Shocking news: Pavlok, the wristband that zaps bad habits, sort of works

By Hiawatha Bray

You should see my fingernails. They’re chipped and uneven, but they’re there. For the first time in about a year, I’ve stopped biting them. Much of the credit goes to Pavlok, a wearable gadget designed in Boston and sold online.

Other wearables measure your heart rate or the distance you’ve run. Pavlok does just one thing — it zaps you with a sharp electric shock to help you shake off bad habits. And when it comes to my nail-biting habit, Pavlok worked.

Yet I’m not entirely convinced. For one thing, Pavlok isn’t automatic; you have to initiate the shock yourself, and who’s up for that? Nail-biting seems like minor-league stuff compared to smoking or overeating. And psychologists who’ve studied similar techniques say they’re a short-term fix, at best.

Still, there are my fingernails, getting longer every day. I guess there’s something to be said for short-term fixes.

Pavlok was founded by Maneesh Sethi, a Stanford University graduate in psychology with a fondness for aversive therapy — the reshaping of behavior through punishment. A few years back, Sethi hired a woman to slap him whenever he spent too much time on Facebook. He got an amusing YouTube video out of the experience, as well as the Pavlok concept.

Pavlok costs $199 on Amazon.com or $169 direct from the company. It’s a metallic cube that snaps into a rubber wrist strap. Fully charged, it delivers up to 200 shocks. Pavlok can hit you with up to 340 volts, but at a power level so low it’s harmless.

Next, you download an app for Apple iOS or Android smartphones and use the Pavlok’s Bluetooth chip to link it with your phone. On command, Pavlok reminds you by either emitting a beeping sound, vibrating, or delivering a nasty little shock. The iPhone app never worked properly for me, but the Android version did the job. The app lets you adjust the shock intensity from a mild tickle to a more noticeable pop that’s almost painful.

Sethi is creating apps to shock users automatically. He’s already adapted the bracelet to become the world’s nastiest alarm clock — an app to zap you out of bed in the morning. You just wear it to bed. At the appropriate time, your Bluetooth-connected phone orders Pavlok to start shocking you. The company is working on a feature to shock you for logging onto Facebook. It’s cheaper than hiring somebody to slap you.

But for now, Pavlok is a manual operation. You decide what bad habit you want to break, and when you find yourself doing it, you give yourself a jolt — either with the smartphone app or by pressing down on the wristband.

It’s worked for me. But I rarely zapped myself, because I rarely had to. Whenever I brought a finger to my lips, I remembered that I’d have to administer a shock if I started to nibble. So I put my hand down. I wasn’t afraid of a shock. Instead, just the act of wearing Pavlok reminded me to stop. The fancy electronics had little to do with breaking my habit.

If you spend $200 on a device to break you of nail-biting — or if you’re planning to write a review about such a device — you’ll find your subconscious bad habits become very noticeable. That’s exactly what happened to me. That’s why I don’t think the shock itself is the most effective part of the system. And that’s why I wonder how well Pavlok would work up against a tougher habit, like procrastination, or whether the habits will return in a few months.

I asked Lisa Coyne, a clinical psychologist on the faculty at Harvard Medical School, whether there’s any scientific support for the Pavlok method.
“My short answer is, none,” she replied. “Otherwise we would all be using aversive shock therapy to treat things.”

Coyne said that while the treatment can produce some short-term benefits, the unwanted behavior will probably return. “In my professional opinion,” she said, “it’s probably a waste of $200.”

Alexander Queen, a lecturer in psychology at Tufts University, was a bit more supportive. “I certainly don’t doubt that it’s probably helpful to some people,” Queen said. “Certainly this is better than nothing.” But again, he said there’s little evidence of long-term benefit from aversive therapy.

Sethi responds that he’s tested Pavlok with the help of scientists at the University of Massachusetts Boston. Eight smokers used the device to try to kick the habit, and 75 percent of them succeeded. And Sethi pointed me to several studies claiming that electric shocks and noxious smells can alter long-term behavior.

“Aversive conditioning has been tested for over 60 years,” said Sethi, “and dozens of studies show the lasting effects of aversive conditioning.”

I don’t believe Pavlok is a scam. Instead, it’s like one of those zany products you see in late-night TV ads. They work, after a fashion, but probably not as well as you’d hope.

Then again, those TV gadgets usually cost about $19.95, and they throw in an extra one for free. If Pavlok was priced like that, Sethi would sell plenty. After all, I’m not the only guy who bites his nails.