### ASSESSMENT OF INTERNET ADDICTION

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Given the popularity of the Internet, accurate diagnosis of Internet addiction is often difficult as its legitimate business and personal applications often mask 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<sup>1</sup>,<sup>2</sup> and utilized various forms of DSM-IV based criteria to define Internet addiction. Of the all the references in the DSM, Pathological Gambling was viewed as most akin to this phenomenon. As previously discussed, the Internet Addiction Diagnostic Questionnaire (IADQ) was developed as an initial screening instrument utilized for diagnosis in academic research and clinical treatment settings.<sup>3</sup>

Patients are considered "addicted" when answering yes to five (or more) of the questions and when their behavior cannot be better accounted for by a Manic Episode. Clinical studies have suggested that the cut off score of "five" is consistent with the number of criteria used for Pathological Gambling. Further, it is seen as an even more rigorous criteria cutoff (5 out of 8) then are used to diagnose compulsive gambling (5 out of 10). It should be noted that while this scale provides a workable measure of Internet addiction, further study is needed to determine its construct validity and clinical utility.

Additionally, addicts suffer sleep depravation and general physical complaints considered associated features of Internet addiction.<sup>4</sup> Changes in normal sleeping patterns result from late night logins as addicts tend to go to bed at later and later hours, often three, four, or five hours after their normal bedtimes.<sup>17</sup> Lack of sleep and fatigue are common signs of addictive or compulsive online behavior. Interestingly, many addicts will even take caffeine pills just to stay awake and alert for a longer duration to use the Internet. Internet addicts may also suffer from back strain, eyestrain, carpal tunnel syndrome, and repetitive stress inquiry from intensive time spent at the computer.<sup>19</sup>,

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 with colleagues, and make vacation plans. Books have been written outlining the psychological as well as functional benefits of the Internet in our daily lives. By comparison, alcohol or drugs are not an integral or necessary part of our professional lives nor do they offer any direct benefit. With so many practical uses of the Internet signs of addiction can potentially masked.

Co-morbidity with other psychiatric conditions is also common among addictive disorders clouding the actual awareness that a client may suffer from a computer-related problem.<sup>5</sup> While self-referrals for Internet addiction are becoming more common, often the client does not present with complaints of computer addiction. The client initially present may with signs of clinical depression, bi-polar disorder, anxiety, or obsessive-compulsive tendencies, only for the treating professional to later discover signs of

Internet abuse upon further examination. Even when confronted by the therapist, a client may actively minimize the addictive behavior justifying his or her need to be online.

Therefore, diagnosing Internet addiction upon clinical interview can be challenging. This article reviews ways to evaluate possible Internet addiction. The article presents the first validated measure of Internet addiction, consequences of the disorder that may be present on an interview, and treatment issues in the early stages of recovery.

### The Internet Addiction Test (IAT)

Intake assessments are often very comprehensive and cover relevant disorders for psychiatric conditions and addictive disorders. However, given its newness, symptoms of Internet addiction are ones that may not always be revealed in an initial clinical interview. Therefore, it is important that treating professionals screen for the presence of compulsive use of the Internet. The Internet Addiction Test (IAT) is the first validated instrument to assess Internet addiction.<sup>6</sup> The psychometric properties of the IAT show that it reliable and valid measure that has been used in further research on Internet addiction. The test measures the extent of client's involvement with the computer and classifies the addictive behavior in terms of mild, moderate, and severe impairment. The IAT can be utilized among outpatient and inpatient settings and adapted accordingly to fit the needs of the clinical setting. The IAT has also been translated in several languages including Chinese, Korean, German, and Portuguese making it the first global measure.

# Administration

Simply instruct the client to answer the 20-item questionnaire based upon the following five-point Likert scale. Remember to inform clients to only consider the time spent online for non-academic or non-job (or recreational) purposes when answering.

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

- **0** = Not Applicable
- **1** = Rarely
- **2** = Occasionally
- **3** = Frequently
- $\mathbf{4} = Often$
- **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 school work 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 off-line, 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 off-line, which goes away once you are back online?

### Scoring

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:

# NORMAL RANGE 0 – 30 points

MILD 31-49 points

**MODERATE 50 -79 points** 

#### **SEVERE 80 - 100 points**

After you have identified the category that fits the total score for your client, evaluate those questions for which the client scored a 4 or 5. This type of item-analysis is useful to review 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 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 and lost a considerable amount of time that could have better been spent with their children. Or perhaps the lost sleep has made it difficult to function at work the next day or attend classes for school or to perform routine chores around the house or have taken a toll on the client's overall health. Overall, the IAT provides a framework for assessment of specific situations or problems that have been caused by computer overuse.

