



Athletic Performance
Research Results
Summary

September 2020



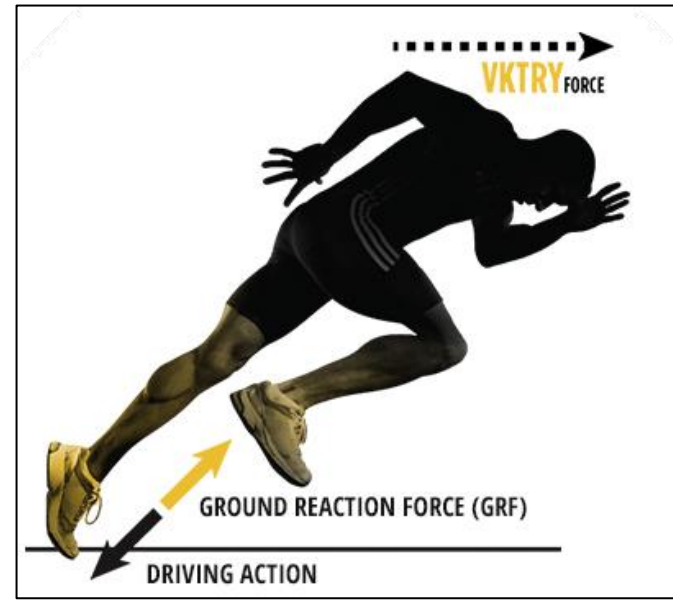
VKTRY Performance Research

How VKs Help Athletes



It's not magic... it's science! Made from aerospace-grade carbon fiber, VKTRY Insoles work like a "spring" in your shoes:

- When deflected (ie- bent by the foot)... energy is stored
- During push-off... energy is returned to the athlete (ground reaction force).
- VKs do not *add* energy... they reduce *lost* energy
- Athletes get back from VKs what they put into VKs

