Internet Addiction: A Handbook and Guide to Evaluation and Treatment
Edited by Kimberly S. Young and Cristiano Nabuco de Abreu

CHAPTER 2

Clinical Assessment of Internet-Addicted Clients

KIMBERLY S. YOUNG

DIAGNOSIS OF Internet addiction is often complex. Unlike chemical dependency, the Internet offers several direct benefits as a technological advancement in our society and not a device to be criticized as addictive. Individuals can conduct research, perform business transactions, access libraries, communicate, and make vacation plans. Books have been written outlining the psychological as well as functional benefits of the Internet in our lives. By comparison, alcohol or drugs are not an integral or necessary part of our personal and professional lives, nor do they offer any direct benefit. With so many practical uses of the Internet, signs of addiction can easily be masked or justified. Further, clinical assessments are often very comprehensive and cover relevant disorders for psychiatric conditions and addictive disorders. However, given its newness, symptoms of Internet addiction may not always be revealed in an initial clinical interview. While self-referrals for Internet addiction are becoming more common, often the client does not present with complaints of computer addiction. People may initially present with signs of clinical depression, bipolar disorder, anxiety, or obsessive-compulsive tendencies, only for the treating professional to later discover signs of Internet abuse upon further examination (Shapiro, Goldsmith, Keck, Khosla, & McElroy, 2000).

Therefore, diagnosing Internet addiction upon clinical interview can be challenging. It is consequently important that treating professionals screen for the presence of compulsive use of the Internet. This chapter reviews ways to evaluate possible Internet addiction. It reviews the evolution of Internet addiction and current conceptualizations of pathological computer use as outlined for the *DSM-V*. As part of the assessment process, this chapter also presents the first validated measure of Internet addiction, which is an

especially useful tool to measure the severity of symptoms once diagnosed. Finally, the chapter outlines specific clinical interview questions and treatment issues that clients present with in the early stages of recovery. These include a client's motivation for treatment, underlying social problems, and multiple addictions.

CONCEPTUALIZATION

According to Dr. Maressa Hecht Orzack, the director of Computer Addiction Services at McLean Hospital, a Harvard Medical School affiliate, and a pioneer in the study of Internet addiction, Internet addicts demonstrate a loss of impulse control where life has become unmanageable for the online user, yet despite these problems, the addict cannot give up the Internet. The computer becomes the primary relationship in the addict's life (Orzack, 1999).

Although time is not a direct function in diagnosing Internet addiction, early studies suggested that those classified as dependent online users were generally excessive about their online usage, spending anywhere from 40 to 80 hours per week, with sessions that could last up to 20 hours (Greenfield, 1999; Young, 1998a). Sleep patterns were disrupted due to late-night log-ins, and addicts generally stayed up surfing despite the reality of having to wake up early the next morning for work or school. In extreme cases, caffeine pills are used to facilitate longer Internet sessions. Such sleep deprivation caused excessive fatigue, impairing academic or occupational performance and increasing the risk of poor diet and exercise.

Given the popularity of the Internet, detecting and diagnosing Internet addiction is often difficult, as its legitimate business and personal use often masks addictive behavior. The best method to clinically detect compulsive use of the Internet is to compare it against criteria for other established addictions. Researchers have likened Internet addiction to addictive syndromes similar to impulse-control disorders on the Axis I Scale in the *DSM* (American Psychiatric Association, 1994) and have utilized various forms of *DSM-IV*-based criteria to define Internet addiction. Of all the references in the *DSM*, Pathological Gambling was viewed as most akin to this phenomenon. The Internet Addiction Diagnostic Questionnaire (IADQ) was the first screening measure developed for diagnosis (Young, 1998b). The following questionnaire conceptualized the eight criteria for the disorder:

1. Do you feel preoccupied with the Internet (think about previous online activity or anticipate next online session)?
2. Do you feel the need to use the Internet with increasing amounts of time in order to achieve satisfaction?
3. Have you repeatedly made unsuccessful efforts to control, cut back, or stop Internet use?
4. Do you feel restless, moody, depressed, or irritable when attempting to cut down or stop Internet use?