### **Consequences of Internet addiction**

In the United States, one of the most common consequences associated with online addiction is the problem of Internet infidelity. At an alarming rate, once long-term and stable marriages are being damaged or destroyed by an online affair.<sup>7</sup> An online affair is a romantic or sexual relationship initiated via online contact and maintained predominantly through electronic conversations that occurs through email, chat rooms, or online communities. In a survey conducted by the American Academy of Matrimonial Lawyers 63% of attorneys said that online affairs were the leading cause of divorce cases. In one of the earliest studies on Internet addiction nearly 53% of online addicts reported serious relationship problems including marital discord, separation, and even divorce.<sup>8</sup>

Globally, recent reports indicated that interactive online gaming has reached addictive proportions in China, Korea, and Taiwan.<sup>9</sup> 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 shut down the number of hours adolescents can play online games and in 2005 opened the first treatment center for

Internet addiction in Beijing.<sup>10</sup> Predominantly they treat addicted online gamers. Online gaming addiction continues to raise such serious concerns that the first detox center for video game addiction opened in Amsterdam<sup>11</sup> and most recently the American Medical Association considered video game overuse an addiction at their annual policy meeting.<sup>12</sup>

We still need more research to understand how cultural differences impact characteristics of Internet addiction and what applications seem to be the most problematic with what countries. We also still need to learn more about the impact of race, gender, and age addictive use of the Internet among users. We can say that student Internet abuse, independent of culture, race, or gender, is another common 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.<sup>13</sup> Away from home and their parent's watchful eyes, college students long have exercised their new freedom by engaging in pranks, talking to friends to all hours of the night, sleeping with their boyfriends and girlfriends, and eating and drinking things Mom and Dad would not approve of. Today, they utilize that freedom by hanging out in chat rooms or message friends on Facebook or MySpace at all hours of night with no parent to complain about their refusal to get off the computer. College counseling centers in the US have even started Internet addiction support groups to help students who abuse.

For companies, Internet addiction has been shown to be both a legal liability as well as productivity problem. As corporations rely upon management information systems to run almost every facet of their business, employee Internet abuse and its potential for addiction has become a potential 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 incidence of abuse. Recently, IBM has been sued for five million dollars for wrongful termination.<sup>14</sup> A former employee who suffered from chat room 'addiction' is suing the firm under the Americans with Disability Act for terminating him rather than providing rehabilitation. While this case is pending, and IBM has filed a motion to dismiss the case, this is a headline example of a large company being sued for wrongful termination and many other lawsuits at smaller companies may follow. In part, the issue becomes that the company has supplied the 'digital drug'. As silly and as ridiculous as this may sound companies are starting to offer treatment and prevention programs on Internet addiction as a means to reduce their legal ramifications.

Personally, a client who becomes 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.<sup>15</sup> Individuals may feel overwhelmed or be experiencing job burnout or money problems or life-changing events such as a recent divorce, relocation, or a death in the family can absorb themselves in a virtual world inside the computer. They can loose themselves in anything from online pornography, Internet gambling, or online gaming and once online, the difficulties of their lives fade into the background as their attention becomes completely focused on the computer. The Internet becomes a new way of escaping without really dealing with the underlying problems becoming a quick fix to wash away troubling feelings.

### **Moderation and Controlled Use**

Use of the Internet is legitimate in business and home practice such as in electronic correspondence to venders 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 net-binges. Moderation of the 'trigger' application may fail however because of their inherent allure and clients will need to stop all activity surrounding that application. Therefore, 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 not only treat the behavior but to address underlying psychosocial issues that often coexistent with this addiction (e.g., social phobia, mood disorders, sleep disorders, marital dissatisfaction, job burnout). To help clients maintain abstain from problematic Internet applications, recovery interventions should apply structured, measurable, and systematic techniques. Predominantly, Cognitive-Behavioral Therapy (CBT) has been found to be the most effective approach with Internet-addicted clients.<sup>16</sup> The next article in the course explores the use of CBT with Internet addicts in greater detail and provides the first outcome data to support its use for long-term symptom management and recovery.

This article focuses on the treatment issues that clients present with in the early stages of recovery. These include motivation for treatment, dealing with underlying social problems, addressing multiple addictions and relapse, and making amends.

#### **Motivation for Treatment**

Before recovery is possible, clients must be motivated to enter treatment. 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.

According to Glasser, the founder of Reality Therapy, people have several basic innate needs, four psychological needs (belonging, power, freedom, and fun) and one physical need (survival).<sup>17</sup> When a person fulfills his or her needs in a responsible way, that is, in a conscious and realistic manner that does not infringe on the rights of others to fulfill their needs, the person has adopted a **success identity**. When a person gratifies hi/her needs in irresponsible ways, the person has assumed a **failure identity**. Most forms of mental and emotional disturbance are viewed as the result of the decision not to fulfill one's psychological and physical needs in a responsible way, which then produces a failure identity. Using reality therapy will help the client identify responsible and effective ways to satisfy their needs, through other activities beyond the computer. By cultivating a 'success identity' the client may join a gym, take up yoga, or join a book club, anything that empowers them to stay motivate to stay away from the computer.

