

# FAST COMPANY

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## **The Science of Why We Fidget While We Work**

By Jessica Hullinger

Paper clips, stress balls, clicking pens, rubber bands, magnets. Most of us mindlessly fidget with something while we ponder a project, listen to a lecture, or work through a problem, and two researchers from New York University want to know why.

"Is fidgeting actually part of our work?" asks [Mike Karlesky](#), a PhD student at NYU's Polytechnic School of Engineering in the computer science program. "Is it some kind of essential behavior that is part and parcel to how we think, how we process?" In the search for answers, he and his advisor, [Katherine Isbister](#), started a Tumblr called [Fidget Widget](#) where they ask fidgeters to come forward and submit pictures of their favorite "doohickeys."

"What object(s) do you play with while you work?" the blog [asks](#). "How do you fiddle with them in your hand? What are they made of? What do you enjoy about them and how they feel? Do they have special meaning to you? When do you play with them?"

They want to know: if fidgeting helps us work better, how can we use technology to maximize this effect?

### **WHY DO WE FIDGET?**

For something that so many of us do, the reasons why we fidget at work are surprisingly unstudied. We do know fidgeting is a common coping mechanism for people with ADD, but could it serve a similar purpose for the population as a whole? According to Roland Rotz and Sarah D. Wright, authors of [Fidget To Focus: Outwit Your Boredom: Sensory Strategies For Living With ADHD](#): "If something we are engaged in is not interesting enough to sustain our focus, the additional sensory-motor input that is mildly stimulating,

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interesting, or entertaining allows our brains to become fully engaged and allows us to sustain focus on the primary activity in which we are participating.”

In other words, the authors believe fidgeting distracts part of the brain that’s become bored so the other parts can pay attention to what we’re reading, hearing, or seeing. They [say](#) this “floating attention” could be an evolutionary trait that “dates back to prehistoric times when the ability to focus 100% on a single task was not entirely desirable and would result in a person missing the large ravenous beast hiding in the bushes.”

## WHAT DOES FIDGETING DO FOR OUR PRODUCTIVITY?

Research shows a correlation between working with our hands and increased memory and creativity. A [recent study](#) found that [writing by hand](#) rather than typing on a keyboard helps us better process and retain information. And mindless doodling can [boost](#) memory and attention span.

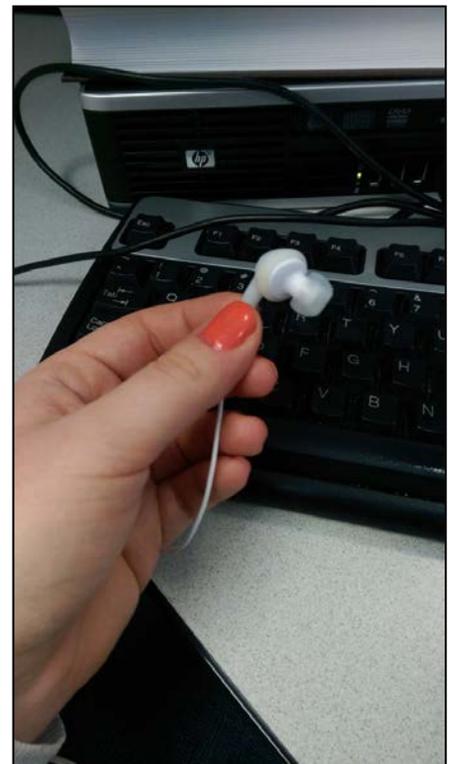
One 2005 [study](#) concluded that kids who are allowed to fidget during class learn more quickly than those who are not. [Karen Pine](#) with the University of Hertfordshire [says](#) that “if teachers encouraged more fidgeting in class they might find children actually learn more.”

## WHAT OUR FIDGETING TOOLS SAY ABOUT US

Initially, Karlesky worried that this project might be a waste of time. Asking people what they play with when they’re bored at work? Would anyone take this seriously? He realized immediately that he was wrong. People are very passionate about the things they fidget with. “They have really well-defined preferences for the experience in their hands,” he says. “They have made specific choices about particular objects they will carry with them.” While we have a variety of fidget preferences, Karlesky has noticed a few common themes in the blog submissions so far:

**We like repetition.** “It seems the mindlessness of these activities is somehow intimately connected to repetition,” Karlesky says. A few samples from the blog:

“[These](#) little rubber things on my headphones. All day.”



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"I do the same movements [over and over again](#); make it into a chain of boxes or steps."

"[The Nitro Grinder thing](#). All day. Until someone tells me to stop. Click. Click. Click."

"I repeatedly take the [lid](#) off and put it back on."

**We like squishy, sticky, and bouncy widgets.** From Silly Putty to sticky tack to Koosh balls. "There's all these evocative words people try to use about squishiness and pokiness," Karlesky says. Again, a few samples:

"[It is filled with some type of liquid](#), cool and squishy to the touch and easily flips inside out through a whole (sic) in the middle. It keeps me mindlessly entertained for hours."



"I fiddle with [tape at my desk](#). I think it has something to do with the sticky texture and crinkly sound."

"The [Koosh ball](#) gets pulled, thrown, and bounced."

We like widgets that have sentimental value. "Oftentimes there's a prolonged kind of affinity for a thing," Karlesky says.

"There's a specific pocket in their bag where it goes or 'so and so gave me this and every so often I think of this person when I look at it."

Some samples:

"My [worry stone](#). I keep it in my pocket and take it out regularly to

rub with my fingers, tumble it around, just have it in my hands. I find it comforting and helps me pay attention to other things more easily."



"I keep a labradorite [stone](#) sphere I've had since (sic) 1999 and some Crazy Aaron's thinking putty. In my shoulder bag, I keep a glass marble I picked up in Stockholm a few years back."

One [woman](#) even took one of her baby's toys to the office. She admits that yes, she stole her fidget widget from a baby, "but it also reminds me of him and all the fun we have when we're together."

All of the examples Karlesky and Isbister have collected on the blog are helping them think about how we could better design our devices. "In the idealized day you sit down at your computer and crank out for eight straight hours, but we don't really do that," Karlesky says. "We get stressed out, we get stuck." Could our computers be designed with a squishy component to help when we're feeling distracted? Could certain computer games fulfill our need to fidget so we can maintain our productivity?

In the future, maybe your computer will recognize when you're fidgeting and remind you to get up and go for a walk, or take a break from work. "There's a huge, not yet well-understood opportunity to re-examine the design of our digital interactions," Karlesky says.