5. Do you stay online longer than originally intended?
6. Have you jeopardized or risked the loss of a significant relationship, job, or educational or career opportunity because of the Internet?
7. Have you lied to family members, therapists, or others to conceal the extent of involvement with the Internet?
8. Do you use the Internet as a way of escaping from problems or of relieving a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety, depression)?

Answers evaluated nonessential computer/Internet usage, such as use that was not business or academically related. Subjects were considered dependent when answering by endorsing five or more of the questions over a six-month period. Associated features also included ordinarily excessive Internet use, neglect of routine duties or life responsibilities, social isolation, and being secretive about online activities or a sudden demand for privacy when online. While the IADQ provides a means to conceptualize pathological or addictive use of the Internet, these warning signs can often be masked by cultural norms that encourage and reinforce online use. Even if a client meets all the criteria, signs of abuse can be rationalized (e.g., "I need this for my job" or "It's just a machine") when in reality the Internet is causing significant problems in a user's life.

Beard and Wolf (2001) further modified the IADQ, recommending that all of the first five criteria be required for diagnosis of Internet addiction, since these criteria could be met without any impairment in the person's daily functioning. It was also recommended that at least one of the last three criteria (e.g., criteria 6, 7, and 8) be required in diagnosing Internet addiction. The reason the last three were separated from the others is the fact that these criteria impact the pathological Internet user's ability to cope and function (e.g., depressed, anxious, escaping problems), and also impact interaction with others (e.g., significant relationship, job, being dishonest with others). New studies that empirically tested the IADQ found that using three or four criteria was just as robust in diagnosing Internet addiction as using five or more and suggested that the cutoff score of five criteria might be overly stringent (Dowling & Quirk, 2009). Finally, Shapiro et al. (2003) put forth an approach to diagnosing Internet addiction under the general style of impulse-control disorders per the *DSM-IV-TR* (American Psychiatric Association, 2000) that further broadened the diagnostic criteria for problematic Internet use. This included a maladaptive preoccupation with Internet use, as indicated by either an irresistible preoccupation with the Internet or excessive use of the Internet for periods of time longer than planned. Also, use of the Internet or preoccupation with its use caused clinically significant distress or impairment in social, occupational, or other important areas of functioning. Finally, the excessive Internet use did not occur during periods of hypomania or mania and was not better accounted for by other Axis I disorders.

Most recently, the American Psychiatric Association has considered including the diagnosis of pathological computer use in the upcoming revision of the *DSM-V* (Block, 2008). Conceptually, the diagnosis is a compulsive-impulsive spectrum disorder that involves online and/or offline computer usage (Dell'Osso, Altamura, Allen, Marazziti, & Hollander, 2006) and consists of at least three subtypes: excessive gaming, sexual preoccupations, and e-mail/text messaging (Block, 2007). All of the variants share the following four components: (1) *excessive use*, often associated with a loss of sense of time or a neglect of basic drives; (2) *withdrawal*, including feelings of anger, tension, and/or depression when the computer is inaccessible; (3) *tolerance*, including the need for better computer equipment, more software, or more hours of use; and (4) *negative repercussions*, including arguments, lying, poor achievement, social isolation, and fatigue (Beard & Wolf, 2001; Block, 2008). This later set of criteria pulls together the previous forms of classification defining Internet addiction in a comprehensive manner to include the major components associated with the compulsive behavior.

THE INTERNET ADDICTION TEST (IAT)

The Internet Addiction Test (IAT) is the first validated instrument to assess Internet addiction (Widyanto & McMurren, 2004). Studies have found that the IAT is a reliable measure that covers the key characteristics of pathological online use. The test measures the extent of a client's involvement with the computer and classifies the addictive behavior in terms of mild, moderate, and severe impairment. The IAT can be utilized in outpatient and inpatient settings and adapted accordingly to fit the needs of the clinical setting. Furthermore, beyond validation in English, the IAT has also been validated in Italy (Ferraro, Caci, D'Amico, & Di Blasi, 2007) and France (Khazaal et al., 2008), making it the first global psychometric measure.

ADMINISTRATION

Simply instruct the client to answer the 20-item questionnaire based on the following five-point Likert scale. Clients should consider only the time spent online for nonacademic or nonjob purposes when answering. That is, they should consider only recreational use.