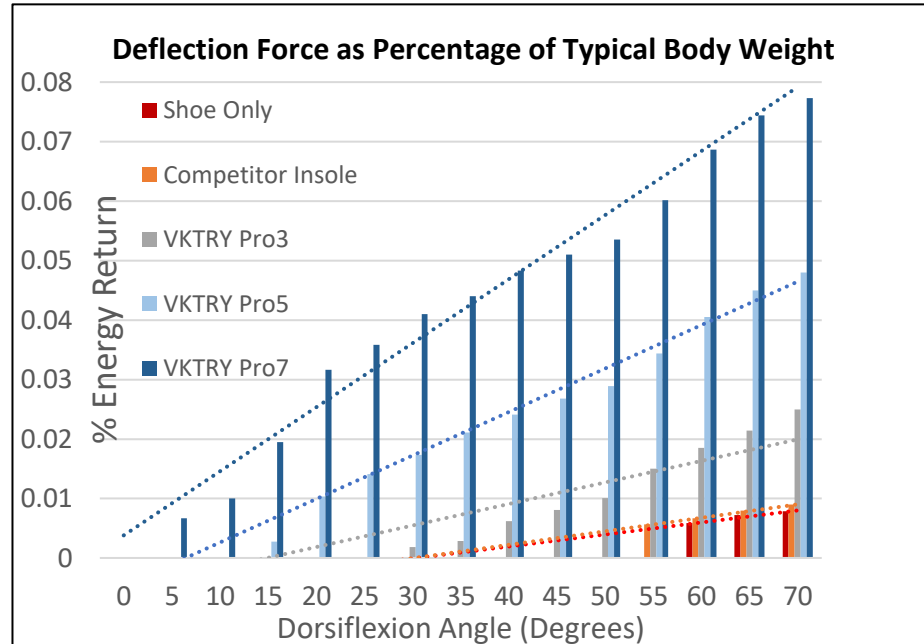
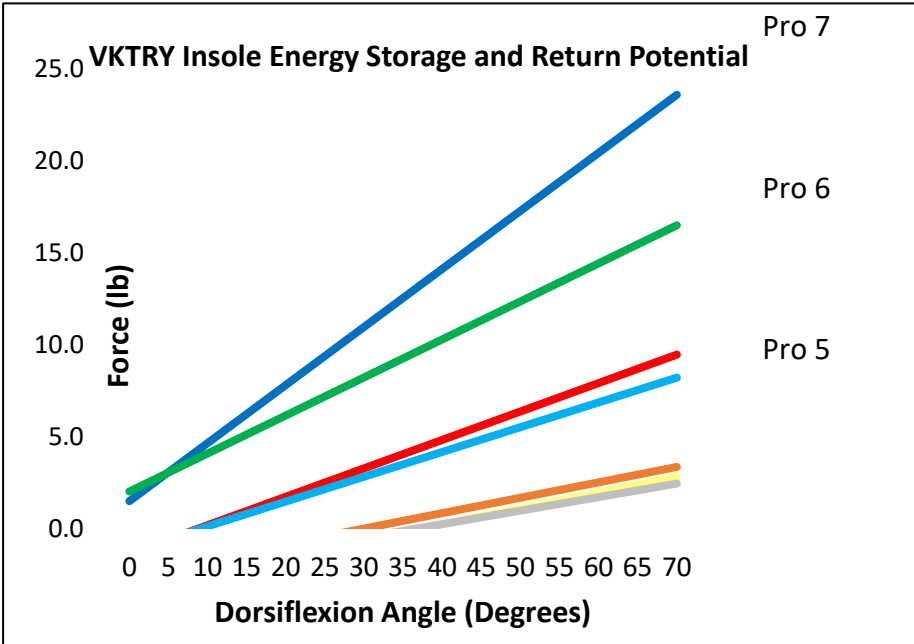
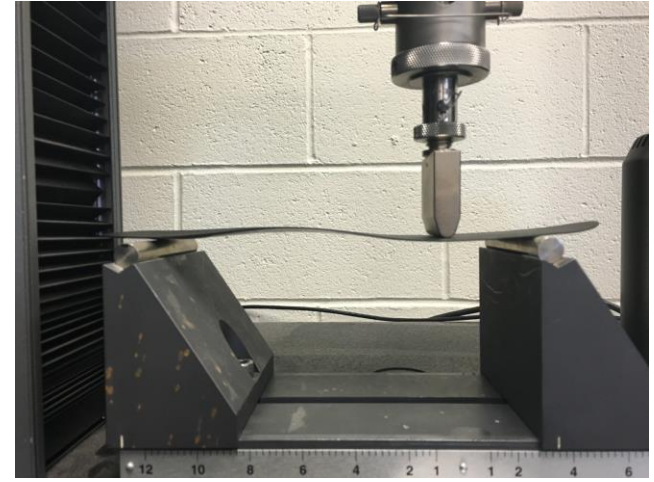


VKTRY Performance Research Lafayette College (2015)



We know that all athletes are not alike ...and bigger athletes need more “spring”. VKTRY Insoles have been developed with 5 unique flexibility levels (ie- Pro Levels).

During the development of VKTRY Insoles, the product was tested by Dr. Scott Hummel, Head of Engineering at Lafayette College.



VKTRY Performance Research

Barwis Methods (2016)



- **Third party testing facility** - Barwis Methods in Port St Lucie, FL; tests conducted Jan-Feb 2016.
- **Test administrator** - Mike Barwis has trained over 600 Pro & Olympic athletes and has been in charge of Strength & Conditioning at the NCAA level (West Virginia, Michigan) and pro level (Mets & Dolphins).
- **Test participants** - 34 elite athletes ranging from 105 to 231 pounds and specializing in a variety of sports (football, baseball, hockey, track, etc.)

