

Internet addiction disorder can lead to decreased gray matter

Posted by ToAdd - 08 Aug 2011 08:17

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I found this article and think it's interesting how they've linked Internet addiction to structural changes in the brain. And that's not even internet p. they're talking about. The changes they found in the brain are similar to those found in substance abuse studies.

### **Recent study suggests that 'internet addiction disorder' can lead to decreased gray matter volume**

A group of Chinese researchers recently published a research paper titled "Microstructure Abnormalities in Adolescents with Internet Addiction Disorder" which examined the impact of internet addiction disorder (IAD) on the brain.

The research involved adolescents who assessed themselves as Internet addicts, typically through their involvement in online multiplayer games.

The research found that long-term internet addiction would result in brain structural alterations, which probably contributed to chronic dysfunction in people which are addicted to the Internet.

The research concluded that Internet addiction leads to decreased grey matter volume in various sections of the brain.

The researchers further found that there was a significant correlation between the brain changes and the duration of internet addiction.

"We provided evidences indicating that IAD subjects had multiple structural changes in the brain. The [grey] matter atrophy and white matter fractional anisotropy (FA) changes of some brain regions were significantly correlated with the duration of internet addiction," the researcher conclude in their paper.

The results may be interpreted, at least partially, as the functional impairment of cognitive control in adolescent Internet addicts.

It is even suggested that the impact of Internet addiction on the brain in adolescents may be compared to the impact of substance abuse.

“The prefrontal cortex abnormalities were consistent with previous substance abuse studies, hence we suggested that there may exist partially overlapping mechanisms in internet addiction disorder (IAD) and substance use.”

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