Teen gaming addicts may wind up physically healthier as young adults

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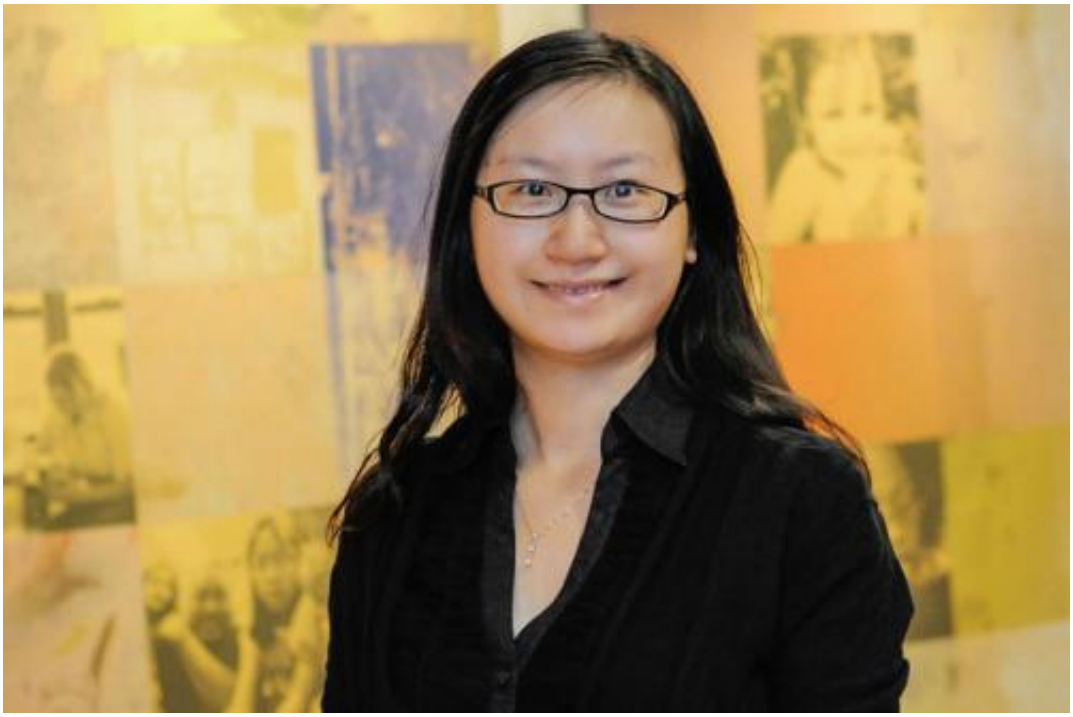

A study by School of Social Work alumna Chennan Liu suggests that extreme gaming may have positive as well as negative effects on teens.

Teens who play video/computer games 21 hours a week or more may be physically healthier and less prone to obesity as young adults than peers who spend their time on other pursuits. But gamers who log the most screen time also may be more prone to depression in young adulthood, a new study says.

Experts have suggested that young people who are heavy video/computer game users are likely to become "mouse potatoes" with a variety of mental, physical and social problems.

However, researcher Chennan Liu tracked more than 10,800 youth in the U.S. and found that the long-term consequences of heavy gaming included a mix of positive and negative effects.

While extreme gamers report better physical health five years later, they also are more prone to depression as young adults, even if they didn't experience depression during their teen years, said Liu, who conducted the research for her doctoral degree in social work at the University of Illinois.

Liu examined the long-term impact of extreme gaming on the mental and physical health and high school completion rates of the teens. The data for her research were drawn from the National Longitudinal Study of Adolescent Health, a survey that was conducted in four waves, beginning in September 1994 and continuing through April 2002. Participants' average age was 15 when the surveys began.

Recent studies indicate that at least 8 percent of youth in the U.S. exhibit pathological patterns of gaming. The fifth and most recent edition of the Diagnostic and Statistical Manual of Mental Disorders includes "internet gaming disorder" as a condition warranting further study and indicates that gamers are likely to begin experiencing serious and clinically significant problems if they play at least 30 hours per week.

Liu, who defined heavy gaming as playing at least 21 hours a week for her study, explored whether the effects on players differed if they spent 21, 35 or 42 hours or more a week at the controls. While the effects did vary at the different thresholds, the consequences weren't all negative, Liu found.

"Youth who played computer/video games between 21 and 42 hours each week reported better general health and were more likely to have a healthier body mass index five years later," Liu said. "Perhaps the excitement of gaming burns more energy than sedentary behavior like watching TV. Video gaming requires physical interaction with the controller, while watching TV enables a person to have their hands free to eat or drink."

Adolescents who played at least 35 hours a week were 22 percent less likely to be marijuana users five years later than peers who were moderate or infrequent gamers, Liu found.

Marijuana usage increased among the individuals who played 42 hours a week, but these players were still 14 percent less likely to be using the drug in young adulthood than peers who didn't play video games or who played in moderation.

Although the teens who played 21 hours a week were less likely to finish high school than peers who played less, Liu found no significant differences in high school completion rates for the two highest groups of users.

Perhaps the most troubling of Liu's findings was that the most prolific gamers – the teens who played 42 hours a week – were 22 percent more likely to experience depression in early adulthood.

It may be that people who spend six hours a day or more playing video/computer games become socially isolated and communicate less with other people, triggering depression, Liu said.

"Another possibility is that playing games six hours a day every day might disturb players' normal sleep and study habits, negatively impacting their academic performance and high school completion,

which also could lead to depression," Liu said.

While experts disagree on whether gaming addiction is a separate diagnosis or merely a symptom of other underlying disorders such as depression, Liu believes her findings shed new light on this controversy.

"Heavy gaming doesn't predict depression in young adulthood until game usage reaches 42 hours a week," Liu said. "It's possible that heavy gaming is not just a symptom of underlying depression at this level of usage.

"In any event, the mix of beneficial and adverse effects that this research found suggests that parents may want to regulate their children's gaming behavior, perhaps limiting it to three hours a day to reduce the likelihood of negative consequences."

Liu said the relatively small sample sizes – just 49 teens in the study played for 35 hours or more, and only 27 individuals played for 42 hours weekly – may have influenced some of the findings.

Liu presented some of her work earlier this year at the 18th annual conference of the Society for Social Work and Research, held this past January in San Antonio.

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