

## The Ultimate Slice Fix

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James Westman (1) Club-Thought Group; (2) Body-Thought Group; (3) Control Group

The game's not much fun when you're reaching into your bag to replace a ball you sliced out of play -- for the fourth time in six holes! You're not alone. Like many weekend players, no matter how hard you work at it, you just can't shake your card-wrecking banana ball.

Why are slices so tough to fix? After all, everybody knows the cure: an inside-out swing path. Okay, there may be clubface issues at work, too, but there's a consensus that grooving an inside-out path is the most powerful no-slice secret. So why can't most golfers execute it? We were curious if the answer might lie in the kind of swing thought we use when trying to hone an anti-slice swing, so we took this question to the golf lab.

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There are hundreds of ways to practice swinging from the inside out. But they all fall into one of two categories: (1) Those that focus your attention on what the club is doing; and (2) Those that focus your attention on what your body is doing.

For you science-lingo lovers, thoughts about the club (for example, "rotate the toe past the

heel through impact") are called external cues, while thoughts about your body ("turn your left shoulder under your chin on the backswing") are called internal cues. Plenty of research into athletic performance suggests that external cues are more effective at optimizing performance than internal ones. Although most of the studies to date have focused on outcomes (i.e., free throws made, bull's-eyes hit, etc.), we decided to explore whether external cues might offer the same edge when it came to mastering mechanics -- in this case, honing a repeatable, inside-out, slice-stopping swing. We wanted to know whether we're better off thinking about what the club should do or about what our body should do.

## **THE PARTICIPANTS**

We recruited 39 slicers [average handicap: 20.3] and randomly divided them into three groups, 13 in each. The three groups each received a different instruction on how to best groove a slice-busting inside-out swing.

### **1. The Club-Thought Group**

This group was instructed to swing the clubhead along an 8 o'clock-to-2 o'clock axis through the impact zone [with the target at 12 o'clock]. Alignment rods were positioned on the ground to indicate the target line and the proper inside-out clubhead path.

### **2. The Body-Thought Group**

These golfers were instructed to use a time-honored slice-fix: bring the right elbow down toward the right hip in the downswing. This internal cue focuses on a body movement with no reference to the clubhead. An alignment rod was placed on the ground solely to indicate the target line.

### **3. The Control Group**

These 13 slicers were instructed on the shape of an inside-out downswing, but they weren't offered any club cues or body-thought cues. They made their own decisions on how to best trace the appropriate inside-to-outside swing.

## **HOW WE DID IT**

Using video, we assessed each golfer's swing path by comparing the position of the clubhead at waist height in the downswing to the shaft plane established at address. A clubhead above address plane = outside-in path (slice); a clubhead below address plane = inside-out path (slice fixed!). The data showed that the subjects were chronic over-the-top swingers. The average downswing was 7.7 to 12.9 degrees above plane -- serious slice conditions.

Each golfer received a 15-minute swing-path lesson and was told to practice using only their assigned cues -- or, in the case of the control group, their self-selected cues. They were asked to swing without a ball, then to hit an actual drive, and then to repeat this routine 36 times.

Afterward, we again assessed their swings to see if their swing planes had improved. Then, the following day, we did yet another test to see if any improvement had a shelf-life of at least 24 hours.

## **THE RESULTS**

The instruction and cue-based practice paid off. The swing planes for all groups were clearly less likely to produce a slice in the post-test (chart, opposite). But the real

discovery? The improvement was far more dramatic in one group than it was in the other two.

- 1.** The club-thought group not only improved their swing paths the most, but the next day, they showed the greatest retention of the inside-out move. In the post-test, the club-thought group was 97 percent closer to the perfect plane than the body-thought group.
- 2.** The control group, which selected their own cues -- some were club thoughts, others were body thoughts -- learned to swing more inside-out. Their retention wasn't as good as the club-thought group's, but it was better than the body-thought group's.
- 3.** The body-thought group showed the least amount of improvement and the poorest retention of correct moves.

Here's what we found fascinating. The instructional content of the prescribed cues was essentially identical -- trying to swing the clubhead from 8 o'clock to 2 o'clock requires the same movements used to implement the "pull my elbow down to my right hip" body-thought -- but produced varying results. The only real difference is where you place your focus. Sure, you need good information, but how you use it in your swing is crucial to how much the information helps you hit straighter shots, and how deeply it takes root.

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