To assess the level of addiction, clients should answer the following questions using this scale:

0 = Not Applicable
1 = Rarely
2 = Occasionally
3 = Frequently
4 = Often
5 = Always

1. How often do you find that you stay online longer than you intended?
2. How often do you neglect household chores to spend more time online?
3. How often do you prefer the excitement of the Internet to intimacy with your partner?
4. How often do you form new relationships with fellow online users?
5. How often do others in your life complain to you about the amount of time you spend online?
6. How often do your grades or schoolwork suffer because of the amount of time you spend online?
7. How often do you check your e-mail before something else that you need to do?
8. How often does your job performance or productivity suffer because of the Internet?
9. How often do you become defensive or secretive when anyone asks you what you do online?
10. How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?
11. How often do you find yourself anticipating when you will go online again?
12. How often do you fear that life without the Internet would be boring, empty, and joyless?
13. How often do you snap, yell, or act annoyed if someone bothers you while you are online?
14. How often do you lose sleep due to late-night log-ins?
15. How often do you feel preoccupied with the Internet when offline, or fantasize about being online?
16. How often do you find yourself saying "Just a few more minutes" when online?
17. How often do you try to cut down the amount of time you spend online and fail?
18. How often do you try to hide how long you've been online?
19. How often do you choose to spend more time online over going out with others?
20. How often do you feel depressed, moody, or nervous when you are offline, which goes away once you are back online?

After all the questions have been answered, add the numbers for each response to obtain a final score. The higher the score range, the greater the level of addiction, as follows:

Normal Range: 0–30 points
Mild: 31–49 points
Moderate: 50–79 points
Severe: 80–100 points

Once the total score for the client has been calculated and the category is selected, to enhance the utility of the instrument, evaluate those questions for which the client scored a 4 or 5. This type of item analysis is useful to review with the client to identify and pinpoint specific problem areas related to Internet abuse. For example, if the client answered 4 (often) to Question 12 regarding feeling life would be empty and boring without the Internet, did he or she realize this dependency and the associated fear with regard to any consideration for giving up the Internet? Perhaps the client answered 5 (always) to Question 14 about lost sleep because of Internet usage. Probing further might reveal that the client stays up excessively late every evening, which has made it difficult to function at work or attend classes for school or to perform routine chores around the house, and has taken a toll on the client's overall health. These are important areas to further investigate with clients, as these are both symptoms and consequences created by Internet addiction. Overall, the IAT provides a framework for assessment of specific situations or problems that have been caused by computer overuse to use in subsequent treatment planning.

Moderation and Controlled Use

Use of the Internet is legitimate in business and home practice such as in electronic correspondence to vendors or electronic banking. Therefore, traditional abstinence models are not practical interventions when they prescribe banned Internet use in most cases. The focus of treatment should consist of moderated Internet use overall. While moderated Internet use is the primary goal, abstinence of problematic applications is often necessary. For example, within the intake evaluation, it is often discovered that a specific application such as a chat room, an interactive game, or a certain set of adult web sites will trigger Internet binges. Moderation of the trigger application may fail, however, because of its inherent allure and clients will need to stop all activity surrounding that application. It is essential to help the client target and abstain from the problematic application(s) while retaining controlled use over legitimate Internet usage.

Treatment includes a variety of inventions and a mix of psychotherapy theories to treat the behavior and address underlying psychosocial issues that often coexist with this addiction (e.g., social phobia, mood disorders, sleep disorders, marital dissatisfaction, or job burnout). To help clients abstain from problematic online applications, recovery interventions apply structured, measurable, and systematic techniques. Using outcome data, cognitive-behavioral therapy (CBT) has been found to be an effective approach with this population (Young, 2007).

Motivation for Treatment

In the early stages of recovery, clients will typically deny or minimize their habitual use of the Internet and the consequences their behavior may have on

their lives. Often, a loved one, a friend, a spouse, or a parent has pushed the individual into seeking help. The client may feel resentful and deny the extent that use of the Internet is a problem. To break this pattern, after diagnosis, the therapist should use motivational interviewing techniques that encourage the client to commit to treatment as an integral aspect of recovery (Greenfield, 1999; Orzack, 1999).

