

HIGH SCHOOL SHOT PUT: GLIDE OR SPIN?

Louisiana High School Coaches
Association Clinic: January 2009

Objective Comparison: Glide vs. Spin Boys

MICHAEL CARTER 81'3"

BRENT NOON 76'2"



Glenn McAtee

- ❑ Clemson 2002-2008
- ❑ Cal State Northridge 1998-2002
- ❑ South Carolina Grad School 1996-1998 Master of Arts in Teaching Physical Education
- ❑ High School and Club Coach in Canada 1990-1994
- ❑ Hammer thrower
- ❑ USATF Level III Certified in Throws
- ❑ USATF Level I and II Instructor

Objective Comparison: Glide vs Spin Men

ULF TIMMERMAN 75'8"

RANDY BARNES 75'10"

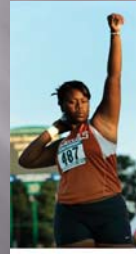


Glide vs Spin: Objective Comparison

- ❑ What about comparing elite female throwers?
- ❑ No tradition of spin shot putting among elite female throwers (East Block).
- ❑ Best glide results 74'3
- ❑ Best spin results 63'2 by Jill Camarena?
- ❑ Perhaps it is more fair to compare US women's results only.

Objective Comparison: Glide vs Spin Girls

MICHELLE CARTER 54'10 SARAH STEVENS 50'4?



Objective Comparison: Glide vs Spin American Women

RAMONA PAGEL 66'2

JILL CAMARENA 63'2



What should your thrower do?

- ❑ Depends on many factors, and is not always objective.

Critical Factors

- ❑ Size
- ❑ Gender
- ❑ Rotational ability
- ❑ Strength levels
- ❑ Throwing Discus
- ❑ Role modeling

Size

- ❑ Initially, the spin was promoted as a way to “level the playing field” for normal sized people.
- ❑ Today, throwers of all sizes are spinning.
- ❑ Spinning seems to allow higher performance levels for less tall people. Ex: Reese Hoffa and Adam Nelson

Critical Factors cont.

- ❑ Time available for training
- ❑ Psychological factors
- ❑ Coaching expertise

Cantwell, Hoffa and Nelson



Gender

- ❑ There is no tradition of women throwing far with the spin at the international level.
- ❑ A woman has never made an Olympic final (top 8) using spin.
- ❑ Does that suggest that women cannot be effective with the spin?
- ❑ Are the reasons for the lack of success with women's spin physical, political, historical, cultural or something else?

Lisovskaya



Women's All Time List

Athlete	Country	Best Result	Year
Lisovskaya	Soviet Union	74'3	1987
Fibingerova	Czechoslovakia	73'10	1977
Briesenick	East Germany	73'8	1980
Losch	West Germany	72'9	1987
Khristova	Bulgaria	71'10	1976
Adam	East Germany	71'8	1979
Li	China	71'4	1988
Akhrimenko	Soviet Union	71'3	1988
Pavlysh	Ukraine	71'2	1998
Sui	China	71'0	1990

Is Height a Factor?

- ❑ Larry Judge has theorized that the lack of performance by women in the spin could be a result of the way we ID talent.
- ❑ Most top female throwers are tall....does that make it harder to spin?

Is Length of Career a Factor?

- ❑ The spin is dominant nationally among boys, but not so for girls.
- ❑ Perhaps it takes a longer time to learn to spin effectively, so the boys are at an advantage since they are starting to spin earlier?
- ❑ Also, women tend to have shortened careers due to socio-cultural factors. Does that negatively impact the spin?

Process Oriented Women

- ❑ Women tend to be more process oriented as throwers.
- ❑ This allows them to master technical patterns easier than their male counterparts.
- ❑ This gives them an advantage in learning to spin.
- ❑ It is like dancing.....

Is Coaching a Factor?

- ❑ Many of the top coaches in the US appear more motivated to work with men.
- ❑ If spinning is more technical and the most talented women don't always have the best coaching, then this would negatively impact the development of results in the spin among women.

Rotational Ability

- ❑ Throwing movements can be linear (glide shot, javelin) or rotational (spin shot, discus, hammer and weight, javelin).
- ❑ You can make a slow person less slow, but you can never make them fast. Likewise with rotational ability.
- ❑ Testing for rotational capability.

Strength Levels

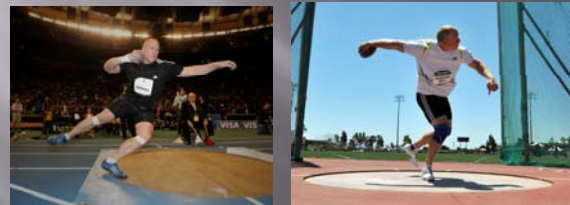
- ❑ Glide may be less efficient mechanically.
- ❑ Strength numbers can be misleading or misrepresented.
- ❑ Core strength is a big factor: linear versus rotational.
- ❑ Some evidence suggests that less upper body strength is needed for spinning. That would make it ideal for women, who are less strong in the upper body than men relative to leg strength.

Several Male Examples Who Spin and Throw Discus Well.

Throwing Discus?

- ❑ If the athlete is already throwing the discus, then teaching the spin saves time, as the techniques are similar (or identical).
- ❑ Some good high school coaches start by teaching the basics of the discus turn then resort to the glide if the results are not good.
- ❑ If you cannot throw the discus, then you are probably not a spin shot putter.

John Godina



Rutger Smith



Females who throw discus and spin shot at a high level?

Andy Bloom



Only one: Becky Breisch



Role Models?

- ❑ Everyone in the top 10 in the US on the men's side throws with the spin now; glide is essentially dead for men in USA.
- ❑ Boys and Girls get much of their information from the internet and the various video sites: what are they seeing?
- ❑ Does the athlete believe they can throw far using a particular technique: what is that worth?
- ❑ Who does that athlete "identify" with?

Psychological Factors

- ❑ Approach to the glide and spin is different.
- ❑ How cool under pressure is the thrower?
- ❑ Does the spin technique itself hold up under the pressure of big competitions; historical record?
- ❑ Do you want to produce consistent throws, or do you want to produce the big one?

Time Available for Training

- ❑ How long is the season?
- ❑ How much extra work will that thrower do on his own time?
- ❑ How long will that athlete throw for?
- ❑ What grade in school are they now?
- ❑ How important are the results this year?
- ❑ How patient is the thrower?

Oly Games: Spin vs Glide

Year	Medal	Name	Result	Technique	World Rank
2008	Gold	Majewski	21.51	Glide	5
	Silver	Cantwell	21.09	Spin	4
	Bronze	Mikhenivich	21.05	Glide	3
2004	Gold	Bilonog	21.16	Glide	8
	Silver	Nelson	21.16	Spin	3
	Bronze	Olsen	21.07	Spin	5
2000	Gold	Harju	21.29	Spin	7
	Silver	Nelson	21.21	Spin	1
	Bronze	Godina	21.20	Spin	5

Coaching Expertise

- ▣ Are you better at coaching the glide or the spin?
- ▣ What do the athletes think?
- ▣ You have to start somewhere: get your feet wet with someone who is an underdog and teach them to spin.

Final Analysis

- ▣ The proof is in the "putting."
- ▣ Use the technique that produces the desired result:
 - Championships versus records

Changing to the Spin

- ▣ Have a game plan and put that plan into effect as early as possible.
- ▣ Lay the groundwork at the end of the season, and prescribe drills for use during the off season.
- ▣ Set a timeline and stick to it, even when it is easy to jump ship.

Questions?

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