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WELL

The 3 R's? A Fourth Is Crucial, Too: Recess

By TARA PARKER-POPE

The best way to improve children's performance in the classroom may be to take them out of it.

New research suggests that play and down time may be as important to a child's academic experience as reading, science and math, and that regular recess, fitness or nature time can influence behavior, concentration and even grades.

A study published this month in the journal Pediatrics studied the links between recess and classroom behavior among about 11,000 children age 8 and 9. Those who had more than 15 minutes of recess a day showed better behavior in class than those who had little or none. Although disadvantaged children were more likely to be denied recess, the association between better behavior and recess time held up even after researchers controlled for a number of variables, including sex, ethnicity, public or private school and class size.

The lead researcher, Dr. Romina M. Barros, a pediatrician and an assistant clinical professor at the Albert Einstein College of Medicine, said the findings were important because many schools did not view recess as essential to education.

"Sometimes you need data published for people at the educational level to start believing it has an impact," she said. "We should understand that kids need that break because the brain needs that break."

And many children are not getting that break. In the Pediatrics study, 30 percent were found to have little or no daily recess. Another report, from a children's advocacy group, found that 40 percent of schools surveyed had cut back at least one daily recess period.

Also, teachers often punish children by taking away recess privileges. That strikes Dr. Barros as illogical. "Recess should be part of the curriculum," she said. "You don't punish a kid by having them miss math class, so kids shouldn't be punished by not getting recess."

Last month, Harvard researchers reported in The Journal of School Health that the more physical fitness tests children passed, the better they did on academic tests. The study, of 1,800 middle school students, suggests that children can benefit academically from physical activity during gym class and recess.

A small study of children with attention deficit hyperactivity disorder last year found that walks outdoors appeared to improve scores on tests of attention and concentration. Notably, children who took walks in natural settings did better than those who walked in urban areas, according to the report, published online in August in The Journal of Attention Disorders. The researchers found that a dose of nature worked as well as a dose of medication to improve concentration, or even better.

Andrea Faber Taylor, a child environment and behavior researcher at the Landscape and Human Health Laboratory at the University of Illinois, says other research suggests that all children, not just those with

attention problems, can benefit from spending time in nature during the school day. In another study of children who live in public housing, girls who had access to green courtyards scored better on concentration tests than those who did not.

The reason may be that the brain uses two forms of attention. “Directed” attention allows us to concentrate on work, reading and tests, while “involuntary” attention takes over when we’re distracted by things like running water, crying babies, a beautiful view or a pet that crawls onto our lap.

Directed attention is a limited resource. Long hours in front of a computer or studying for a test can leave us feeling fatigued. But spending time in natural settings appears to activate involuntary attention, giving the brain’s directed attention time to rest.

“It’s pretty clear that all human beings experience attentional fatigue,” Dr. Faber Taylor said. “Our attention has to be restored from that fatigue, and there is a growing body of research evidence that nature is one way that seems particularly effective at doing it.”

Playtime and nature time are important not only for learning but also for health and development.

Young rats denied opportunities for rough-and-tumble play develop numerous social problems in adulthood. They fail to recognize social cues and the nuances of rat hierarchy; they aren’t able to mate. By the same token, people who play as children “learn to handle life in a much more resilient and vital way,” said Dr. Stuart Brown, the author of the new book “Play: How It Shapes the Brain, Opens the Imagination and Invigorates the Soul” (Avery).

Dr. Brown, a psychiatrist in Carmel Valley, Calif., has collected more than 6,000 “play histories” from human subjects. The founder of the National Institute for Play, he works with educators and legislators to promote the importance of preserving playtime in schools. He calls play “a fundamental biological process.” “From my viewpoint, it’s a major public health issue,” he said. “Teachers feel like they’re under huge pressures to get academic excellence to the exclusion of having much fun in the classroom. But playful learning leads to better academic success than the skills-and-drills approach.”

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