

Virtual Mentor

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CLINICAL CASE

Lost in the Web: Compulsive Videogaming

Commentary by Michael Brody, MD

In early October, Joe, a second-year medical student, approached the dean of students. Midterms were about to begin, and Joe complained that he could not study properly in his room or even sleep because his roommate, Bob, also a second-year student, was up all night at his computer playing an online video game. Joe was concerned that Bob had become too involved in the game. The two had roomed together during their first year, when Bob had gone to class, studied, and slept regularly. Joe now hardly recognized his roommate who appeared tired, distant, and uncommunicative.

After listening to Joe's report and asking him some questions, Dr. Hammond, dean of students and a physician, suspected that Bob's gaming activity had taken a compulsive, possibly addictive hold of Bob's life. Since Bob was also a medical student, the dean was particularly concerned about his health and well-being. Joe had not thought about his roommate's behavior as an addiction, and he was reluctant to bring the topic up with Bob. It also occurred to Joe that maybe Dr. Hammond was too old to understand how much a part of young people's lives the computer was. At the same time, Joe was worried about his friend.

Commentary

The Internet, with e-mail and electronic communities like Facebook and MySpace, provides new forms of connection and self-expression for a younger generation. This evolving technology also has a down side, sometimes enabling unhealthy compulsive behaviors. Pornography has taken time and money from young males, as "cybersex" can—and often does—become compulsive, displacing real relationships and professional pursuits. Gambling has also come online. Students have the access to money, their own computers, the need to distract themselves, and the ability to bet heavily in the privacy of their rooms.

Administrators in higher education are now worried that a large percentage of students—mostly male—are pathologically involved with the Internet [1]. Away from home and parental guidance, students are particularly vulnerable to the trappings of cyberspace. Faced with constant social and career decisions, tests, alcohol, and lack of experience, their egos can easily become overwhelmed. The desire to reduce these tensions is now fulfilled through online experiences, which are immediate, uncensored, constant, and unregulated.

Online video gaming, a multibillion dollar industry the revenues of which surpass those of the music and film industries, is one of the most common and available forms of Internet activity. While a Kaiser Family Foundation study found that 80 percent of boys aged 8-14 years have at least one video game console, often in their bedroom [2], the Entertainment Software Association (an industry-funded group) has now declared that the average gamer (players of either or both online and television-based games) is closer to 30 years of age [3].

Game playing is entertaining and engrossing. It is an immersion medium where the player becomes a part of the game's world through visual, audible, and physical integration. Blood, decapitation, guns, knives, mutilations, and death are presented in color, sound, and ever more realistic three-dimensional graphics. Piaget showed decades ago that learning and assimilation is enhanced with sensorimotor activity, and this finding has been exploited through the development of the joy stick, mouse, and, now, the wand. Repetitive actions using these "weapons" become habits that are further reinforced through communal game playing. As I heard Jane Healy, a well known educational psychologist, explain, "Habits of the mind become structures of the brain."

Most popular are "first-person shooter games," like Halo or Doom, where scores reflect the number of objects killed. Video game play correlates with aggression, which is a primary emotional response to prolonged playing. The world of video games is Darwinian, paranoid, and controlled. There is no empathy. Studies have even shown that those who play video games contribute less to charities than nonplayers [4]. Research has also demonstrated that these games create intense autonomic effects—rapid heart rate, higher blood pressure, and an increase in aggressive thoughts [4]. There is no altruism in *Twisted Metal* or *Resident Evil*. One wins only by killing. Is it any wonder that the military uses these games to simulate combat? Video gaming requires a Zen-like approach—there is no time to celebrate a score or curse a miss. One must quickly move on to the next obliteration. This pace, with its emphasis on reaction rather than thought, serves to desensitize the player to violence.

In the summer of 2007, the American Medical Association's House of Delegates decided to defer to the American Psychiatric Association's opinion to classify excessive video game playing as an addiction [5]. This matter is already being explored by the various sections charged with the creation of the new 2012 edition of the *Diagnostic and Statistical Manual of Mental Disorders*, the "bible" of American psychiatry.

As someone who has written and testified before Congress about this subject, I believe that, like most extreme behaviors, excessive video game play functions as a cover or adaptive mechanism for underlying anxiety and depression. This certainly appears to be the case with Bob, as his work, friendships, and health are all suffering. Compulsive gaming, like all pathological solutions (alcohol, drugs, gambling) makes a bad situation worse. One can ask whether entertainment and other distractions have

risen to the level of addiction for Bob. In the absence of a specific psychoactive substance that has a physiological pleasure-inducing effect on the brain, video game addiction would be considered more of a behavioral addiction. The playing becomes preoccupying and obsessive; the behavior affects mood changes; more of the behavior is required to feel satisfied (tolerance); when the behavior is limited or withdrawn, excruciatingly unpleasant feelings occur.

In sum, when the behavior craved has its importance denied and cannot be controlled, major problems can arise in work, studies, interpersonal relationships, or self. This creates, as indicated in Bob's situation, pathology. Whatever the label—addiction, compulsion, or abuse—the boundaries between one's real world and online world are blurred, and this causes difficulties, made worse by increased isolation and lack of monitoring. The multiplayer online games are particularly seductive because the real identity of the player merges with a character in the game. Individual distinctiveness fragments as the retreat into an alternate world becomes more satisfying and more pleasurable than reality. Community-based online activities provide a feeling of belonging and a way to avoid dealing with internal demons. Classes seem boring, and friendships are harder to maintain; even eating and sleeping are chores.

As a physician, I would want to understand what Bob was trying to avoid, and to look for an underlying loss or life change. I would also consider referring Bob to a psychiatrist who could help him recognize the role and influence that gaming has, and I would certainly appreciate that, when online gaming for some students, like Bob, stops being a virtual world and is now their only world, they become lost in cyberspace.

References

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