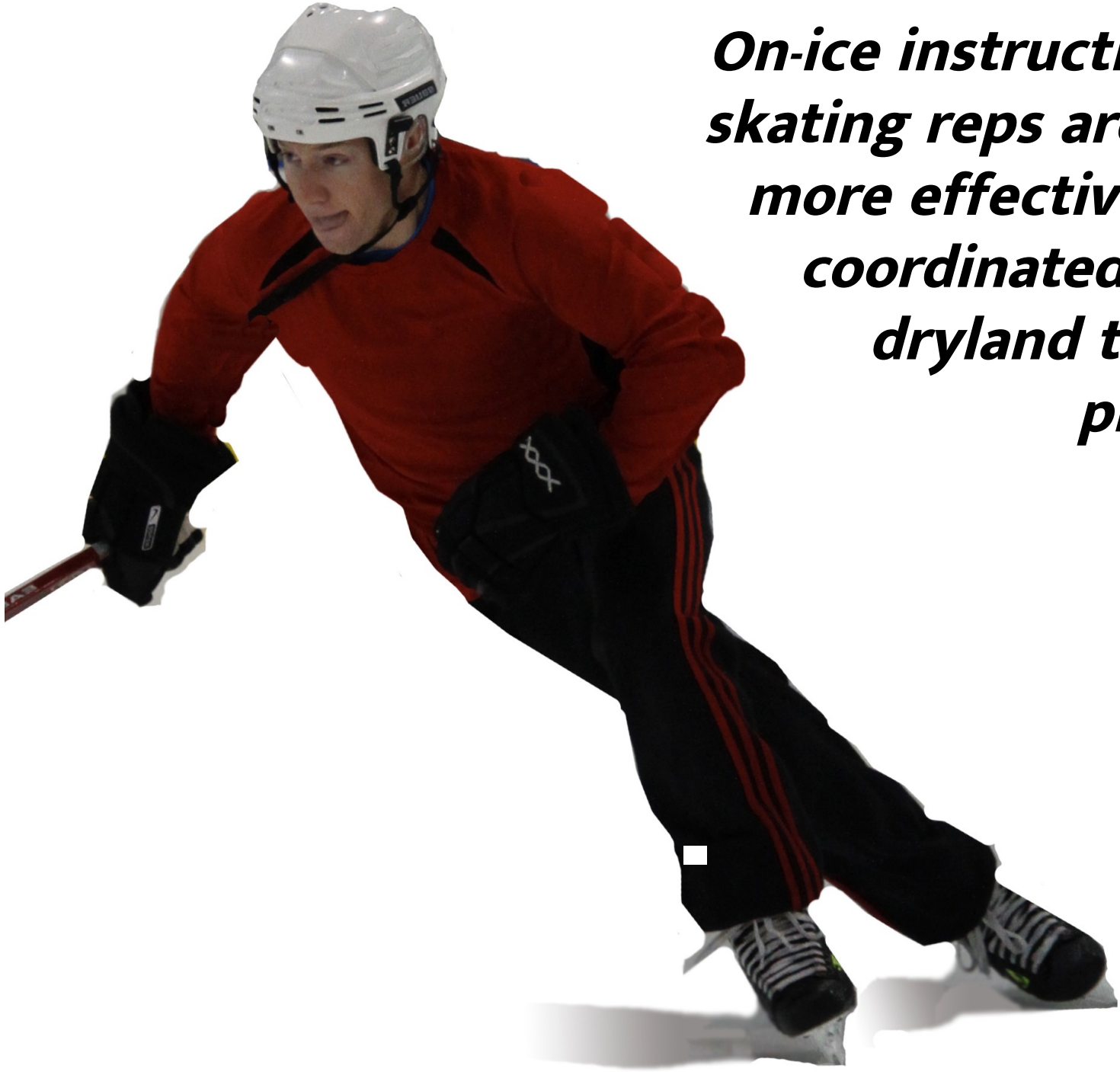


Build crossover strength off-ice.



Skating speed requires natural whole-body athleticism, so the arms move aggressively to support leg power.

FORCE MULTIPLIERS!!



On-ice instruction and skating reps are much more effective when coordinated with a dryland training program

Mixed-up priorities: Torture ≠ Training

When speed-agility training is confused with endurance training … results are counterproductive. This is a tradition passed along by drill-sergeant coaches who didn't know. The tragic incident at ASU in the desert sun can NEVER be repeated in sports.

Thinking in a DANGEROUS box.

INSTEAD OF TORTURE FOR MENTAL TOUGHNESS
Plan short work intervals (6-10 seconds) with (barely) adequate rest intervals (40-60 seconds), so there is quality in every sprint.

Endurance is the maintenance of quality for entire games