However, as we discussed, Internet addicts will typically deny or minimize their habitual use of the Internet and the consequences their behavior may be causing to their

real lives. Therefore, motivational interviewing techniques that encourage the client to commit to treatment and find a success identity are an integral aspect of recovery.<sup>18</sup>

To help identify a client's level of motivation, therapists should ask the following:

- 1. When did you first begin to use the Internet? \_\_\_\_\_month \_\_\_\_\_year
- 2. How many hours per week do you currently spend online (for non-essential use)?
- 3. Using the following chart, please check each application you use on the Internet.
  - 3a. If applicable, list the specific sites/newsgroups/areas visited.
  - 3b. How many hours per week do you spend using each application?
  - 3c. How would you rank order each application from best to least important?

(1=first, 2=second, 3=third, etc.)?

3d. What do you like best about each application? (If this is 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).

Application	Sites Visited	Hours	Rank	Like About it
Email				
Chat/IRC				
MUDs/Games				
Newsgroups				
E-Auctions				
E-Brokerages				
Virtual Casinos				
Adult Web Sites				
General Sites				
Other				

4. Using the following chart, please describe the preceding event or antecedent that occurs just before you log on to that application (e.g., a fight with a spouse, depressed mood, stress at job, a poor grade in school).

- 4a. Next, please describe the feeling you have once you log on and your rationalization(s) or justification for the online activity (e.g., chatting makes me forget about the fight with my husband, checking my stocks makes me feel less depressed, surfing makes me feel less stressed at work, killing other players in a MUD allows me to feel better about my poor grade at school).
- 4b. Next, briefly describe the consequences for the online activity when utilized in this manner (e.g., my spouse becomes angrier, my feelings return when I turn off the computer, my job still stinks, I will loss my scholarship if I don't get my grades up).

Application	Antecedent	Affect/Belief	Consequence
Email			
Chat/IRC			
MUDs/Games			
Newsgroups			
E-Auctions			
E-Brokerages			
Virtual Casinos			
Adult Web Sites			
General Sites			
Other			

5. Have you been in prior counseling for Internet addiction before? \_\_\_\_\_yes \_\_\_\_\_no

- 6. If yes, please describe when and the level of effectiveness:
- 7. Have you been involved with support groups for Internet addiction \_\_\_\_\_yes \_\_\_\_\_no
- 8. If yes, please describe when and the level of effectiveness:
- 9. What medications are you currently taking?

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 (i.e., chat rooms, online gaming, online pornography, etc.). The length of Internet use,

the consequences of the behavior, a history of prior treatment attempts, and medications they are currently taking are also assessed. Not only does this information help the therapist to develop a clear treatment plan but this type of motivational interviewing also helps clients begin the process of examining how their Internet use has their lives.

# **Underlying Social Problems**

Internet addicts often suffer from interpersonal difficulties such as introversion or social phobia. Or they 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.<sup>19</sup> In other cases, due to their addiction, they have lost significant relationships such as a spouse, a parent, or a close friend. Generally speaking, the research has shown that social problems are both a symptom and a cause of Internet addiction.

To identify the presence of social problems for a client, ask the following:

YES	NO
Friends	
Family	
Therapists	
Other (please specify)	

1. Have you been honest about your Internet habit with \_\_\_\_\_? Check all that apply.

2. Have you ever created an online persona? \_\_\_\_\_yes \_\_\_\_\_no

3. If yes, please describe:

- 4. Did you develop multiple identities online? \_\_\_\_\_yes \_\_\_\_\_no
- 5. What were they:
- 6. List online activities that you kept secret or thought others would not approve of:
- 7. Have online friends disrupted real life relationships? \_\_\_\_\_\_yes \_\_\_\_\_no
- 8. If so, please describe which ones (i.e., husband, wife, parent, friend) and how they are impacted?
- Does Internet use disrupt your social or work relationships? \_\_\_\_\_yes \_\_\_\_\_no
  If yes, please describe how:
- 11. Please describe other ways that Internet use has impacted your life:

The questions help structure the clinical interview to provide more detailed information on how the Internet has impacted the client's relationships. In many cases, clients make up 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 their motivation for continued treatment.

