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LIFESTYLE



Interactive Metronome trainer Darren Means helps Mary-Catherine clap and stomp her way to overcoming ADHD.

Getting the beat

*Children
with ADHD
able to get on
track with
Interactive
Metronome*

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Andrea Bevill knew something was wrong with her daughter Mary-Catherine. "Ever since she was 3 ... she couldn't focus and wasn't processing things," said Bevill, a north Shelby County resident.

She'd give her daughter a series of instructions: Clean your room, brush your teeth, make your bed. Mary-Catherine couldn't retain the instructions in her head for long.

It wasn't until the girl was 5, however, that doctors discovered she had learning disabilities and severe attention deficit hyperactivity disorder, or ADHD.

Instead of being upset, Bevill was relieved to get a diagnosis for her daughter's peculiar behavior. Soon after, she went on a quest to find a way to free Mary-Catherine from her

mental haze.

Bevill and her husband, Al, heard about Interactive Metronome, a computer-based training program that helps children with learning disabilities focus better. IM uses a computerized metronome to improve the user's coordination and concentration by improving their timing.

The program, invented by Jim Casily, was created to help musicians improve their performance.

But that was changed by the father of a boy named Jimmy.

Jimmy Eggleston has ADHD and severe birth defects. After Jimmy took music lessons from a teacher who used the IM program, his medical conditions began to improve.

"At the end of 15 sessions, he put his walker to the side and walked the length of the basement," Tom



The Interactive Metronome program helps Mary-Catherine Bevill improve her coordination and concentration by making her synchronize her claps with beeps she hears in the headphones.

► See Program, Page 3D

PROGRAM: Helps kids with learning disabilities

► From Page 1D

Eggleston said. "He learned to take one step per beat and improved his balance and never used his walker again."

Eggleston launched research to see if children with disabilities could be helped by the program and formed the Florida-based group IM.

A study published almost two years ago in the American Journal of Occupational Therapy looked at 56 boys, age 6 to 12, with ADHD. Nineteen of the boys used the metronome training, and they showed more improvement in attention, motor control, language processing and reading skills than the groups of boys who didn't use IM.

"The training is demanding and forces you to concentrate during the session," Eggleston says, "but once you improve your timing, you improve it forever."

The program works the part of the brain that controls the cognitive and mental processing, Eggleston says.

A participant slips on a set of headphones and straps on a glove. A computer plays a metronome-emulated sound in the headphones and the listener must perform a series of hand and foot coordination exercises to the beat. When the listener is close to being in perfect sync with the beat, a pleasant sound goes off. When they are out of sync, a bong sound is made.

Getting in sync

The listener's brain instructs the body to get in sync with the pleasant sound so it won't have to hear the unpleasant one.

Users are scored; the fewer milliseconds between the sound

in the user's headphone and their corresponding movement, the better.

An ideal score is 30 or below. A score of 201 or more reflects severe deficiencies. Mary-Catherine was assessed at Ifoundhope counseling center in Inverness — the only place that offers IM in a clinical setting in Alabama — and got an initial score of 251.

"She was bouncing off the walls," said Darren Means, who conducted the assessment. She got in a chair and tried to stand on her head, he said.

Bevill enrolled her daughter in the program, which usually is made up of 15 50-minute sessions of clapping and stomping exercises three times a week. It took Mary-Catherine 40 50-minute sessions to get her brain patterns in sync, Bevill said.

"She would get frustrated," Bevill said. But after Mary-Catherine's seventh session, she sat her mother down and read her a book.

"I couldn't believe this was my child," said Bevill, who now works as marketing director of Ifoundhope.

After several sessions, Mary-Catherine was able to sit quietly for 20 minutes, a feat for a child with ADHD, Means said.

"It resets the timing mechanism in their head," said Jonathan McKee, occupational therapist for Life Cycle Therapy in Atlanta, a pediatric occupational therapy clinic. "It improves their motor skills, attention span. Life Cycle Therapy offers IM for children with learning disabilities.

"It works on the lower part of the brain and gets them down to a more primal part that sets up our coordination."

The children he has worked with have been able to improve their balance and coordination, testing to an age level 6 months to 1½ years older than they had before.

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Tom Eggleston

The cost of the initial assessment is \$350 at Ifoundhope and can go up if more testing is needed. The standard, 15-session IM program is \$1,300 and is covered by some insurance companies. More than 600 hospitals, schools and clinics use the program.

Cindy Cason, a former special education coordinator for the Homewood School System, is studying IM using students in the Title I program to determine whether the program is beneficial for children with learning disorders. Since the first of August, she's been testing 80 students with low test scores in fourth- and fifth-grades at Vincent Elementary School and fifth-grade at Ashville Middle School.

She's operating under a research grant and has gotten a portion of her research funding from IM.

So far, she believes the program is helpful. "IM helps them distinguish sound, concentrate and focus," she said.

Improved grade levels

Some of the children she works with have improved 2.7 grade levels since being in the program, she said.

"I had one teacher come up to me and say, 'I can't believe what so and so is doing in my class.'"

Cason plans to be finished with her research by March.

Other researchers are conducting tests of the program at Oak Mountain Elementary and Inverness Elementary schools, as well.

Interactive Metronome also has been shown to help athletes, and many children participate to help improve their coordination in baseball, basketball and other sports.

PGA golfer Garrett Willis was quoted in Golf Digest as using the program to improve his game.

"My husband's golf game has improved," Bevill said.

More than that, Bevill's grateful for what's it done for Mary-Catherine. Her last IM score was 33, and she now gets up in the morning and gets herself ready for school, Bevill said.

"We feel blessed," she said.