- **Details of the Testing:**

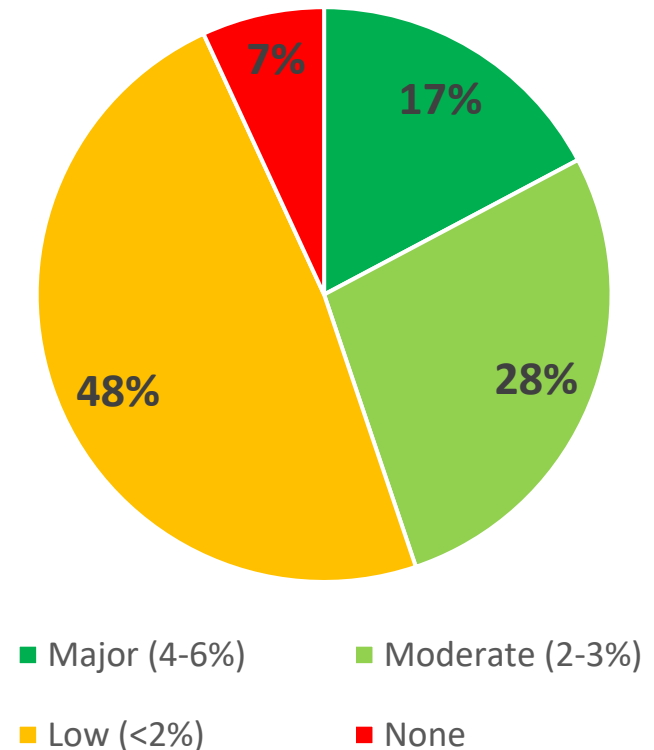
- All tests conducted indoors on turf
- Administrator used digital laser timing devices
- 40 yd dash – 3x (1 no VK, Low Pro VK, High Pro VK)
- 3 Cone Drill – 4x (2 no VK, Low Pro VK, High Pro VK)
- Broad Jump – 4x (2 no VK, Low Pro VK, High Pro VK)



40 Yard Dash Testing

- Average 40 yd dash best time without VKs was 5.55 seconds
- Average 40 yd dash best time with VKs was 5.43 for an improvement of 0.12 seconds.
- 93% of athletes improved with VKs... 45% showed significant improvement... 34% improved their times by > 0.20 seconds... 2 athletes ran 0.36 seconds faster with VKs.

Level of Improvement with VKs
(Best Trials of Each Athlete)

