How Do Computers Affect the Social Behavior of Children?

Overview
Research into the social effects of the computers on children -- researchers include teens in this group -- is in its infancy. There are certain positive effects, especially for young children, from computer use, mostly concerning effects on cognitive skills such as hand-eye coordination, decision-making and strategy. However, the social effects of computers are not so positive. Major amounts of time spent playing video games, often suffused with violence, appear to have the same negative effects as too much time watching TV. Recent results of MRI brain scans on a number of college-age Internet users who spent large amounts of time online indicated signs of atrophy. This has implications for both the cognitive and social development of children who get hooked on their computers.

Role Reversal
According to the journal "The Future of Children," kids are more likely to teach their parents how to use computers than parents are to teach their kids. In theory, this role reversal with computers may weaken parental authority and lead children to disrespect their "ignorant" parents. However, it also might foster more communication, shared experiences and bonding between parents and children.

Effects of Moderate Use
A moderate amount of computer use and game playing doesn't seem to affect social development. The social behavior of moderate computer users and nonusers was roughly the same in terms of sociability and relationships with friends and family. However, heavy computer users tended to believe they had less control over their lives than their classmates, a possible indication of inadequate socialization.

Increased Hostility and Aggression
After the massacre at Columbine High School in 1999, researchers and educators paid more attention to violent video games such as Doom, the daily game of choice for one of the two teenage killers. Many studies show that violent TV shows increase aggression and hostility in both children and adults. It appears the same is true of computer games. The key variable appears to be a preference for violent games, rather than the amount of time a child plays such games. Even playing Mortal Kombat for a short time increases a child's hostility and aggression. Violent computer games also desensitize children, who show less empathy and willingness to help others, according to research cited in "The Future of Children."

Brain Drain
In a small study of 18 Chinese university students, published in the "PLos ONE" journal and reported on Mail Online, kids who played games on their computers at least eight hours a day, six days per week showed alarming amounts of atrophy in parts of their brain, as measured by MRI scans. The scans also found abnormalities in the white matter of the brain, which coordinate communication between different areas of the mind. On Mail Online, Dr. Aric Sigman of the Royal Society of Medicine called the July 2011 report a "wake-up call." Experts fear that in addition to cognitive damage, heavy Internet use might reduce the inhibitions and decision-making ability of children, leading to damaged relationships with family members, peers and authority figures.

References
- "The Future of Children": The Impact of Home Computer Use on Children's Activities and Development; Kaveri Subrahmanyam, et al; Fall/Winter 2000