

# Silicon Valley Smartphone Addiction (SVSA) Creates Imbalance in Brain

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**Radiological Society of North America (RSNA)**  
05:00 ET

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CHICAGO, Nov. 30, 2017 /PRNewswire-USNewswire/ -- Researchers have found an imbalance in the brain chemistry of young people addicted to smartphones and the internet, according to a study presented today at the annual meeting of the Radiological Society of North America (RSNA).

According to a recent Pew Research Center study, 46 percent of Americans say they could not live without their smartphones. While this sentiment is clearly hyperbole, more and more people are becoming increasingly dependent on smartphones and other portable electronic devices for news, information, games, and even the occasional phone call.

Along with a growing concern that young people, in particular, may be spending too much time staring into their phones instead of interacting with others, come questions as to the immediate effects on the brain and the possible long-term consequences of such habits.

Hyung Suk Seo, M.D., professor of neuroradiology at Korea University in Seoul, South Korea, and colleagues used magnetic resonance spectroscopy (MRS) to gain unique insight into the brains of smartphone- and internet-addicted teenagers. MRS is a type of MRI that measures the brain's chemical composition.

The study involved 19 young people (mean age 15.5, 9 males) diagnosed with internet or smartphone addiction and 19 gender- and age-matched healthy controls. Twelve of the addicted youth received nine weeks of cognitive behavioral therapy, modified from a cognitive therapy program for gaming addiction, as part of the study.