

Study Suggests : More Game Less Brain

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According to a recent study, prolonged time spent on playing games may have a detrimental effect on the personality. According to an article posted in the Mainichi Daily News, a Japanese online news site, the research suggests that gamers could be getting much more from their hobby than they ever expected.

Prolonged time playing video games could cause people to lose concentration, get angry easily and have trouble associating with others, a Japanese professor's research has suggested.

In a survey conducted by Akio Mori, a professor in Nihon University's College of Humanities and Sciences, it was found that the longer people spent playing video games, the less activity they showed in the prefrontal region of their brains, which governs emotion and creativity.

What is even more worrying is that according to the study, brain activity in the people who continually played games did not recover in the periods when they weren't playing games.

Mori analyzed the brain waves of 240 people aged between 6 and 29, separating the beta waves that indicate liveliness and degree of tension in the prefrontal region of the brain, and alpha waves, which often appear when the brain is resting.

He divided brain activity of participants into four categories, naming them normal, visual, half-videogame, and videogame.

The beta waves in the brains of those in the normal category, who rarely played video games, were always stronger than the alpha waves their brains emitted, and little change was shown when they started playing a game.

Those in the half-videogame category, who spent between one and three hours each day playing games for three to four days a week, had roughly equal alpha and beta wave activity before they started playing a game. However, once they started playing, the beta waves rapidly decreased, falling below the level of the alpha waves.

Beta wave activity in people in the videogame group, who spent between two and seven hours each day playing games, was constantly near zero even when they weren't playing, showing that they

hardly used the prefrontal regions of their brains.

Many of the people in this group told researchers that they got angry easily, couldn't concentrate, and had trouble associating with friends.

I want people to be aware of the quality of games and the time young people spend playing them during their earlier years when sentiment develops, Mori said of the results.

Mori said the research showed that only the nerve circuits of sight and motion moved when people played videogames, causing a drop in the process of thought.

The research also found that after continued time playing videogames, a decrease in prefrontal brain activity became chronic. Those in the visual group, who were used to visual stimulation, such as from television, easily developed videogame-type brains.

Many videogames stir up tension and a feeling of fear, and there is concern that this could have an effect on the autonomic nerves, Mori said. **During childhood, playing outside with friends, not videogames, is the best option.**

The results of the research were expected to be announced at a meeting of the Society for Neuroscience in the United States in autumn.