The concept of motivational interviewing evolved from experience in the treatment of problem drinkers, and was first described by Miller (1983). These fundamental concepts and approaches were later elaborated by Miller and Rollnick (1991) in a more detailed description of clinical procedures. Motivational interviewing is a goal-directed style of counseling for eliciting behavior change by helping clients to explore and resolve ambivalence. Motivational interviewing involves asking open-ended questions, giving affirmations, and reflective listening.

Motivational interviewing is intended to confront the client in a constructive manner to evoke change, or to use external contingencies such as the potential loss of a job or relationship to mobilize a client's values and goals to stimulate behavior change. Clients dealing with addiction or substance-abuse problems often feel ambivalent about quitting, even after they admit they have a problem. They fear the loss of the Internet; they fear what life might be like if they were unable to chat with online friends, engage in online activities, and use the Internet as a form of psychological escape. Motivational interview helps clients confront their ambivalence.

Questions can be asked such as:

- When did you first begin to use the Internet?
- How many hours per week do you currently spend online (for nonessential use)?
- What applications do you use on the Internet (specific sites/groups/games visited)?
- How many hours per week do you spend using each application?
- How would you rank order each application from most to least important? (1 = first, 2 = second, 3 = third, etc.)?
- What do you like most about each application? What do you like least?
- How has the Internet changed your life?
- How do you feel when you log offline?
- What problems or consequences have stemmed from your Internet use? (If these are difficult for the client to describe, have the client keep a log near the computer in order to document such behaviors for the next week's session.)
- Have others complained about how much time you spend online?
- Have you sought treatment for this condition before? If so, when? Have you had any success?

The answers to these questions create a clearer clinical profile of the client. The therapist can determine the types of applications that are most

problematic for the client (chat rooms, online gaming, online pornography, etc.). The length of Internet use, the consequences of the behavior, a history of prior treatment attempts, and outcomes for any treatment attempts are also assessed. This helps clients begin the process of examining how the Internet impacts their lives. It is helpful for the client to gain a sense of responsibility for his or her behavior. Allowing clients to resolve their ambivalence in a manner that gently pushes them helps them to be more inclined to acknowledge the consequences of their excessive online use and engage in treatment. Generally, the style is quiet and eliciting rather than aggressive, confrontational, or argumentative. For therapists accustomed to confronting and giving advice, motivational interviewing can appear to be a hopelessly slow and passive process. The proof is in the outcome. More aggressive strategies, sometimes guided by a desire to "confront client denial," easily slip into pushing clients to make changes for which they are not ready.

Helping the client explore how he or she feels just before going online will help pinpoint the types of emotions being covered by the behavior (or how the client is using the Internet to cope or escape from problems). Answers may include issues such as a fight with a spouse, depressed mood, stress at a job, or a poor grade in school. Motivational interviewing should explore how these feelings diminish when online, looking for how the client rationalizes or justifies using the Internet (e.g., "Chatting makes me forget about the fight with my husband"; "Looking at online porn makes me feel less depressed"; "Gambling online makes me feel less stressed at work"; "Killing other players in an online game makes me feel better about my poor grade at school"). Motivational interviewing is also meant to help the client recognize consequences stemming from excessive or compulsive use. Problems may consist of issues like "My spouse becomes angrier"; "My feelings return when I turn off the computer"; "My job still stinks"; "I will lose my scholarship if I don't get my grades up." The therapeutic relationship is more like a partnership or companionship than expert/recipient roles to examine and resolve ambivalence. The operational assumption in motivational interviewing is that ambivalence is the principal obstacle to be overcome in triggering change. Overall, the specific strategies are designed to elicit, clarify, and resolve ambivalence in a client-centered and respectful therapeutic manner.

Multiple Addictions

Once ambivalence toward treatment has been resolved, the next issue is to examine how a client experiences addiction. Is this the first time the client has been addicted to something? Or does the client have a long-standing history of addiction? Often, Internet addicts suffer from multiple addictions. Clients with a prior history of alcohol or drug dependency often find their compulsive use of the Internet to be a physically safe alternative to their addictive tendency. They believe that being addicted to the Internet is medically safer than being addicted to drugs or alcohol, yet the compulsive behavior still avoids the unpleasant situation underlying addiction.

