

Preventing “Barani Confusion”

- Rick McCharles

Many gymnasts have puzzling problems when learning twisting forward somersaults. Especially those who use a “contact” twist, from the floor, to initiate rotation around the long axis.

In this article I will try to answer some frequently asked questions concerning twisting. I’ll offer some suggestions to prevent the dread **Barani Confusion**.

What is Barani Confusion?

Confusion about the actual direction of twist on a Barani (forward somersault with half twist) is a real and common problem. Many gymnasts twist in the wrong direction when learning Barani; that is, a gymnast attempting to twist to the left actually twists to the right!

What Causes Barani Confusion?

Visual information when upside-down is disorientating — the perception is exactly opposite reality.

Try this experiment. Find a swiveling office chair and spin yourself around in circles. Compare your view of the floor with your view of the roof. Note that, relative to your point of view, the floor spins in the **opposite** direction than does the roof. (i.e. If the floor turns in the clockwise direction, the roof will turn in the counter-clockwise direction.)

It is no wonder that the gymnasts get confused. The visual information when upside down (looking at the roof) is reversed!

I’ve seen, sadly, some gymnasts learn Barani as a round-off with no hands. This is the worst possible progression. It usually results in Barani Confusion.

How can I be sure which direction the gymnast twisted?

When observing twisting skills watch whether the athlete turns chest or back to you during the first half twist. If the LEFT shoulder is moving backwards, it was a LEFT twist. And visa versa with the RIGHT shoulder.

This is a quick and easy way to determine whether the twist was initiated to the left or to the right, regardless of the complexity of the skill. With a little practice you can easily decide the direction of any twist at a glance.

There is no Barani Confusion for the observer.

Why does it matter which direction you twist?

- 1) **Safety!**
- 2) **Skill Learning**

It is important that **ADVANCED GYMNASTS TWIST IN ONLY ONE DIRECTION**. We want no confusion to arise regarding which direction to twist while learning inverted skills. A fall on the head can be catastrophic.

Do not allow a gymnast to twist in different directions on different skills. An athlete who can twist in both directions has no **automatic response** when learning complex, inverted twisting skills. An athlete indecisive about twisting direction may “freeze” or try to reverse a twist in mid-air. This is frustrating and can be dangerous.

Trampoline coaches are strongly agreed on this point.¹

For me as a coach, the main problem skill is the Barani. Far too many gymnasts twist this skill in the wrong direction.

However, several other inverted gymnastics skills may be troublesome including:

- Round-off
- handstand pirouettes
- some beam combinations
- twist-on, twist-off vaults
- Tsukahara vault with twist
- Parallel bar dismounts with twist

The coach needs to be alert to ensure that gymnasts do not turn in the wrong direction! Twisting direction errors on these skills have baffled more than a few coaches ... and judges!

After much consideration, my philosophy is to **teach all twisting skills in the SAME direction with one exception — round-off**. Ideally, I want all gymnasts to fit in one of these two categories:

1. Right Twisters
 - all skills twist to the right
 - round-off twist to the left (right hand first)
2. Left Twisters
 - all skills twist to the left
 - round-off twist to the right (left hand first)

¹ However, there are many examples of top gymnasts and trampolinists who can do advanced skills twisting in different directions. We certainly don't want to promote this “special” ability.

There are advantages to twisting the round-off in the opposite direction to everything else though, admittedly, they are beneficial only for advanced gymnasts. For example, this approach is essential to do the popular Kazamatsu vaults, and an advantage when tumbling out of backward layout 1/2, 3/2, or 5/2 twist on floor.

I have seen many advanced gymnasts who twist the round-off in the same direction as all other skills. Some top coaches even advocate teaching the round-off in the same direction as all of the other skills. However, the vast majority of coaches prefer the round-off to twist in the opposite direction.

Which direction should my gymnasts twist?

Almost everyone has “preferred” direction of twist based, most probably, on brain structure and function. To determine which is the preferred direction, I recommend coaches use the “Direction of Twisting Dominance” assessment chart in the Canadian Level 1 Trampoline Manual. I’ve attached an adapted version of that chart to this article.

You may be doing a great service to your young gymnasts by ensuring that they learn to twist in their preferred direction!

Should I try to CHANGE the direction of twist?

