

Is It Possible to Increase Your “Immunity” to Nerves?

Description

I was listening to an entertaining *This American Life* podcast episode this week¹, and unexpectedly learned something curious about cats (the episode was not about cats).

What I learned, is that you can't just take a cat to a different home and set them free like you would a dog. They need to be acclimated. Or else, to quote comedian Mike Birbiglia, they "[will explode](#)".

This made me think about performing. And how often it is that we explode (or implode?) on stage.

So does this mean that we are all cats that need to be acclimated to the stage?

Is this even a thing? What would it look like? So many questions!

There's a study for that!

Fortunately, the practice-performance gap/on-stage exploding phenomenon is as much a thing for athletes (or surgeons or public speakers) as it is for musicians, so researchers have been curious to see if there might be a way to “inoculate” us to pressure. To practice in such a way that we can maintain a high level of performance even when the anxiety kicks in.

Dutch researcher Raoul Oudejans has conducted several studies in this area. And – spoiler alert – they suggest that yes, we can indeed train ourselves to perform well even when we're nervous.

And how, exactly?

A Dutch basketball study

One study ([Oudejans & Pijpers, 2008](#)) involved two comparable Dutch national-level basketball teams.

Both teams started off with a baseline test of their free throw shooting abilities. Just 20 free throw attempts under regular no-pressure practice conditions.

Then, they repeated this test – but with some pressure thrown in.

To get the players to feel at least a little bit of nerves, each team was split into two smaller teams, which competed against each other for a prize of €25. Their shooting performance was also videotaped, and they were told that experts would be reviewing the footage to evaluate their shooting technique. They

were asked to imagine that each pair of free throws were the decisive points in a close game. And the coach and other players watched each shooter throughout the test too.

Then, 96 practice shots...

Over the course of nine practice sessions in the next five weeks, both teams took an additional 96 practice shots (which worked out to basically a few extra free throws after warmups, and a few more at the end of practice).

The only difference between the two teams, is that one of them (the **anxiety-practice group**), practiced their free throws under the same anxiety-inducing conditions as their baseline test.

While the other team (the **regular-practice group**), practiced their free throws in normal practice-like settings.

...and another test

Then, the athletes redid the shooting tests that they did at the outset of the study. So 20 shots, in regular practice conditions with no pressure. And then 20 shots under a bit of pressure, with the competition, videotaping, and other anxiety-inducing elements added back in.

So...was there any inoculation effect of practicing with pressure?

Results

During their baseline test, both teams performed worse when anxious, just as you'd expect.

The **regular practice** team regressed from 75.4 points to 70.2 points². And the **anxiety practice** team went from 77.1 points to 72.7 points. Both with the same ~5-point drop in accuracy.

After five weeks of training however, things changed.

The **regular practice** team again performed more poorly under pressure – 73.1 without pressure and 67.9 with pressure. But the team which practiced free throws under anxiety-provoking conditions not only did not regress under pressure, they actually performed even *better*. Specifically, they went from **71.3** points with no anxiety, to **78.0** points *with* pressure.

A dart study

The researchers then did a second study, this time with expert dart players.

The players started with a baseline test of 24 throws at a target. And then, they made another 24 throws –

but with a little twist.

Specifically, the participants were asked to make the throws while standing on a climbing wall, their feet on footholds about a foot off the ground.

Then, one group of players (the **no-anxiety group**) took an additional 48 practice throws at that same low position on the climbing wall (as in the photo below on the left).

But the other group of participants (the **anxiety group**) took their 48 practice throws much higher up the rock wall – with their feet on footholds 12 feet up, and one hand clinging to a handhold 17.5 feet up (as in the photo on the right above).

Finally, everyone took a final test. One set of 24 throws at the low position, and another set of 24 throws at the higher, more anxiety-provoking position.

And how'd they do?

Results

Both groups of participants performed comparably when tested at the low position on the wall.

But when they were tested at the higher, nerves-inducing position, the players in the no-anxiety group struggled to maintain their level of performance, and saw their performance at the high position on the wall suffer.

On the other hand, the players who trained with anxiety did **equally well** at **both positions**, even when anxiety kicked as they clung to the wall at the higher position.

Takeaways

I would be curious to see how this training translates to performance in real competition settings – not just in experimental settings.

However, there is certainly a good bit of anecdotal evidence about this sort of practice, so I think there's probably a lot to be gained by looking for ways to acclimate to performance even in our daily practice. Instead of waiting until the week of a performance or audition to start acclimating our cat selves to pressure, as we've all probably been guilty of on more occasions than we'd like to admit. ?

Take action

The dart study in particular made me wonder what creative strategies musicians might already be using to create a bit of pressure in the practice room.

Whether it's practicing in a moving car³, to busking in the subway, to a run-through on [China's scariest new walkway](#)⁴, what are some of the best strategies you yourself have tried (or heard others try) that help to induce a bit of pressure in the practice room? Please share below in the comments!

BTW, if you've been meaning to do more "inoculation" practice, but haven't been able to get over the hump or find people to play for, stay tuned – I'll have some news to share next week. ? (Or, you can take a sneak peek [here](#) if you'd like.)

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References

Oudejans, R. R. D., & Pijpers, J. R. (2009, August). Training with anxiety has a positive effect on expert perceptual-motor performance under pressure. *Quarterly Journal of Experimental Psychology*, 62 (8), 1631–1647. <https://doi.org/10.1080/17470210802557702>

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