

Two Things Experts Do Differently Than Non-Experts When Practicing

By Dr. Noa Kageyama

Have you ever found yourself awake at 2am, watching infomercials, wondering where they find those folks who can go from a size ten to a size four in eight weeks, throw out their fat pants, get engaged, and live happily ever after? (If not, you gotta check out these [five all-time worst fitness infomercials](#) – especially the Hawaii Chair, which you could *totally* use to tone your abs while you practice.)

I will admit that I've been tempted by the Bowflexes, Perfect Pushups, and various other devices, because the frustrating thing about working out, is that it's hard to know if you are making the best use of your time.

I mean sure, doing something is better than doing nothing, but what if there's another exercise routine that could be getting me far greater results in the same amount of time?

What do the fittest people do that I'm not? How are their workouts different? Are there key things they do *while* they're working out that provide a bigger payoff than the things I do? In other words, are they extracting disproportionately greater results from their time in the weight room than I am?

The same can be said for the practice room. What do the best musicians do in the practice room? What do the less effective practicers do? Are there any differences?

Indeed, it appears that there are.

Best vs. worst

Two researchers from the City University of New York did a study of basketball players to see if they could discern a difference between the practice habits of the best free throw shooters (70% or higher) and the worst free throw shooters (55% or lower).

There were a number of differences, but it boiled down to two in particular.

Difference #1: Goals were specific

The best free throw shooters had *specific* goals about what they wanted to accomplish or focus on before the made a practice free throw attempt. As in, "I'm going to make 10 out of 10 shots" or "I'm going to keep my elbows in."

The worst free throw shooters had more general goals – like "Make the shot" or "Use good form."

Difference #2: Attributions of failure were specific

Invariably, the players would miss shots now and again, but when the best free throw shooters missed, they tended to attribute their miss to specific technical problems – like “I didn’t bend my knees.” This lends itself to a more specific goal for the next practice attempt, and a more thoughtful reflection process upon the hit or miss of the subsequent free throw. Far better than saying “I suck” or “What’s wrong with me?” or “Crap, I’m never going to get this.”

In contrast, the worst performers were more likely to attribute failure to non-specific factors, like “My rhythm was off” or “I wasn’t focused” which doesn’t do much to inform the next practice attempt.

It’s not what you know, but whether you use it

You might be thinking that perhaps the worst performers didn’t focus on specific technical strategies because they simply didn’t know as much. That perhaps the best performers were able to focus on technique and strategy because they knew more about how to shoot a free throw with proper form.

The researchers thought of this as well, and specifically controlled for this possibility by testing for the players’ knowledge of basketball free throw shooting technique. As it turns out, there were *no significant differences* in knowledge between experts and non-experts.

So while both the top performers and the worst performers had the *same level of knowledge* to draw from, very few of the worst performers actually *utilized* this knowledge base. Meanwhile, the best performers were much more likely to utilize their knowledge to think, plan, and direct their practice time more productively.

Take action

When you’re practicing something technical, try using more *specific* goals.

But perhaps more importantly, pay attention to how you talk to yourself after mistakes. Do you focus on technique? Or throw out a few curse words and jump right into another practice attempt without trying to figure out why you missed the last one?

The one-sentence summary

“Without knowledge action is useless and knowledge without action is futile.” ~Abu Bakr