



## Physical activity recharges brain

Research links exercise to academic achievement

By David Quick  
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After I suffered through a tumultuous middle school experience in the Detroit public school system, my Southern-bred parents, who insisted on living in the city and wanted to support the public schools, faced sending me to a high school where assaults and stabbings were more a part of everyday school life than homework and preparing for the SAT.

Lucky for me, my parents abandoned their idealism about sticking with the public schools and then sent me in the opposite direction, to one of the top private schools in southeastern Michigan.

Frankly, Cranbrook School, alma mater of ABC-TV's Bob Woodruff and presidential candidate Mitt Romney, was a cultural and educational shock in multiple ways for me, a preacher's kid with a "funny" North Carolina accent. But I appreciated, even as a teenager, that it was a rare opportunity.

Cranbrook knows education and that it's not all about

studying.

Then and now, sports and physical activity are required of students. All three seasons of the school year. No exceptions. If not varsity or junior varsity sports, it was club or intramural sports or, in the very least, physical education class. Cranbrook was not an incubator for bookworms.

I gravitated to the competitive sports except in the winter season (I was too short for basketball, not quick enough on skates for hockey, no comment on wrestling), but also did my senior slacker gig playing intramural softball with my gang of buddies. Of the sports I did, softball offered the least amount of physical exercise.

With the exception of P.E. class, everything was after school. The activity, usually outdoors, was not only a physical release, but I found that it recharged my brain. And I needed all the recharging I could get because suddenly I found myself having to read and study an average of about two hours every evening, in addition to putting in time during school-day free periods.

Instinctively, I continued to use exercise to recharge my brain into my college life and career.

In the past week, I started thinking about Cranbrook and my experience there after getting a call from Dave Spurlock, the director of physical education (among other duties) for the Charleston County School District.

Spurlock told me about some research he has done on the importance of physical activity to academic achievement, that he was trying to get the schools to embrace the idea, and gave me a heads-up on the

upcoming publication date (officially today) of a new book, "Spark: The Revolutionary New Science of Exercise and the Brain" by Dr. John J. Ratey, a clinical associate professor of psychiatry at Harvard Medical School.

I had to get that book ASAP. I scrambled to get an advanced copy shipped overnight to me and, in the process, set up an interview with Ratey, an accomplished scholar and author who brought attention-deficit hyperactivity disorder to the mainstream in 1994 with the book "Driven to Distraction."

Likewise, his newest book is no boring, heavy academic dissertation. (Outside magazine former senior editor Eric Hagerman helped write it.) It addresses the importance of physical activity, especially of the rigorous variety, for improving brain function at every age level. "Spark" backs up everything with hundreds of scientific studies and research papers, mostly done within the past decade.

If you watch TV news or read major newspapers, expect to hear more about his book and from Ratey. He is a personable man with an infectious laugh who could be a different kind of ambassador for physical fitness.

"We need to change the way we think about exercise," says Ratey. "We really need to think about exercise to keep the brain functioning well, and that it also happens to be good for the body. We tend to think about it the other way around."

He adds that exercise itself doesn't make us smarter. (The stigma of the "dumb jock" likely will continue to exist because some athletes don't apply themselves intellectually.) Instead, exercise makes us more able to

learn and focus.

"It readies the cells in the brain to be optimal," says Ratey.

What's the minimum amount needed? He says people should do cardiovascular exercise at least four times a week, 40 minutes each time. And part of that time should include some intense aerobic activity.

"We are made to move and people aren't moving anymore," Ratey says of our "cyber culture."

As for the schools, Ratey says sports or physical education classes also need to emphasize sustained movement. Sitting on a bench waiting for your time to bat or kick the ball doesn't count. Three-on-three volleyball, four-on-four soccer or running an all-out mile does.

The schools, especially public schools, are saddled with so many responsibilities along with enduring pressure to "improve test scores." I'm amazed at all the ills they are expected to remedy. But it's my hope that Charleston school leadership will listen to Spurlock's call for physical activity (not just P.E. class) and know that there's proof to back it up.

The big results, after all, may just turn out to be academic, not athletic.

*Reach David Quick at 937-5516 or [dquick@postandcourier.com](mailto:dquick@postandcourier.com).*

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