

## 'Anxiety tech' companies say their glowing orbs and audio-playing rocks will improve your mental health

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[washingtonpost.com/technology/2022/01/26/anxiety-stress-tech-meditation](https://www.washingtonpost.com/technology/2022/01/26/anxiety-stress-tech-meditation)

### Amid a national mental-health crisis, tech companies are vying for a spot in our screen-free moments.

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By [Tatum Hunter](#)

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Usually “mental-health tech” means an app with some screen-based features such as messaging, games or journaling. Now a new batch of products is focusing on something different: your body.

Take the Orb, a \$229 grapefruit-size ball from Israeli start-up Reflect Innovation, which sits in your hands and measures your heart rate and finger sweat while you try to relax. Then there's the \$79 Zen, from French company Morphée, which looks exactly like a rock but is actually an audio device that plays the company's proprietary meditation content. And Dutch company Alphabeats built a \$28.99-a-year stress-reduction app that combines music and “biofeedback,” which occurs when you practice controlling your body's functions such as breath or heart rate.

Armed with pricey, good-looking products that might be more retail therapy than mental-health treatment, tech companies are elbowing their way into moments of peace and silence that could be therapeutic even without a glowing or humming device. Several scientific studies show that meditation and biofeedback are effective treatments for anxiety — something many of us could benefit from what's turning into an epidemic of stress. But tech companies have little incentive to prove their products work to treat stress and anxiety, experts caution.

“It's not scientific or statistically significant or anything, but the strongest feedback I feel we get is that anyone who hears about this product says, ‘Oh, I need one,’ ” said Shiri Perciger, chief marketing officer at Reflect, which makes the Orb.

It's easy to see the appeal of body-based therapies for stressed-out people. Even though there is little evidence linking stress to screen use, we are wary of our phones, [the data they collect](#) and the stress they drop into our laps at a moment's notice. A widely cited [1992 study](#) in the American Journal of Psychiatry established that meditation has long-lasting positive effects for people with anxiety and panic disorders, and a [2017 study](#) found that biofeedback training with heart rate led to significant drops in self-reported anxiety.

There are benefits for companies, too. Meditation and biofeedback aren't tainted by the scandals surrounding other types of mental-health tech, such as text-based therapy apps. (Leading therapy app Talkspace [gave its employees burner phones](#) to leave good reviews and bury bad ones, the New York Times reported, while BetterHelp came under fire for [spotty service and rote responses](#) to patients.)

## Tech meets body-based therapies

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In his book, [“The Body Keeps the Score,”](#) clinician and researcher Bessel van der Kolk criticized mental-health practitioners for sidelining body-based treatments, and he named meditation and biofeedback as therapies with the potential to remake the field. Now tech companies are repackaging these approaches in products that are easy to use.

Both meditation and biofeedback involve paying attention to the body: Meditators often focus on the breath or another physical sensation, while biofeedback measures your breath, heart rate or brain waves and presents you with some signal based on that data. For instance, the Reflect Orb measures two physiological signs of stress — heart rate variability, which is the length of the pauses between different heartbeats, and electrodermal activity from the sweat glands on your fingers. Meanwhile, a soft light on top of the Orb changes from purple to blue to white as your body calms down.

Just by thinking about these bodily functions, people start trying to change them, said Perciger of Reflect. Some people naturally start taking longer, deeper breaths. Others find different ways — even ones they don't consciously notice — to change the Orb's readings.

Alphabeats draws on similar ideas. After pairing the app with your Spotify account, you lie down, set your phone on your belly and start listening to music. In one exercise, a subtle buzzing sound plays over your songs until you slow your breath and heart rate enough for it to go away. In another, the app subtly adjusts the quality of the audio in response to your body.

And there's Morphée's Zen, which at first glance is a rock and at second glance is an audio-file player that looks exactly like a rock.

Plug a pair of headphones into the Zen, and you can play meditations including visualization exercises, body scans and music. Because there's no app, and not even a screen, there's no risk of pinging emails, Morphée co-founder Charlie Rousset said. People can enjoy all the benefits of meditations with minimal tech interference — except for those headphones plugged into a rock, of course.

“We don't want an app. It was a big decision we had to make in the company,” Rousset said.

**‘Anxiety tech’ is a quick fix for a big problem. But is it the best we've got?**

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It's easy to scoff at the spooky orb or the techno rock. But when we poke fun at these products, are we any different than the uncle who insists anxious people should just toughen up?

Mental-health care is shrouded in stigma, and it's hard to know what's legitimate. Even before the coronavirus pandemic, 18 percent of Americans suffered from clinical anxiety, according to the Anxiety and Depression Association of America. Now the pandemic has been dubbed a mental-health crisis for its role in amplifying anxiety.

Despite soaring demand for mental-health tech, there is still little oversight as to whether the products actually work, says Stephen Schueller, an associate professor of psychology at the University of California at Irvine and executive director of One Mind PsyberGuide, which reviews mental-health apps and digital health resources.

One 2017 study of 52 anxiety apps found that two-thirds didn't have health-care professionals involved in their development and less than 4 percent had been thoroughly tested. As long as people are buying, companies have little incentive to prove their claims, Schueller said, and meditation and biofeedback products are no exception.

"I'm concerned about the industry pushing ineffective solutions and people delaying effective care because they try something and it doesn't help them," he said.

When companies do present facts and figures, Schuller noted, they could be taken from studies with participants who don't suffer from chronic anxiety. That was the case with Reflect, which hasn't yet studied the effect of the Orb on people with clinical anxiety. Morphée's Rousset said it was too early to share information on Zen's effectiveness, despite the product already hitting the market in Europe.

Still, company executives say they have taken some steps to validate their products. Morphée says it has partnerships with a variety of hospitals and practitioners that recommend its other products for insomnia. Alphabeats says it saw promising results from a recent study with health-care workers at the Fontys University of Applied Sciences in Eindhoven, Netherlands. After using the music biofeedback regularly for four weeks, workers reported significantly lower levels of stress, it said.

Mental-health tech might also play an important role for people too busy or underserved to seek other types of care, Schuller said. Indeed, 1 out of 3 U.S. counties doesn't have a single licensed psychological professional, according to the American Psychological Association.

"We're living in a world that makes it hard sometimes to build and maintain a mental presence," Perciger said.

Heather Shoren Iarusso, a meditation teacher living at the San Francisco Zen Center, said tech companies have no real interest in freeing us from stress— they only encourage us to take short breaks.

Any product that makes a positive difference for people’s mental health is worthwhile, but companies peddling meditation should beware: Before “Zen” was a \$79 rock, it was a spiritual tradition. And that tradition teaches ideas — like compassion for the self and detachment from earthly objects — that might be bad for business, she said.