With young children, I have successfully changed the direction of twisting skills. Sometimes, it is frustrating for them. With older gymnasts, it is often better not to try to change twist direction. It may be easier, instead, to avoid certain problem skills. You must make these decisions on a case-by-case basis.

How can I avoid Barani Confusion?

I recommend that each **club** put in place a **policy** on twist direction, which must be communicated to EVERY coach, most importantly the pre-school and recreation instructors!

We should decide the dominant direction of twist for each child BEFORE they learn round-off! I recommend that recreation programs encourage practicing cartwheels in both directions, and DELAY learning the round-off for as long as possible. Yegor Kolesnikov (former coach of Sharipov) recommends we teach 5 cartwheels in series in both directions **before** deciding which direction to teach the round-off. Most gymnasts are taught the round-off too soon.

Attached to this article you’ll see a “Direction of Twist” monitoring sheet which I have posted on the wall of our club. I record the dominant twist direction for all of the gymnasts training twice / week or more. This should help prevent confusion and remind coaches to be attentive to the direction of twist.

Lastly, I should state that I don't ever teach the "Barani". Instead I (and many other coaches) teach a forward somersault with a "late" half twist. I recommend this sequence of progressions:

- forward somersault piked
- forward somersault piked, and kick open
- forward somersault piked, open with **late 1/2 twist** (in correct direction)
- forward somersault layout with **late 1/2 twist** (in correct direction)

Using this method you will rarely see the gymnast twist in the wrong direction. The pike-open prevents the gymnast from initiating the twist from the ground, which eliminates a number of problems including Barani confusion. Also, a "late" twist should be initiated when the gymnast can already see the floor — they are no longer inverted and, hence, no Barani confusion.

In Summary

For advanced gymnastics, I strongly recommend a **solid groundwork in non-inverted trampoline skills**. Once the dominant direction of twist is decided, the gymnasts should learn "roller", "cradle", "cat twist", "cruise", "corkscrew", and many other fun and challenging non-inverted skills.

A gymnast with a solid foundation of twisting experience doing non-inverted, challenging trampoline skills are far less likely to accidentally twist in the wrong direction.

Trampoline is an excellent apparatus for training gymnasts. Be aware of the perceived and real risks, however. **Coaches should be both certified and qualified at the appropriate level.**

Good coaching!

Recommended Reading

C.G.F. (1992). Level 1 Trampoline Coaching & Safety Program. Ottawa: Canadian Gymnastics Federation.

C.G.F. (1984). Level 2 Trampoline Coaching & Safety Program. Ottawa: Canadian Gymnastics Federation.

Russell, K. (1986). Introductory Gymnastics — CGF Level 1 Coaching Manual (4th ed.). Ottawa: Canadian Gymnastics Federation.

Torg, J. S. (1987). Trampoline Induced Quadriplegia. Clinic in Sports Medicine, 6(1).

U.S.E.C.A./Women (1995). Video #64 Trampoline for Gymnasts USSR.

U.S.E.C.A./Women (1995). Video #75 Twisting.

Preferred Direction of Twisting — Assessment Chart

This chart may be useful for gymnastics coaches who need to decide which direction a young child should twist. Try a number of **creative and challenging contests turning in both directions** to reveal a twisting preference. (Try not to let the kids know what you are assessing.)

Contest — turn in both directions.
Check the preferred directions, if there is one.

left twist? right twist?

Ask children to lie down on floor with the nose on the ground. On command, they stand-up, turn, and race for a line 5 metres away. Which way did they turn?		
Ask the children to run in ever decreasing circles. Observe the direction of the turn. Try the other direction. Which direction looks more comfortable		
Ask children to lie on their back on a mat and rock backward and forward 5 times. On the 5th rock turn over and do 5 rocks on the stomach.		
Jump turn contests on floor landing on the feet — 1/2 twist, 1/1 twist, more?		
Jump turn contests on floor landing into a crash pad — 1/1 twist, more?		

If these contests reveal a strong preference, record that preference and post it on the gym wall. The direction of twist is decided by the coach, not the gymnast. If, for example, a child is identified as a right twister then ALL advanced skills are done in that direction except round-off, which is normally done in the opposite direction. A right twister normally puts the right hand down first on round-off.

If after many creative & unique tests no strong preference is demonstrated, my advice is to decide twisting direction based on round-off. If the child is better at a round-off with the left hand down first, then that gymnast will be a left twister. Decide - and then stick with that direction of twist.