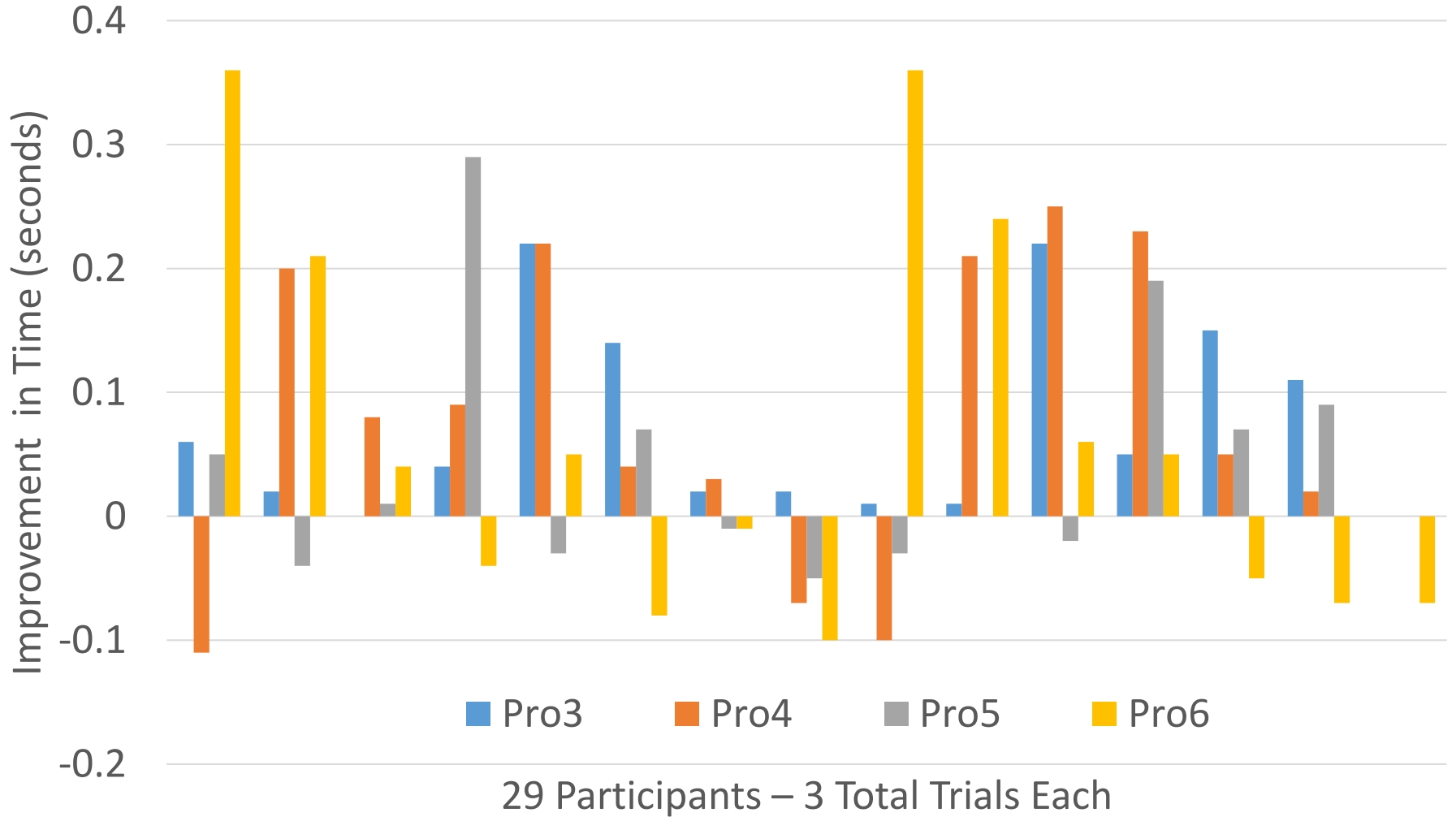


VKTRY Performance Research

Barwis Methods (2016)



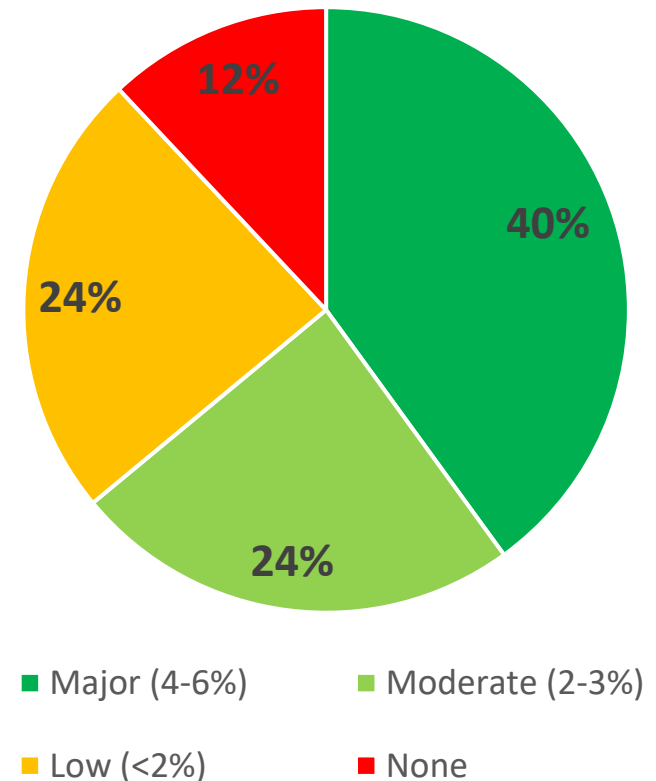
40 Yard Dash Testing



3 Cone Agility Testing

- Average Agility Drill best time without VKs was 4.68 seconds
- Average Agility Drill best time with VKs was 4.51 for an improvement of 0.17 seconds.
- 88% of athletes improved with VKs... 64% showed significant improvement... 36% improved their times by > 0.20 seconds... 5 athletes ran > 0.30 seconds faster with VKs.