Clients who suffer from multiple addictions (to the Internet as well as to alcohol, cigarettes, drugs, food, sex, etc.) are at the greatest risk to relapse. This is especially true when it comes to the Internet. Often, addicts will need to use the computer for work or school, so the temptation to return to the problematic behavior feels constant because the computer is always available. Multiple addictions in a client also suggest that the person suffers from an addictive personality and has compulsive tendencies, making relapse more likely.

"I always think about cybersex when I feel stressed and overwhelmed on the job," admitted one client after being addicted to sex chat rooms for three years. "I always promise to only do it for a half an hour or an hour but time just slips by. Each time I log offline I promise that I will never do it again. I hate myself for all the wasted time I spend online. I go a few weeks and then the pressure builds inside. I play mind games, telling myself just a little won't hurt. No one will know what I am doing. Sometimes I actually believe that I am in control. I wear myself down and the whole process starts all over again. I feel defeated that I will never get rid of these feelings."

This describes what has been defined as the Stop-Start Relapse Cycle (Young, 2001, pp. 65–66). Many Internet addicts engage in a self-destructive internal dialogue of rationalizations that serve to bring about relapse. The pattern begins with rationalizing the behavior is okay or harmless, followed by a period of regret. The regret is followed by promises to stop the behavior, then temporary abstinence. Abstinence may last days, weeks, or months. Emotional pressure builds until these rationalizations creep back into the addict's mind, triggering relapse. The Stop-Start Relapse Cycle falls into four distinct but interdependent stages:

Stage 1: Rationalization. The addict rationalizes that the Internet serves as a treat after a long, hard day of work, often making a statement such as "I work hard; I deserve it"; "Just a few minutes won't hurt"; "I can control my Internet use"; "The computer relaxes me"; or "With the stress I've been under, I deserve this." The addict justifies the need to look at a few adult sites or chat for a few minutes with an online lover or game with friends, only to discover that the behavior is not so easily contained.

Stage 2: Regret. After the Internet experience, the addict experiences a period of deep regret. Turning off the computer, the addict realizes that work is piling up and feels guilty for the behavior, making statements such as "I know this is hurting my job"; "I can't believe I wasted all this time"; or "I am a horrible person for what I just did."

Stage 3: Abstinence. The addict views the behavior as a personal failure of willpower and promises never to do it again, so a period of abstinence follows. During this time, he or she engages in healthy patterns of behavior, works diligently, resumes interests in old hobbies, spends more time with his or her family, exercises, and gets enough rest.

Stage 4: Relapse. The addict craves the online high or experience as temptations to return to the Internet emerge during stressful or emotionally

charged moments. The addict recalls the self-medicating effects of being online and its associated relaxation and excitement. The addict remembers how good it felt to be online and forgets how bad it felt afterward. The rationalization period starts again, and the availability of the computer easily starts the cycle anew.

Addicts use several rationalizations to minimize the impact of the Internet in their lives, such as "Just one more time won't hurt"; "I can't get addicted to a computer"; "It's better to be addicted to the Internet than to drugs and drinking"; or "I'm not as bad as other people I see." These rationalizations feed the addictive behavior. Addicts will rationalize that spending 8, 10, or 15 hours a day online is normal. They use poor judgment and compare themselves to someone they know who is worse than they are—"I'm not as bad as so-and-so." They rationalize that their online use isn't a problem and ignore the consequences created by their behavior.

The rationalizations are the origin of the cycle, and in order to stop the cycle it is important for the client to examine his or her preoccupations and cravings related to online use.

Assessment questions to help clients evaluate cravings or signs of withdrawal include:

- Do you feel preoccupied with the Internet?
- What attempts have you made to control, cut back, or stop computer use?
- How often do you think about going online?
- How often do you talk about going online?
- How often do you plan ways to use the Internet?
- How often do you forgo other responsibilities or duties to go online?
- Have you ever used the Internet to escape from feelings of depression, anxiety, guilt, loneliness, or sadness?
- What is your longest period of abstinence from the Internet?

The answers show how much clients think about being online or feel preoccupied with the Internet. The answers also show patterns of abstinence and relapse if the client has been trying to quit for weeks, months, or years. In addition, the answers show the types of feelings clients are escaping from by using the Internet and how they feel when they are forced to go without it.

