

Study suggests video games lead to concentration loss, alienation

Wed Jul 10, 2002

By KENJI HALL, Associated Press Writer

TOKYO - People who play video games for more than two hours a day tend to be irritable and have trouble concentrating on other tasks, according to a new Japanese study.

The findings were based on a study conducted by researchers at Tokyo's Nihon University, who examined the brain waves of 240 people over several months, the mass-circulation Mainichi newspaper reported this week. The researchers, led by Akio Mori, a professor of neurology, studied the alpha and beta brain waves of children and adults between the ages of 6 and 29 before and while playing games, the report said.

Dividing the subjects into three groups depending on how long they regularly sat at a game console, the scientists found that people who played between two and seven hours every day were more likely to be short-tempered, experience problems concentrating and have trouble getting along with friends.

The study was to be presented at the annual meeting of the Society for Neuroscience in Orlando, Florida in November, the Mainichi reported. Mori and his team were not immediately available to confirm the report. Other studies have linked video games with physical and chemical changes in the brain. But the new findings suggest that they risk inhibiting brain waves involved in sleep and wakefulness, the Mainichi report said.

Studies have shown that brain waves fluctuate — when alpha waves increase, relaxation occurs, and when beta waves increase, you feel more awake.

Mori was quoted by the Mainichi as saying children who devote hours to video games are at risk of developing "video game brain," in which key parts of the brain's frontal region become chronically unused, altering moods. The report didn't specify the types of video games used or how researchers measured brain waves. Japanese scientists gave the study's findings cautious praise.

"It's a unique look at how video games affect the brain," said Dr. Yutaka Oomura, a professor of neuroscience at Kyushu University in

southern Japan. Oomura was not involved in the study.

"But there are other brain waves, called theta waves, that can be measured in the frontal region. Without that data, I think it's a little hasty for them to reach their conclusions about how it affects a person's concentration and other behavior," Oomura said.