Level of Improvement with VKs
(Best Trials of Each Athlete)

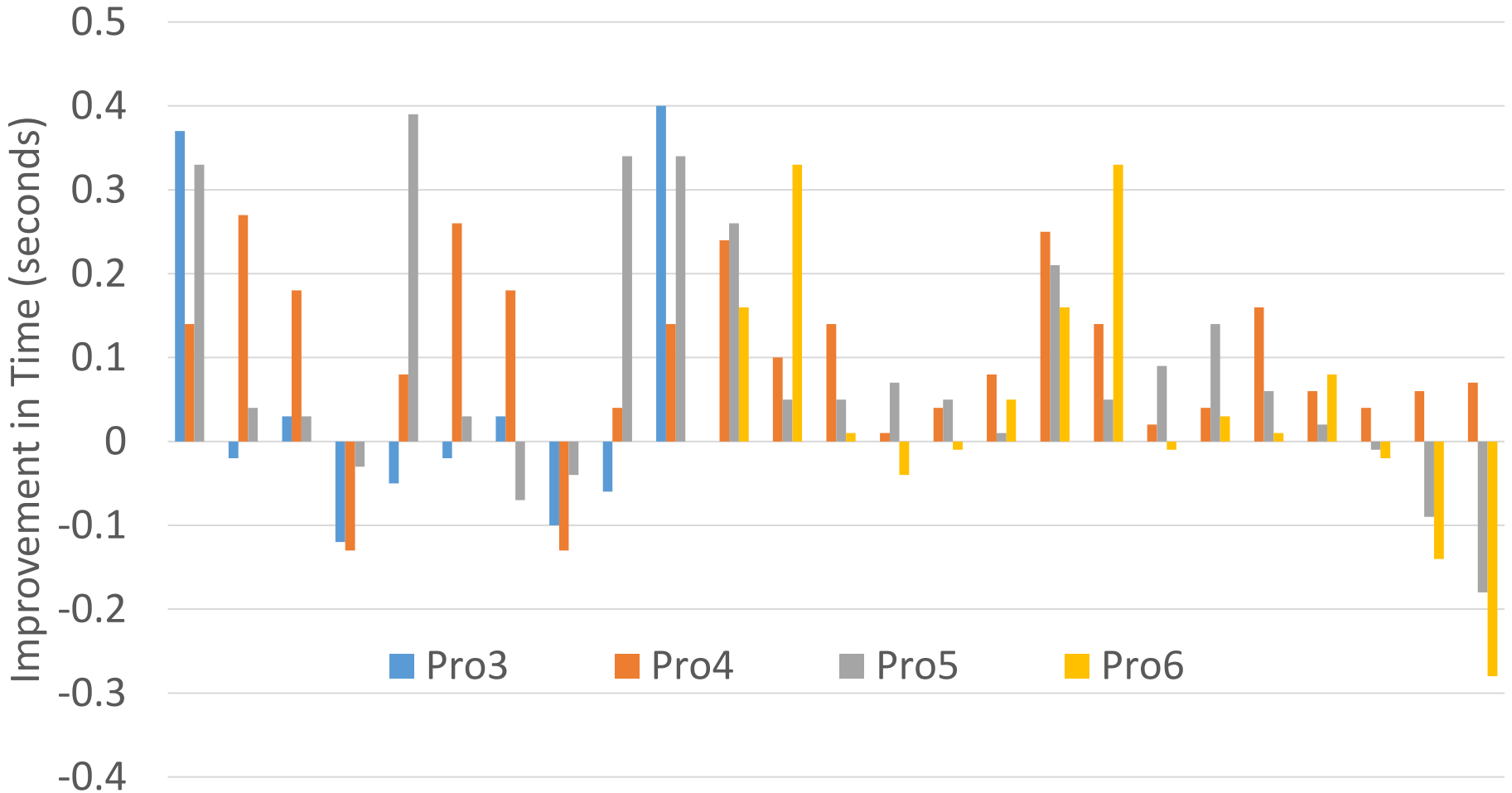


VKTRY Performance Research

Barwis Methods (2016)



