

## **The Impact of Movement**

**Robert Brooks, Ph.D.**

In my writings and presentations I have frequently highlighted the impact that physical exercise has on our emotional, physical, and cognitive well-being regardless of one's age. Several of my monthly articles have been devoted to the importance of exercise in our daily lives, and I continue to tweet links to articles that detail the health benefits of engaging in exercise, even for just 20 minutes a day.

As just one example, my [September, 2008 website column](#) focused on the then recently published book *Spark: The Revolutionary New Science of Exercise and the Brain* authored by psychiatrist John Ratey in collaboration with Eric Hagerman. Ratey cited research that clearly demonstrated the ways in which exercise enriches our lives. In one study, the academic performance and emotional moods of high school students were improved when they engaged in aerobic exercise at the beginning of the school day. Ratey observed, "Exercise provides an unparalleled stimulus that creates an environment in which the brain is ready, willing and able to learn." He viewed exercise as "an indispensable tool for anyone who wants to reach his or her full potential" and extolled its importance from our childhood into our senior years.

Ratey expressed dismay in 2008 that the amount of time allotted for physical education programs had been cut in numerous schools, a situation that has not improved for many students 14 years later. A disconnect seems to exist between the results of studies that indicate the ways in which exercise reinforces academic performance and social-emotional skills and the actual practices in schools in which there is limited opportunity for students to engage in physical exercise. During the first year of the pandemic when a vast number of students experienced remote learning, I recommended during my webinars that parents build in regular exercise at home for their children. I also suggested that they do the same for themselves.

Although the benefits of exercising even 20 minutes a day are well-documented, I have witnessed for years adult patients who neglect exercise at a time when some movement is most urgently required, namely, when they are feeling increasingly stressed. Some described being too tired or depressed to exercise, so that a vicious cycle is set in motion. I always attempted to inform my patients of the healing power of exercise and to help them to implement and maintain an exercise regimen in the face of feeling exhausted and pessimistic.

## **The Benefits of Movement**

I recently read an very interesting article “[Moving Your Body Is Like a Tune-Up for Your Mind](#)” by Kira Newman that summarizes some of the main points of a new book *Move!: The New Science of Body Over Mind* by science journalist Caroline Williams.

Newman wrote that Williams, citing the work of neuroscientist Antonio Damasio, believes that “our bodies are constantly processing signals from the world and making adjustments to keep us healthy. At the same time, they’re sending signals to the brain about the state of our bodies. The unconscious messages coming from the body provide not only the basis for the self but also a kind of undercurrent to our consciousness that sets the mood for everything else that happens. . . . In other words, while we may not recognize it, our moods and feelings have a lot to do with how our bodies are functioning—and that’s where movement comes in.”

Newman added that Williams’ new book offers an overview of the ways in which moving our bodies enriches the functioning of our brains, noting that “sitting may be ‘the new smoking,’ but the ills of a sedentary lifestyle aren’t just for physical health.” Sedentary lifestyles are associated with an increased risk for anxiety and depression. “When our brain has no movement to oversee, we suffer. In fact, our brains actually reduce capacity when we’re more inactive, removing cells from areas like the hippocampus. Moving is at the heart of the way we think and feel. If we stay still, our cognitive and emotional abilities become seriously compromised.”

In light of my focus on the concepts of resilience and “personal control,” I was encouraged by several other observations offered by Williams. For instance, “Moving is at the heart of the way we think and feel. If we stay still, our cognitive and emotional abilities become seriously compromised. Having the physical skills to get out of sticky situations makes a big difference in how mentally capable and emotionally resilient we feel as we battle our way through life. . . . In general, the more physical activity you do, the more you’ll tend to have a sense of control over your life.” Without wishing to digress, I should add as someone who also advocates taking as little as 10 minutes a day for meditation, I believe that while movement and exercise are important for our well-being, so too is meditation.

## **Realistic Goals**

When I’ve discussed the importance of movement and exercise with patients, I find it important to help them establish specific and realistic goals, especially for those who have not

engaged in any meaningful exercise for years. An unrealistic goal is likely to result in disappointment and frustration, prompting people to not only disengage from the current activity but to dissuade them from involvement in future exercise as well. In this regard, Steven, a middle-aged man, was referred by his primary care physician for stress and depression; in addition, he had gained a considerable amount of weight during the past five years and had given up physical exercise. As Steven and I began to examine the sources of his stress, he acknowledged that he had to improve his diet and “become more diligent about setting aside a regular time for physical activity.” We considered possible physical activities. Steven, with seemingly little reflection, said he had a plan, that he would begin by jogging five miles at least three times a week. I actually thought he was being somewhat humorous when he stated he would begin by jogging five miles, but then I realized he was serious and not being realistic.