Communication training has been used effectively with those clients who suffer social problems related to the Internet. Many Internet addicts cannot communicate well in face-to-face situations. This is part of why they use the Internet in the first place. Communicating online seems safer and easier for them. However, lack of communication skills can cause poor self esteem, feelings of isolation and create additional problems in

life, so part of therapy needs to address how they communicate offline. Encouraging affect, communication analysis, modeling, and role-playing are helpful interventions to apply. These help establish new ways of interacting and improved social functioning that will resolve underlying role disputes, role transitions, and interpersonal deficits.

#### **Multiple Addictions and Relapse**

Clients with a prior history of alcohol or drug dependency often find their compulsive use of the Internet a physically "safe" alternative to their addictive tendency. The Internet addict rationalizes that Internet addiction helps with relapse to drinking or drug use by fulfilling their compulsive needs with minimal medical risk, yet still avoids the unpleasant situation underlying addiction. It is important to help the client understand the deeper issues related to chronically compulsive behavior in their lives.

Clients who suffer from multiple addictions (to the Internet as well as to alcohol, cigarettes, drugs, food, etc.) are at the greatest risk to suffer from relapse. Recurrent and repeated relapse is a chronic issue in recovery when it comes to Internet addiction. Addicts usually need the computer for work or school so the temptation to return to the problematic behavior feels constant because the computer is always available.

"I always think about cybersex when I feel stressed from work and overwhelmed on the job," Mark admitted 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 off after cybersex I promise that I will never do it again. I hate myself for all the wasted time I spent online. I go a few weeks 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."

Most Internet addicts engage in a self-destructive internal dialogue of rationalizations that serve to onset relapse. The pattern begins with rationalizing the behavior followed by regret then temporary abstinence, until these rationalizations creep back into the addict's mind, triggering relapse. This has been called the *Stop-Start Relapse Cycle* that falls into four interdependent stages:<sup>20</sup>

- Rationalization The addict rationalizes that the Internet serves as a "treat" from a long, hard day of work, often making self-statement such as, "I work hard, I deserve it," "Just a few minutes won't hurt," "I can control my net use," or "The computer relaxes me," "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.
- *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."
- 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.

4. *Relapse* – The addict begins to crave and miss 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 feels afterwards. Soon, the rationalization period starts again, and the availability of the computer easily starts the cycle anew.

A part of recovery involves helping clients know the signs of possible relapse so that they may understand when they are talking themselves into justifying the addiction. Some common behavior patterns associated with potential relapse include:

- Going online when no one is home
- Using work Internet access for online activities not directly work related
- Keeping Internet use a secret
- Not getting sleep or rest because of Internet use
- Increased isolation
- Overconfidence of recovery
- Lying to self and others
- Ignoring agreed upon guidelines
- Blaming others for need to use
- Minimizing the return to problematic situations
- Skipping support group meetings or therapy

Clients need to explore their current use of the Internet to identify high-risk situations, feelings, or events that trigger the compulsive behavior. For continued recovery, clients should avoid those behaviors or situations that place them at risk for relapse. If they noticed themselves falling back into old patterns, they should be encouraged to bring those up in therapy so that they can confront those patterns directly and through therapy find ways to help them stay focused and stay offline.

#### **Making Amends**

Due to their addiction, clients often hurt or lose significant real-life relationships, such as a spouse, a parent, or a close friend. 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 that they are unlovable. The addict must amend and reestablish these broken relationships to achieve recovery and find the support necessary to fight the addiction. The recovery process is an ongoing selfexploration that must separate the behavior from the person, relieve shame about the behavior, correct maladaptive cognitions, and promote opportunities to learn from mistakes. The recovery process must also build relationships, providing new ways to relate to others and allowing for amends to be made. Involving loved ones in the recovery process 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. Finally, the recovery process should provide continuous support and affirmation that creates a positive self-image.

Twelve step support groups can help repair damaged relationships and engage friends and family in the treatment process. Support Groups serve a multitude of recovery purposes. First, support groups improve the Internet addict's real life social support system as they provide an opportunity to build offline relationships. Such peer support offers comfort that decreases the reliance upon the Internet for companionship and serves as a safe place to reality test interpersonal behavior that leads to personal growth. The Twelve-Step model is a belief system that helps clients overcome the temptation when the hard times hit. As this article explores, relapse is part of the recovery, and having a support group will help clients to process those moments of temptation, and akin to AA, group membership helps clients cope with difficult times during this transition period.

It is important to keep in mind that throughout the entire treatment process, and particularly in the early days of recovery, the client will most likely experience a loss and miss being online for frequent periods of time. This is normal and should be expected. After all, for most clients who derive a great source of pleasure from the Internet, living without it being a central part of one's life can be a very difficult adjustment. <sup>1</sup> Beard, K. W., & Wolf, E. M. (2001). Modification in the proposed diagnostic criteria for Internet addiction. *CyberPsychology & Behavior* 4: 377-383.

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