3 Cone Agility Testing

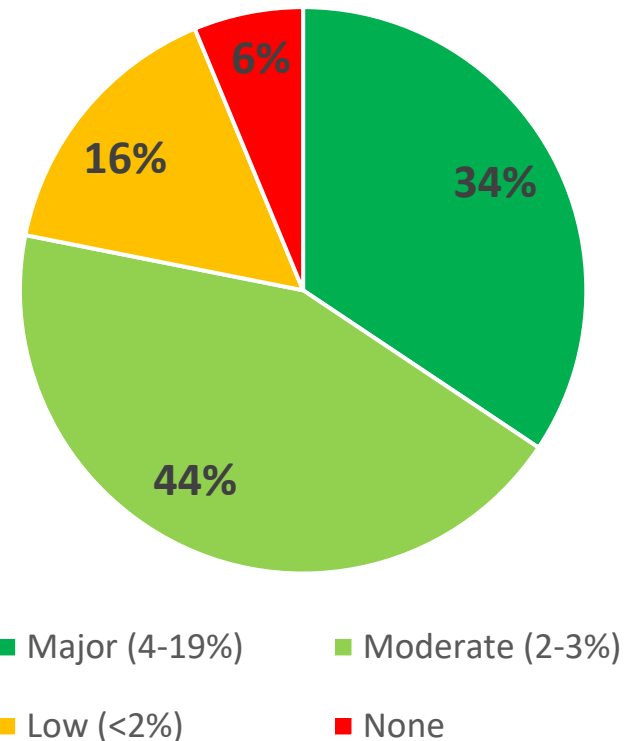


25 Participants – 4 Trials

Broad Jump Testing

- Average Broad Jump best jump distance without VKs was 94 inches.
- Average Broad Jump best jump distance with the VK was 98 inches for an avg improvement of +4 inches.
- 94% of athletes improved with VKs... 84% improved their distances by >2 inches... 9 athletes (28%) jumped 5 or more inches farther with VKs.