Steven’s goal of jogging five miles three times a week was admirable but attempting to reach this goal within a day or two was a very likely prescription for failure and disappointment. I framed and supported five miles as a long-term objective but questioned his initial timeline. I shared my experience when I first began to jog and the time required to build up to five miles. Steven established a more realistic timeline that began with his jogging (or sometimes walking part of the way) 20-30 minutes each day and slowly increasing the time and distance as he was able to do so. Each short-term success bolstered his motivation, enabling him to reach his long-term goal three months later.

Newman described a number of activities suggested by Williams for increased movement. Not surprisingly, strength training, walking, and running were included. Similar to my approach with Steven, Williams emphasized that exercise can occur in small steps, advising, “It’s more a matter of incorporating movement into our daily lives.” If your job is sedentary, you can “get up to move every half an hour. You can do a little gardening, go for a walk, or just have a ‘movement snack’—a couple minutes of walking like a crab or balancing on one leg. It sounds silly, but what could be sillier than sitting with our butt in a chair for eight hours straight?” An interesting thought!

It's obvious that many people are very conscientious about the amount of their daily movement. One indication is the large number of Fitbit, Apple, and other watches being sold that allow the wearer to keep track of health and exercise indices, including movement. Many

individuals will proudly keep track of the number of steps they have taken that day and their progress over time.

Williams' recommendations for movement extend beyond the individual. She believes "we could do more as a society to acknowledge the importance of movement. That might mean prioritizing recess and PE classes, which more and more U.S. schools are cutting. Elders need encouragement and fitness classes designed for them, not a culture that surrenders to the inevitability of frailty in old age."

The importance of students being provided with opportunities to move, strongly recommended by Ratey and many others, was once again [spotlighted in a recent article](#) by educator Andrew Watson. He described the role of movement in promoting certain kinds of creativity, such as divergent thinking, which has been defined as "a thought process or method used to generate creative ideas by exploring many possible solutions."

Watson acknowledged that "if 25 students walking around in the classroom sounds like too much chaos, maybe they can choose a *new place to sit for a while*. . . . The research suggests that actual movement matters and that the *relative degree of restriction* also matters. Even if students sit in solid chairs, their freedom to choose seats or move seats or sit cross-legged (or whatever) might jostle some creative energy in useful ways."

### **An "Ah-Ha" Experience Early in My Career**

In reviewing the writings and research of Ratey, Williams, Wilson and others, I reflected upon my clinical work with many children, adolescents, and adults, and what I learned about the significance of movement. I should like to share an interaction I had very early in my career, an interaction that confirmed what many therapists know—namely, we often learn as much if not more from our patients than they learn from us.

I was conducting a psychoeducational assessment of Jon, a seven-year-old who was struggling in school and had difficulty remaining focused on the task at hand. Although many children display a greater ability to focus during a one-to-one situation in my office, this was not the case for Jon. He was constantly distracted while being tested, commenting on a bird chirping outside, a loud truck passing by, and a phone ringing in the adjacent office.

And then what I consider to be an "ah-ha" event occurred with Jon, which as I look back, seems to have been so obvious and not worthy of referring to it as "ah-ha." However, I remind myself that this session with Jon took place during the early phase of my career when I

experienced many events that were to become regular features of my clinical interventions, as “ah-ha.”

At the far end of the testing table was a ball of Play Doh that had been used by a patient in the previous hour that I had neglected to put back on the shelf. Jon spotted the ball and picked it up. He began to squeeze it and as he did, much to my surprise (and delight), he became increasingly focused on the test I was administering rather than becoming even more distracted by squeezing the ball.

I could write a chapter about the importance of this and subsequent sessions with Jon. Suffice it to say that one of the key recommendations I made at a school meeting and was adopted by Jon’s very caring teacher was to permit him to hold the equivalent of what was to known a few years later as an “executive stress ball.” (If only I had thought of marketing that product with the executives and business leaders I was seeing in therapy! I discovered that it is still available for sale, sometimes labeled a “stress relief ball.”) In follow-up meetings with Jon’s teacher, she commented how helpful it was for Jon to have the ball available to squeeze. She also reported that although she had been concerned that his doing so might be distracting to other students, that did not occur. She added, “If anything, his lack of focus and fidgety behavior before he started to use the ball were more of a distraction to his classmates than squeezing the ball.” In addition, she became increasingly sensitive to the amount of movement transpiring in her class and decided more was needed. Consequently, she scheduled several brief “stretch breaks” every hour for the entire class, which she found to heighten concentration and focus among these young children.

One final comment. The initial draft of this article was very different from what you are reading. I was not pleased with my first draft and decided to follow the advice offered in this column. I took a break, exercised, and meditated. As a result, I not only felt better, but a greater clarity of the points I wished to address emerged. Movement, indeed, is important.

<http://www.drrobertbrooks.com/>