What The “Bleep”: Can Swearing Improve Performance? Transcript

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Episode Introduction and Big Question

What if you could increase your pain tolerance by 20% and your athletic performance by 8%, but it would make you socially criticized? Would you do it?

Well, swearing every three seconds does both of these. Not just an interesting finding, more importantly, it tells us that we can tolerate more discomfort and are stronger than we think.

Welcome my listeners to episode number 32. What the bleep? Can swearing really improve performance? Well, I ran across a study recently about how swearing improves athletic performance.

And I thought, now this is a really fun topic. But as I looked into it, there really are studies that support it and theories as to why it might occur.

This relates to episode number five that we talked about some time ago on mind body connection. And we're going to explore what that mind body connection is here.

Now the study is fun. The findings are really interesting. I believe what's really more important, truly important, is that we can do more than we think.

We are more capable than we believe possible. Sometimes you read stories about how a woman lifts up a car because her loved one is trapped underneath.

Swearing gives us a taste of how much more we can possibly do and there's evidence to support.

Grunting as a Performance Boost

So it's exciting it's fun and now let's dive in together well why now of course there's always a story behind the story. I was recently chastised by Gideon, my nine-year-old, soon-to-be nine-year-old grandson, that I sometimes swear.

And as he says, I shouldn't do that. Now, the question is, could this study and what it shows in this podcast episode justify my swearing, absolve me from my sins?

Well you listeners can decide and of course Gideon can and his mom can. Well let's start with a bit of background and something that's more socially acceptable than swearing and that's grunting and as we'll get into later actually the taboo element is really a critical piece of this puzzle and I'll explain why.

Now if you ever watch tennis And I used to play tennis in high school quite a lot. You hear grunting nowadays when players hit the ball. Now this probably goes back to Jimmy Connors decades ago.

Serena Williams is famous for this. Maria Sharapova was able to, you know, grunt at about 100 decibels. So pretty, pretty long. And basically what's happening is you're exhaling when you're exerting yourself and it focuses your energy at the moment of contact.

Now that's all nice and interesting in theories, but there's actually scientific studies to show that grunting changes your abilities in tennis. So this is a study of 32 collegiate tennis players, both men and women.

And in this experiment, some of the time they grunted and some of the time they didn't grunt. And they measured the speed of their serve and their forehand strokes and they put EMG monitors on their muscles so they could see how much force was being generated.

And lo and behold, what did they find? That with grunting, velocity, the speed of the ball was 5% greater and the force they were generating from those muscles increased by 20%. Now it also turns out that when you grunt it distracts your opponent a fraction of a second so they can't quite as well tell where the ball might be going.

So this is grunting and it's interesting if you're a tennis player. But this concept of grunting also has been shown to work for weightlifters. So here's a study of 30 men and women about age 25, and they were looking at hand grip in this study.

So how hard can you grip a device and how many pounds of force can you generate? and it was a two second hand grip and they tried it three different ways.

Swearing, Pain Tolerance, and Taboo Words

One they grunted, another they didn't grunt so there's no big sound but they exhaled when they did it and of course there was a control where they didn't do it.

And what they found is that if you exhaled at the moment you were doing this, you had 11% increase in the force you generated. But if you grunted, it was 25%. Now that's huge.

Like everything we talk about here, the evidence is never as clear as we'd like. So it worked for hand grip, but when they did the same exact study or another study that looked at this, it didn't help deadlifts.

So is it unique to hand grip? Is it unique to tennis? Well, it didn't generalize to all activities. So there's a wrinkle in this already. Well, let's move on from grunting to swearing.

Now, there's a couple of pieces of the puzzle here. Grunting is generally singular. You do it a single time while you're trying to do something forceful.

Whereas swearing, at least is the way it's done in these studies, is done multiple times. You swear over and over every couple of seconds. I mentioned this earlier grunting is somewhat socially acceptable whereas swearing is viewed as a taboo and there may be a component of the taboo which is really important.

Well, what is swearing? We must define our terms. And that is defined as use of potentially offensive taboo words. Again, this issue of taboo, something that you don't normally say you're going to say when we do these athletic tests.

Well, this, of course, goes back to the Bible and probably thousands of years before the Bible. Where in the Bible it says, thou shalt not take the Lord's name in vain.

So swearing, or at least that aspect of swearing, was prohibited in the Bible. In the year 1250, one F word, which in this case was fart, was one of the very first times that it was written down.

And in the 16th century, a monk scribbled the other F word, the bad F word, in the margins of a manuscript. So it turns out that although swearing may have been relatively common throughout history, it was almost never written down.

That's part of its taboo element of it. Now, the most common swear words, which may or may not be your most common swear words, are the F word and the S word.

And in these studies, they asked the folks to think of what you might say if you stubbed your toe or hit your head really hard. So each person would choose their taboo or swear word of choice.

Now, before we get into the strength element, and this is going to be very important because we're going to talk about the theories of why this might occur.

And if we can't come up with any good theories, then I don't know what to make of the evidence. So there's been a number of studies in the psychological literature that swearing increases your pain tolerance.

And keep this in mind because we're going to come back to this concept in just a bit. And some of these studies did something very interesting. Of course, they had the control where you didn't say anything.

Then you had, of course, the swear word of choice. But then they made up what sounded like a swear word. In one of the studies, that word was fouch. And so they would utter that in a very loud way.

But of course, that's not a taboo word. And so it was a way of testing whether it was the word itself or the taboo element of it. Now there's many different types of testing of pain tolerance, but in this case, they submerged the subject's hand in ice water.

And they asked the subjects two different things. How quickly did you detect pain? And then secondly, how long could you keep your hand in that ice bath up to a certain limit that they set?

And what they found is that if they swore, they could increase their physical tolerance to pain by 20% or more.