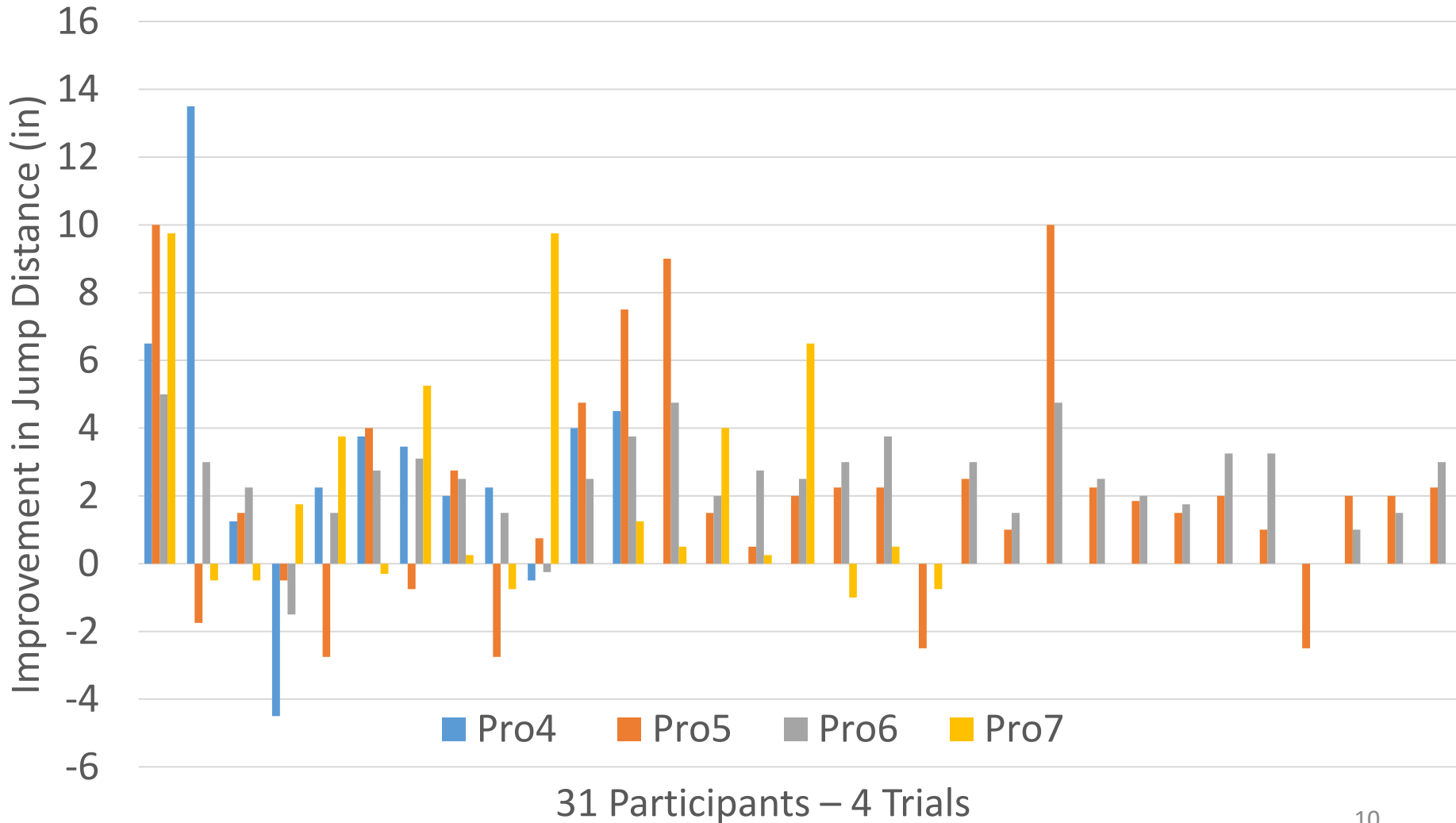
Level of Improvement with VKs
(Best Trials of Each Athlete)



VKTRY Performance Research Barwis Methods (2016)



Broad Jump Testing



Barwis Testing Summary

- **94%** of athletes showed *some* improvement with VKs.
- **78%** of athletes showed *significant* improvement with VKs (>2%).
- **47%** showed *major* improvement in one or more events (>4%).

	Average Improvement	Top 30% Improvement	Top 10% Improvement
40 Yard Dash	0.12 seconds faster	0.20 seconds faster	0.30 seconds faster
3 Cone Agility	0.17 seconds faster	0.20 seconds faster	0.30 seconds faster
Broad Jump	4 inches farther	6 inches farther	11 inches farther

VKTRY Performance Research UConn Strength Training (2017)



Vertical Jump Testing:

Chris West, Director of Sport Science at UConn tested 18 athletes from the Huskies Men's Soccer Team.

- 18 athletes, 9 weeks, 9 jumps/week
- 1,458 total jump trials



Test Results:

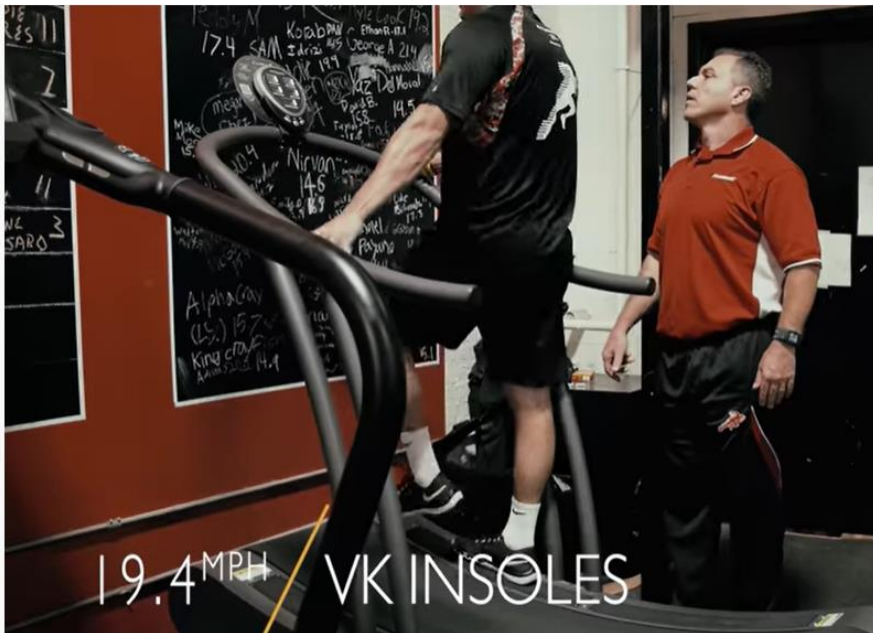
- **67%** of the players achieved personal bests in the Vert with VKs.
- Average increase in jump height was **1.63 inches higher (+7.2%)**
- Players loved how VKs felt and how they were able to better jump & cut.