These rationalizations utilized by the client are important for the therapist to understand as they begin the recovery process. From a cognitive perspective, these serve as cravings or signs of withdrawal that trigger problem Internet use (Beck, Wright, Newman, & Liese, 2001).

Such maladaptive cognitions result in problematic computer use (Caplan, 2002; Davis, 2001). Therapists need to identify and eventually attack the cognitive assumptions and distortions that have developed and the effects of

these on behavior. This may involve cognitive approaches such as problem solving, cognitive restructuring, and keeping thought journals.

Clients must not be permitted to minimize their addiction to the Internet as less harmful than an addiction to drugs, alcohol, gambling, or sex. Clients who become addicted to the Internet may suffer from a number of emotional and personal problems. They see the Internet as a safe place to absorb themselves mentally to reduce their tension, sadness, or stress (Young, 2007). Individuals who may feel overwhelmed or may be experiencing job burnout or money problems or life-changing events such as a recent divorce, relocation, or death in the family can absorb themselves in a virtual world inside the computer. They can lose themselves in anything from online pornography to Internet gambling and online gaming. Once online, the difficulties in their lives fade into the background as their attention becomes completely focused on the computer.

Addressing all unhealthy or compulsive behaviors early on the evaluation process will aid the client. Working within the motivational interviewing context, clients can see how they use the computer as a new way of escaping without really dealing with the underlying problems in their lives. They will also learn that an addiction to the Internet can be as harmful as other addictions they may have by continuing to avoid problems without ever resolving them.

Underlying Social Problems

Excessive or problematic Internet use often stems from interpersonal difficulties such as introversion or social problems (Ferris, 2001). Many Internet addicts fail to communicate well in face-to-face situations (Leung, 2007). This is part of why they use the Internet in the first place. Communicating online seems safer and easier for them. Poor communication skills can also cause poor self-esteem and feelings of isolation, and can create additional problems in life, such as trouble working in groups, making presentations, or going to social engagements. Therapy needs to address how they communicate offline. Encouraging affect, communication analysis, modeling, and role-playing are helpful interventions to apply to establish new ways of interacting and social functioning (Hall & Parsons, 2001). Others may have limited social support systems in place, which is in part why they turn to virtual relationships as a substitute for the missing social connection in their lives. They turn to others on the Internet when feeling lonely or in need of someone to talk to. What is worse, online affairs are occurring at an alarming rate (Whitty, 2005). An online affair is a romantic or sexual relationship initiated via online contact and maintained predominantly through electronic conversations that occur through e-mail, chat rooms, or online communities (Atwood & Schwartz, 2002). The problem has grown, and according to a study conducted by the American Academy of Matrimonial Lawyers, 63% of attorneys said that online affairs were the leading cause of divorce cases (Dedmon, 2003).

Due to their addiction, clients often damage or lose significant real-life relationships, such as with a spouse, a parent, or a close friend (Young, 2007). Often, these were individuals who provided the addict with support, love, and acceptance before the Internet, and their absence only makes the addict feel worthless and reinforces past notions of being unlovable. The addict must make amends and reestablish these broken relationships to achieve recovery and find the support necessary to fight the addiction. Rebuilding relationships and providing new ways to relate to others allows for amends to be made. Involving loved ones in recovery can be a rich source of nurturing and sponsorship to help a client maintain sobriety and abstinence. Couples or family therapy may be necessary to help educate loved ones about the addiction process and engage them more fully in helping the client maintain boundaries established with the computer.

When evaluating social problems, it is important to investigate how the client has been using the Internet. If in interactive environments such as chat rooms, instant messaging, or social networking sites, then the therapist should evaluate aspects of online use such as: Does the person make up a persona? What kind of screen name does the person use? Does the Internet and its use disrupt current social relationships? How so? These factors are important to evaluate in terms of understanding the social dynamics underlying online usage and how relationships formed on the Internet may be substituting for or replacing real-life relationships. Possible questions to consider are:

- Have you been honest about your Internet habit with your friends and family?
- Have you ever created an online persona?
- Did you develop an identity or persona online?
- Have there been online activities that you kept secret or thought others would not approve of?
- Have online friends disrupted real-life relationships?
- If so, who (husband, wife, parent, friend) and how were they impacted?
- Does Internet use disrupt your social or work relationships? If so, how?
- In what other ways has Internet use impacted your life?

