Power down to speed concussion recovery: study

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Research supports several days' mental rest, including no screen time.

(HealthDay)—Young people who suffer a concussion often want to return to school and begin using electronics right away, but resuming everyday life too quickly might delay recovery, researchers say.

Kids who give their brains a few days' rest and gradually return to normal mental activity heal faster than those who rush back to their books, computers and TVs, a new study suggests.

"After a concussion, we recommend rest because kids tend to do too much," said the study's lead author, Dr. Naomi Brown, a physician in the division of sports medicine at the Children's Hospital of Philadelphia.

Senior study author Dr. William Meehan, director of the Sports

Concussion Clinic at Boston Children's Hospital, said that although the findings suggest vigorous mental exertion is detrimental to recovery, more moderate levels of mental exertion do not seem to prolong recovery substantially.

"We recommend a period of near full mental rest after injury—approximately three to five days—followed by a gradual return to full levels of mental activity," Meehan said.

Brown said parents might overreact and want their children to refrain from any activity that requires concentration. But the study of more than 300 concussion patients, which was published online Jan. 6 in the journal *Pediatrics*, showed that only those who reported the most mental activity took the longest time to fully recover—an average of 100 days.

For the others, a complete retreat from mental stimulation was no more effective than partial rest. "If you shut down completely, meaning you don't go to school or do any reading or screen time, or if you do a little bit less than normal, you recover in the same time period—an average of 20 to 50 days," Brown said.

After concussions, young people can resume normal mental activity a little at a time. Brown suggested working only to the point where symptoms such as headaches, blurred vision or dizziness begin. That's when the brain is being overstimulated.

"We are not recommending complete abstinence from school, especially after the first week," she said. "If you go to school for a couple of hours and you are doing OK, then the next day you can go for a little bit more and slowly test it out."

But every patient is different, Brown said. An 18-year-old might feel great two days after a concussion and be ready to return to school, but a

10-year-old might need extra time, she said.

The findings support current recommendations.

Dr. John Kuluz, director of traumatic brain injury and brain rehabilitation at Miami Children's Hospital, said he counsels concussion patients to take it easy. "Rest is the cornerstone of concussion therapy," he said.

"I tell my patients, 'You have to slow down, but I don't want you to do nothing. I want you to find the right amount of mental activity for you, and you find that level by paying attention to your symptoms,'" Kuluz said.

For the study, Brown's team followed 335 people aged 8 to 23 who had suffered a concussion. Their average age was 15.

Each patient reported the amount of mental activity they engaged in: complete mental rest; minimal mental activity (no reading or homework, and less than 20 minutes of online activity and video games a day); moderate mental activity (reading fewer than 10 pages per day, and spending less than an hour on homework, online activity and video games); significant mental activity (reading less and doing less homework than usual); or full mental activity.

The researchers used a concussion-symptom scale and found that patients who engaged in the most mental activity took about 100 days to completely recover, having no headaches, dizziness or blurred vision.

For those who gave their brains time to heal, recovery time was cut to an average of 43 days, the study found.

Study co-author Michael Collins is one of the developers and owners of

the company that created and sells the concussion-assessment tool used in the study.

More information: For more information on concussions, visit the U.S. National Library of Medicine.