VKTRY Performance Research Paris Speed Schools (2017)



Bill Parisi

Founder of Parisi Speed Schools and former D1 Track & Field star, put VKs to the test with some of his athletes.



Test Results with VKs:

- Vertical Jump: +1.5"
- Broad Jump: +4.2"
- 3 Cone Agility Drill: - 0.24 secs
- Treadmill Speed: +0.4 MPH

VKTRY Performance Research Southern CT State University (2017)



- ***Third party testing facility*** – The Human Performance Laboratory at Southern Connecticut State University.
- ***Test administrators*** - Robert W. Gregory, Ph.D., Robert S. Axtell, Ph.D., Marc I. Robertson, D.P.T., and William R. Lunn, Ph.D.
- ***Test participants*** - 28 elite athletes (D2 Football players) participated in this 12 month long study.
- ***Test Details*** – Vertical Jump and 40-yard Sprint testing were performed using a control shoe insert and a carbon fiber inserts (VKTRY Insoles). Performance was measured with Kistler & QuattroJump (*for the vert*) and Zybeck & PowerDash (*for the sprinting*).



VKTRY Performance Research Southern CT State University (2017)



Test Results:

- The use of VKTRY Insoles resulted in a statistically significant increase in vertical jump height and sprint speed.
- VKTRY Insoles showed an increase in both Ground Force (avg 8.1%) and Rate of Force Development aka Explosiveness (+9.3%)

		All Participants		Top 30%	
		Delta	Percent	Delta	Percent
Vertical	Vertical Jump Height	1.1 in	4%	2.54 in	11%
	Rate of Force Development	1.1 BW/s	8%	2.0 BW/s	15%
	Average Power	139W	4%	318 W	9%
Sprint	0 - 10 Yard Split Time	0.02 sec	2%	0.07 sec	4%
	20 - 40 Yard Split Time	0.03 sec	1%	0.08 sec	3%
	Max Force (Back Foot)	2.1 Wkg	8%	6.0 Wkg	22%
	Rate of Force Development (Back Foot)	1.1 BW/s	9%	5.9 BW/s	51%

VKTRY Performance Research Test Results Summary



“VKTRY Insoles are impactful in the reduction of injuries and in the improvement of athletic performance. The VK is truly the only insole I have ever seen bridge both fields!”

– **Mike Barwis**, Head of Sports Science & Human Performance for the NY Mets & Detroit Red Wings.

“I tried VKTRY Insoles for myself and instantly felt the energy return. Increasing speed and explosiveness is all about one thing – putting a greater force into the ground – and that’s what VKs do for an athlete.”

– **Bill Parisi**, Founder of Parisi Speed Schools

“Performance and biomechanical data were measured during both vertical jump and sprint testing. The improvement in performance with the VKTRY Insole is statistically significant in all biomechanical variables tested.”

– **Dr. Robert W. Gregory, PhD**, Professor at Southern Connecticut State University, the Human Performance Lab.



To ask any questions regarding these studies, please contact us at Info@VKTRYgear.com