Questions like these help structure the clinical interview to provide more detailed information on how the Internet has impacted relationships in the client's life. Many times, clients create online personas and the answers provide specific information on the characteristics and nature of these online personas. Therapists can understand the psychological motives, the ways online personas develop, and how they may be used to fulfill missing or unmet social needs. Once this type of critical examination takes place, the therapist can work with the client to develop new social relationships or reestablish former social connections that will sustain the client's motivation for continued treatment.

Future Trends

Studies on Internet addiction originated in the United States. Most recently, studies have documented Internet addiction in a growing number of countries, such as Italy (Ferraro et al., 2007); Pakistan (Suhail & Bargees, 2006); and the Czech Republic (Simkova & Cincera, 2004). Reports also indicate that Internet addiction has become a serious public health concern in China (BBC News, 2005), Korea (Hur, 2006), and Taiwan (Lee, 2007). About 10 percent of China's more than 30 million Internet gamers were said to be addicted. To battle what has been called an epidemic by some reports, Chinese authorities regularly shut down Internet cafes, many illegally operated, in crackdowns that also include huge fines for their operators. The Chinese government has also instituted laws to reduce the number of hours adolescents can play online and opened the first inpatient treatment center for Internet addiction in Beijing.

It is difficult to estimate how widespread the problem is. A nationwide study conducted by a team from Stanford University's School of Medicine had estimated that nearly one in eight Americans exhibited at least one possible sign of problematic Internet use (Aboujaoude, Koran, Gamel, Large, & Serpe, 2006).

Independent of culture, race, or gender, Internet addiction seems to be a growing problem. College counselors have argued that students are the most at-risk population to develop an addiction to the Internet because of the encouraged use of computers, wired dorms, and mobile Internet devices (Young, 2004). Away from home and their parents' watchful eyes, college students long have exercised their new freedom by engaging in pranks, talking to friends at all hours of the night, sleeping with their boyfriends and girlfriends, and eating and drinking things parents would not approve of. They utilize that freedom by hanging out in chat rooms or sending messages to friends on Facebook or MySpace with no parent to complain about their refusal to get off the computer.

For companies, Internet addiction has been shown to be both a legal liability as well as a productivity problem. As corporations rely on management information systems to run almost every facet of their business, employee Internet abuse and its potential for addiction has become a possible business epidemic. Studies show that employees abuse the Internet during work hours, resulting in billions of dollars of lost productivity. Media reports show that companies such as Xerox, Dow Chemical, and Merck have terminated employees for incidents of abuse. IBM has been sued for $5 million for wrongful termination (Holahan, 2006); a former employee who used chat rooms during work hours is suing the firm under the Americans with Disabilities Act for terminating him rather than providing rehabilitation. More wrongful termination lawsuits at smaller companies may follow. The issue becomes that the company has supplied the so-called digital drug, and companies may be liable for providing treatment and prevention programs on Internet addiction as a means to reduce their legal ramifications.

A good diagnostic evaluation should include a complete history of symptoms, whether the symptoms were treated, and if so what treatment was given. The therapist should ask about alcohol and drug use, and questions about a family history of addiction. The proper evaluation of Internet addiction is important for both clinical and legal implications. Clinically, therapists need to properly diagnose the problem and understand the dynamics associated with the condition. This includes things about Internet use that may not be readily available. A therapist may ask about only the number of hours one spends online, but that is just one aspect of the complete clinical profile. Therapists need to understand the ambivalence clients often feel about treatment, especially in cases of addiction, and encourage them to moderate and control their use of the Internet. They also need to understand the dynamics of what clients do online; creating personas, romantic relationships, and gaming can take on a variety of forms. Finally, accurate diagnosis is important from a legal perspective. Corporations face increasing legal liability as computers and the Internet become a recognized addiction warranting treatment. Other social laws may follow, such as divorce cases involving the Internet or criminal cases such as online pedophilia that involve accurate assessment for rehabilitation.

Overall, as Internet addiction becomes a more common and recognized condition, the need for accurate and thorough clinical evaluation becomes more important in a variety of fields and for a variety of reasons.

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