

# Why bicycling might keep your kid’s mental health in high gear

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By Nikki Campo Published September 6, 2022



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The science behind why riding a bike might boost mental well-being, plus 7 ideas to get children pedaling.

Shannon Brescher Shea’s nine-year-old struggled with focus and following directions at home and at school. But after riding his bike—whether around the park or to school—he felt calmer.

“We called it moving meditation,” says Shea, who is a family biking advocate and author in Maryland. “We saw how incredibly helpful it was for his focus, emotional regulation, and ability to follow directions.”

Shea's experience isn't unique. Science has repeatedly proven that physical activity contributes to improved mental health. "Exercise, no matter your age, is the single best thing you can do for every organ in your body, including your brain," says [Allan Reiss](#), a psychiatry and pediatrics professor and director of the Division of Interdisciplinary Brain Sciences at Stanford University School of Medicine.

And while any exercise helps, a growing [body of research](#) shows bicycling is among the activities that might provide even more of a mental health boost. "Our research shows that kids who get out for a bike ride at least once a week report higher levels of mental well-being," says cognitive scientist [Esther Walker](#), research program manager at Outride, a nonprofit organization that conducts cycling research and supports programming for youth.

At a time when youth mental health is in crisis, bicycling is one avenue families might not have fully leveraged. If your child has a bike—or has access to one through [a local youth organization](#)—here is what you need to know to reap the benefits of riding.

## The brain on bicycling

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Recent research has shown that aerobic exercise is [related to improved cognitive functioning](#) like attention and academic performance. But some experts believe that when we hop on a bike, the improvements might be even more pronounced.

Scientists aren't yet sure why, but it might have something to do with all the executive-function skills cyclists use. "You need to maintain your balance and process a lot of information from your environment, like knowing whether you can squeeze past a tree or how hard you need to brake," says Reiss, who is among the researchers shifting focus to a younger subset of bikers. "You've got to coordinate, sense, process, integrate, inhibit, and continually make decisions."

For kids especially, honing those parallel processing skills is key. Outride, through primary research as well as research conducted through [university partners](#), is starting to look at how [cycling can provide that brain boost](#) to kids. According to Walker, "Research suggests that physical activity like cycling likely encourages new cell growth in areas of the brain linked to memory and problem solving, and can support stronger connections between neurons, ultimately impacting memory and learning."

Meanwhile, Reiss and his team at Stanford are in the throes of a [brand new study](#) to measure changes in the brain *while* someone is exercising. (Most research to date looks at the brain's activity before and after.)

This will allow the team to understand, among other things, how cycling changes attention, whether a child has a known attention-related issue like ADHD or not. That's important, he says, because improved attention, derived from something as simple as a bike ride, has the potential to help at home, with friends, and at school.

## How to get in—or *back in*—the bike saddle

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Luckily, it's not too hard to get children on a bike. "They don't see it as work," Walker says. "They see it as fun and freedom." Here are some ideas from the on how your family can take advantage of this powerful mental health supercharge.

**Give kids the reins.** How, exactly, does one hand over control to children on a bike ride? "We're guiding kids but giving them agency to make decisions," says [Thomas Clanton](#), assistant professor of sport and recreation studies at Young Harris College.

So, for instance, parents might lay out a map of the city, highlight 10 kid-friendly destinations, and let the child decide where to go and how to get there on the bike. Your role? Weigh in on safety and logistics, depending on your biker's age and capabilities.

**Offer them jobs.** Assigning roles on the bike ride can also provide children a sense of control. For instance, whoever is leading the ride gets to be in charge of a pre-ride check: Does everyone have their helmet secured, lights on, and water bottle filled? During the ride, a leader can call out things to watch for, like big puddles or a stop sign. If anyone is too tired, the leader decides whether to take a break or turn back.

"Allowing actions to be youth-led gives kids a sense of ownership," says [Ajoa Abrokwa](#), founder of She Is Focused, a cycling-centric exercise and community engagement program for women and girls in Philadelphia. "They develop abilities on the bike to plan, execute, lead, and support."

**Focus on the fun.** To ensure they don't get tired too quickly (or too bored), build in an ice cream pit stop or a visit to a playground rather than making the ride the sole focus. "Self-paced exploration and adventure are key on the bike," says [Charles Chancellor](#), an associate professor at Clemson University's College of Behavioral, Social, and Health Sciences. (He also heads up the [Bicycle Research Team](#), which conducts research on bicycling.)

Adventure can be urban or rural, too. If you live in a city with access to bike parks or [pump tracks](#), take the kids and watch—or join in the fun. Or consider creating a scavenger hunt for different types of buildings, car colors, or even ambient sounds like horns or music. For rural landscapes or those with access to bike trails, search for local flora and fauna on the ride.

**Start small.** Some children will be naturally hesitant, especially when it comes to things like speeding down a hill or trying a bumpy trail. Try starting with a "snail race": Who can ride the slowest without tipping over, from point A to point B?

**Incorporate eco-stewardship.** Whether your biker enjoys the smooth pavement of city streets or dirt and root-covered trails, the ride provides an opportunity to talk about caring for the Earth. City streets and dusty forest trails need care and concern to remain safe for

cyclists. “We develop an increased awareness of, and care for, trailways and roads naturally while we’re on the bike,” Abrokwa says.

**Give them goals.** “With biking, kids can set goals and overcome them at their own pace,” Chancellor says. “They can’t always do that with team sports.” Challenge your child to set a small time-bound goal, like reaching a certain distance within a certain timeframe over a couple of weeks. Or maybe they want to try a group ride to school or learn to pop a (safe) wheelie. “Setting goals and reaching them promotes self-confidence,” he adds.

**Bring some friends.** Reiss says that the benefits of cycling can multiply when it becomes a social endeavor: “Our brains evolved to be socially involved, and exercise in groups is often more motivating for people.”

In neighborhoods where bike lanes or other safe-to-ride pathways exist, organizing a group ride to school or an after-school wheeled romp with pals might be just the ticket to less stressed, more relaxed kiddos.