Athletic Performance Studies and Results

And it really happened and really worked well when it was an actual taboo swear word, as opposed to the made up one. Well, now we get to the study of interest.

Now this is actually one of those studies of studies or a review article and they asked the question, is there an impact of swearing on athletic performance?

Now they had a swearing protocol. Of course you have to have a protocol. So the test they were doing was the strength you could do for 30 seconds. Sometimes they did hand grips, sometimes they did a cycling where you'd be on a sort of stationary bike and you would pedal all out for 30 seconds.

And in the protocol, many of them would have you swear every three seconds. So it wasn't just a one and done. You would swear a couple seconds later, you would swear again, a couple seconds later, you would swear again.

Sometimes you would swear 10 seconds before you started this whole protocol. And they did it just like they did with the ice water bath, where sometimes you didn't do anything, sometimes you uttered a made up what sounded like a swear word and then of course the actual swear word.

Well they found that it worked that swearing made a huge difference that power increased by four and a half percent on the bicycle, the grip went up eight percent, chair pushups went up by 15 percent, a wall sit, how long you could sit next to a wall, 22% and then the length of time you could do a plank went up by 12%. Now these 5, 10, 15% improvements, let me put that into context.

If you're an elite weightlifter and you're working out all year long, you might hope you could increase the amount of weight you could lift by 3%. And the swearing was increasing by 5, 10, 15%. If you look at Olympic sprinters and you compare in the 2024 Summer Olympics, The difference between the first place sprinter of a hundred meter race versus the eighth place was one percent difference and here swearing is giving five or ten times that in terms of power output.

Well, here's another wrinkle. There's always wrinkles. There's a wrinkle like it worked with grip strength, but didn't work with a deadlift. If you are a regular swearer, now I don't remember what they exactly defined as a regular swear, but we can just assume they swear regularly.

It wasn't as effective. So again, this comes back to this taboo element that if you are Never a swearer. Then when you say that bad word, that's taboo.

That brings up something in our brains. Whereas if you swear all the time, it doesn't seem to have the same effect. Well, you know I love evidence, but for me to believe that this is a real phenomenon, yes, the evidence is critically important.

But I want to understand, is there a plausible theory? Because if I can't explain it, then I don't know what to make out of this. So here's a number of studies that tried to explore what the issue was and there are three reigning theories as to why swearing might increase your pain tolerance or might increase your strength in a test.

The first is physiologic that when you utter these words There's a sympathetic response, your heart rate might go up, your blood pressure might go up, and that might prime you to do this much greater effort.

Well, when they've done that and they measure these things, No difference. All right, so that theory is interesting, but doesn't seem to be the operative one.

Well, the second one is psychological arousal. The theory is, now there's not a lot of evidence here, is that when you swear, it in essence wakes your brain up.

You're more confident, you're more excited. Perhaps you're distracted. And the thought is the amygdala, which is your emotional center in your brain, there might be activation there.

But I'm not sure anybody's done this study with a fast MRI scan to show it.

Why Swearing Might Work

In essence, maybe your brain is saying, well, let's throw caution to the wind as I am already throwing caution to the wind by swearing, and I can let myself go with this athletic attempt.

The last one, which I actually think may be the most important, although the caution of the wind I think has some appeal as well, is that it increases your pain threshold.

We talked earlier about the ice water bath and how we definitely found that swearing increased your ability to tolerate pain with the ice water bath. But when you think about a very difficult exercise challenge, there's pain associated with it.

We typically pull back from something that's painful. So maybe the taboo word, the grunting with that taboo word, distracts us, increases our pain tolerance and therefore we can do more.

This seems very compelling to me. Well, I wanted to test it in myself. Now, I didn't go to a public gym and swear and see what happens. I figured, well, that's probably not something good.

They'll probably kick me out. But I did my own N of 1 study. And that was I went for a run. Now, it wasn't exactly the 30-second burst of athletic energy.

But I was getting tired while I was running. It was feeling painful. And I tried grunting every couple of seconds. Well, that didn't do very much. I then experimented with the fake word.

I tried the fouch as a fake swear word. Nah, that didn't do much for me. But then I tried a couple of choice swear words. And believe it or not, for me, it helped.

I was momentarily distracted. You know, what came out of my mouth was something that doesn't normally come out of my mouth. And I was focused for a moment on that.

Like, ooh, I just said that. And when that happened for a short period of time, I was distracted. I was not aware of the discomfort. Then, of course, a few seconds later or so, the discomfort came back.

I didn't feel like I could run quite as strong. And I would repeat it. And it worked a number of times. So for me in my NF1 study, it corroborated the pain tolerance of the ice bath work and corroborated the findings of the studies I've talked about.

Now keep in mind, as I've said a few times, it's a taboo. You're not going to be allowed to swear in the gym.

Personal Test and Closing Takeaway

And it turns out that if you just quietly swear or you swear internal to your brain, but don't utter the words doesn't quite work. So it really has to be something that you say.

Often you say it loudly for it to work. Well, this very fun episode or at least a fun episode for me is coming to an end. This was a really enjoyable study, not because it talked about something that we all can probably laugh a little bit about.

But the deeper message is that we perceive limits in ourself in so many aspects of life. And as I talked about the car and the lifting of a car, and I hope none of you ever have to be faced with that situation.

But what that tells us is that there is more to our capabilities than we believe possible. And as we talked about, at least one or two of the theories support why this may occur.

I encourage you to try your own N of 1 study and if you've forgotten how to do that, by all means go to episode 27 or go to my website and all of these things are written about in various blogs.

I believe as a parting message that you are more powerful than you think you may be. This tiny little set of studies gives us a window into that which I hope you will try out and carry with you.

May you live long, well, and powerful, knowing that swearing may make you even more powerful than you thought you were capable of doing.