

Why the “Task Completion Bias” Could Give You the Illusion of Productive Practice, but Actually Make You Less Productive

Description

You know how people say you should never go to the grocery store when you're hungry? I know this is probably good advice, but when I'm hungry is like my favorite time to go!

Admittedly, that's when I end up with all sorts of stuff in my basket that wasn't on my shopping list. Most of which don't serve my long-term health and fitness goals...

Umm...and what does this have to do with anything?

Well, I wish I could say that I spent most of my life practicing in an organized, thoughtful, and strategic way.

But the truth is that it looked a lot more like going to the grocery store hungry.

Like, rather than beginning each practice session with a clear, specific list of problems to address (a.k.a. shopping list), I went in with a pretty general and vague goal of “stay in the practice room until things don't suck so bad” (a.k.a. put yummy things in tummy until full). Where I'd basically start playing (a.k.a. wandering around the store) and spontaneously auto-generate this ad-hoc list of things to work on (a.k.a. put food I'm craving in basket) with no system for tracking my progress or solutions.

Obviously, this is not an efficient strategy for making the most of your time. And whether you want to be at your best in an audition, run a marathon, or make [epic dorm-style ramen](#), it helps to have a plan.

And what might that entail?

Well, a few years back, Met percussionist Rob Knopper wrote about his strategy for making practice maximally efficient and effective. Which you should totally read after finishing this post (it's linked at the bottom), but for now, the TLDR version¹ is that in the same way that it helps to have a detailed shopping list and recipe if you want to make [non-sucky lasagna](#), practicing becomes much more effective when you have an organized list of well-defined problems to find solutions for.

Of course, unlike the [sandwich of justice](#), which has only so many ingredients, there are a near-infinite number of things you could work on in your next practice session. There are intonation issues to solve, rhythm issues to troubleshoot, fingerings, bowings, and stickings to sort out, sound production problems, coordination challenges, and more. And there's only so much time before your lesson or next performance. Ack!

So what's the most effective way to work through your list? Should you start with the easiest, quickest issues? Or with the really thorny, complicated, difficult ones?

An ER study

To answer just this sort of question, a multi-university research team ([KC, Staats, Kouchaki, & Gino, 2017](#)) analyzed two years of treatment records in a hospital emergency department to see what patterns there might be in how doctors selected patients when things got busy, and whether this had any impact on overall productivity.

Basically, when a patient arrived at the ER, they would first see a triage nurse who would do a basic evaluation to find out what was going on, determine the severity of the problem, and create an electronic record and file for that patient. These electronic records would then be entered into a queue, which the ER doctors monitored and used to select new patients from, as they evaluated, diagnosed, treated, and discharged each patient, while managing and balancing a caseload of other individuals at various stages of that process.

Because the doctors had the autonomy to select their own patients, and the electronic records included the times patients were picked up and discharged by each doctor, it was possible to see how many patients doctors were treating at any given time, and calculate each doctor's productivity in a couple different ways.

So what did they find?

A task completion bias

Well, overall, the researchers found that as the ER physicians got busier and had more patients on their caseload, they were indeed more likely to pick up easier patients than difficult ones.

Which makes sense, right? Because when you have a million things to do, and you want to get through as many things on your plate as possible, it's tempting to lean towards the items on your list that can be completed more quickly and easily than those which take more time and mental effort. The authors called this a "task completion bias."

Short-term consequences

On the plus side, this bias *did* lead to a short-term boost in productivity. Meaning, up to a point, front-loading easy cases did seem to help doctors process patients more quickly. But the key word here is *short-term*.

Long-term consequences

Because in the long-term, the physicians who tended to front-load easier cases had a *lower* processing rate. Meaning, it took them longer to treat their patients, than the doctors who took on a more balanced mix of easy and difficult patients.

Why? Well, I'm not sure if this is the reason, but I wonder if there may have been a little of the so-called "[Parkinson's Law](#)" at play here – i.e. where "work expands so as to fill the time available for its completion."

The idea being, if you have too much time, or not enough time pressure, you can end up being less efficient and devoting more time to a task than is optimal. Like, if it's a couple hours before your lesson and you have ten pages worth of music to work on, you'll find a way to make the most of the time you have and get through as much of the music as you can.

But if you have only *two* pages of music to work on, you could easily spend that time working on the two pages, but probably not in the most efficient way, and also at the expense of *other* things that may be a more valuable use of your time.

Another long-term consequence

In addition, the researchers found that the doctors who were prone to picking easier cases generated less revenue for the hospital too². Essentially, if I'm understanding correctly, the more difficult cases were often associated with more income for the hospital, so by taking on fewer of these patients, the task completion-biased doctors spent a greater proportion of time on lower revenue-generating cases than the more efficient doctors.

The practice room equivalent to this might be like solving a lot of little minor issues, but neglecting to address the bigger problems that would actually make a more significant impact on the level of your playing.

Indeed, the authors note that what they observed in the ER data is "*similar to the general idea of exploration and exploitation. By selecting the easier task (exploitation) an individual gets work done quicker – and likely feels good doing it. However, by choosing the harder task (exploration) one creates an opportunity to learn. Although always selecting the harder task may be suboptimal, if one continually chooses the exploitation path then longer term performance suffers.*"

What causes this bias?

And what causes this bias towards choosing easier tasks? Well, a follow-up study found that a big part of it seems to be the “hey-look-at-me-being-so-productive!” mini-high we get when we check something off our to-do list.

This *is* a pretty terrific feeling, so it can be tempting to gravitate toward the lowest hanging fruit and easiest, quickest tasks – especially when we feel like we are pressed for time.

Take action

So what can we do to avoid the task completion bias and be maximally productive in the *long-term*?

Well, a few things.

1. Have a list

I think it starts by having a list of clearly defined problems, as Rob explains here: [Five simple ways to retain your work in the practice room](#)

2. Triage the problems

Having a “shopping list” like this already puts you way ahead of the game. But the results of this study make me wonder if it might also be helpful to “triage” your list of problems too. To at least flag the difficult and easy issues, so you can make sure you’re not taking on a disproportionate number of the easy ones, but addressing the difficult problems too.

3. Match up problems with available energy

It might also help to save easy problems for when you’re tired, and your brain doesn’t want to think so hard. And use your high-energy times during the day to problem-solve the more challenging issues.

4. Divide and conquer

And if you’re kind of addicted to that good feeling of checking off tasks, the researchers suggest breaking complex tasks into smaller pieces. Like, maybe it’s ok if you don’t solve the fingering problem completely, but simply come up with two potential fingerings to try later. Or maybe you get the first few chords in a passage in tune, but leave the remaining few for another time.

References

KC, D. S., Staats, B. R., Kouchaki, M., & Gino, F. (2017). Task Selection and Workload: A Focus on Completing Easy Tasks Hurts Long-Term Performance. *SSRN Electronic Journal*.

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