With the Compliments of Springer Publishing Company, LLC

JOURNAL OF COGNITIVE PSYCHOTHERAPY

SPRINGER PUBLISHING COMPANY

www.springerpub.com/jcp

Journal of Cognitive Psychotherapy: An International Quarterly
Volume 25, Number 4 • 2011

CBT-IA: The First Treatment Model for Internet Addiction

Kimberly S. Young, PhD
Center for Internet Addiction Recovery, Bradford, Pennsylvania

Research has identified Internet addiction as a new clinical disorder that causes relational, occupational, and social problems. Cognitive behavioral therapy (CBT) has been suggested as the treatment of choice for Internet addiction, and addiction recovery in general has used CBT as part of treatment planning. This article outlines cognitive behavioral therapy–Internet addiction (CBT-IA), a uniquely designed model for treating Internet addiction applying CBT with harm reduction therapy (HRT). CBT-IA uses a three-phase approach. In the first phase, behavior modification is used to gradually decrease the amount of time the addict spends online. In the second phase, cognitive therapy is used to address denial that is often present among Internet addicts and to combat the rationalizations that justify excessive online use. The third phase applies HRT to identify and treat coexisting issues involved in the development of compulsive Internet use. As the first model of its kind, it can be used both on an outpatient and inpatient basis to deal with this emergent client population.

Keywords: cognitive behavioral therapy; Internet addiction; recovery; treatment; harm reduction therapy

Studies on Internet addiction originated in the United States. More recently, studies have documented Internet addiction in a growing number of countries such as Italy (Ferraro, Caci, D'Amico, & Di Blasi, 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% 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 opened the first inpatient treatment center for Internet addiction in Beijing. In the United States, Internet addiction has also been considered for classification in the *Diagnostic and Statistical Manual for Mental Disorders, Fifth Edition* (*DSM-V*; Block, 2008), and it is expected to be included in the appendix for the upcoming edition.

It is difficult to estimate how widespread the problem is. Given the popularity of the Internet, detecting and diagnosing Internet addiction is often difficult as its legitimate business and personal use mask addictive behavior (Young, 2010). However, in a nationwide study conducted by a team from Stanford University's School of Medicine, it was estimated that nearly one in eight

http://dx.doi.org/10.1891/0889-8391.25.4.304

Americans exhibit at least one possible sign of problematic Internet use (Aboujaoude, Koran, Gamel, Large, & Serpe, 2006).

Researchers have likened Internet addiction to impulse-control disorders on Axis I in *DSM-IV* (e.g., Aboujaoude et al., 2006; Beard & Wolf, 2001; Block, 2008; Shapira et al., 2003; Young, 1998) and have used various forms of *DSM-IV* based criteria to define Internet addiction. Cognitive behavioral therapy (CBT) has been shown to be an effective treatment for impulse control disorders such as intermittent explosive disorder, pathological gambling, and trichotillomania (Hucker, 2004). CBT has also been effective in treating substance abuse, emotional disorders, and eating disorders (Beck, 1979; Beck, Wright, Newman, & Liese, 1993). Researchers have suggested using CBT to treat Internet addiction (e.g., Greenfield, 1999; Hansen, 2002; Orzack, 1999), given the compulsive nature and similarity to other disorders successfully treated with CBT. However, Internet addiction has been noted to be different from other compulsive syndromes given the daily and necessary use of the Internet and technology in general. Therefore, this article outlines cognitive behavioral therapy–Internet addiction (CBT-IA), a uniquely designed model for treating Internet addiction, applying CBT with harm reduction therapy (HRT). As the first model of its kind, this article explores how CBT-IA can be applied to reduce symptoms, improve impulse control, challenge cognitive distortions, and address personal and situational factors specifically associated with compulsive use of the Internet.

Why Use Cognitive Behavioral Therapy?

CBT is a familiar treatment based on the premise that thoughts determine feelings. In general, clients are taught to monitor their thoughts and identify those that trigger addictive feelings and actions while learning new coping skills and ways to prevent a relapse. CBT usually requires 3 months of treatment or approximately 12 weekly sessions. With Internet addicts, it has been suggested that the early stage of therapy should be behavioral, focusing on specific behaviors and situations where the impulse control disorder causes the greatest difficulty (Hall & Parsons, 2001). As therapy progresses, the focus is more on the cognitive assumptions and distortions that have developed and the effects of these on behavior (Young, 2007). When applied, techniques involve the assessment of the type of distortion, problem-solving skills and coping strategies training, modeling in therapy, support groups, and thought monitoring.

In cases of Internet addiction, abstinence recovery models are not practical because computers have become such a salient part of our daily lives. Clinicians have generally agreed that moderated and controlled use of the Internet is most appropriate to treat the problem. Behavior therapy should examine both computer behavior and noncomputer behavior (Hall & Parsons, 2001). Computer behavior deals with actual online usage, with a primary goal of abstinence from problematic applications while retaining controlled use of the computer for legitimate purposes (Young, 2007). For example, a lawyer addicted to Internet pornography would need to learn to abstain from adult Web sites while still being able to access the Internet to conduct legal research and to e-mail clients. Noncomputer behavior focuses on helping clients develop positive lifestyle changes for life without the Internet. Life activities that do not involve the computer are evaluated and may include activities associated with social or occupational functioning.

Young (2004) found that online addicts felt a sense of displacement when online and were unable to manage central aspects of their lives because of their growing preoccupation with online use. They started to miss important deadlines at work, spent less time with their family, and slowly withdrew from their normal routines. They neglected social connections with their friends, coworkers, and with their communities, and, ultimately, their lives became unmanageable because of the Internet. As the addiction grew, online addicts become consumed with their Internet activities—preferring online games, chatting with online friends, or gambling over the

Internet—ignoring family and friends in exchange for solitary time in front of the computer (Leung, 2007). Therefore, managing their time online is an initial goal of behavior therapy.

Cognitive therapy is also used to deal with maladaptive thoughts often associated with addictive or compulsive behavior. Addictions accomplish something for the person however illusory or momentary these benefits may actually be (Twerski, 1990). Because of the pleasure that people find in their addictions, they begin to behave more intensely about them. For example, an alcoholic is often driven to drink at moments of excessive stress, or an overeater is often driven to binge on food during moments of tension. In each case, the compulsive behavior serves to reduce the underlying emotional tension and serves as a reward for future behavior. In a similar fashion, researchers suggest that Internet addicts turn to the computer to find relief from moments of painful states of mental tension and agitation present in their lives (Greenfield, 1999). Greenfield conducted an early survey of Internet users in conjunction with ABCNews.com and found more than 29% of those who were classified as addicted users reported using the Internet to "alter their mood or escape on a regular basis." In such instances, he found that their use of the computer was less about using it as a tool and more about finding a psychological escape to cope with life's problems. Because the Internet served a useful purpose for those considered addicted, they become increasingly dependent and attached to Internet usage.

Beyond using the Internet as a psychological escape, subsequent studies hypothesized that other maladaptive cognitions such as overgeneralizing or catastrophizing, negative core beliefs, and cognitive distortions also contribute to compulsive use of the Internet (Caplan, 2002; Davis, 2001; LaRose, Mastro, & Eastin, 2001). Young (2007) hypothesized that those who suffer from negative core beliefs may be the ones who are drawn the most to the anonymous interactive capabilities of the Internet to overcome these perceived inadequacies. In one outcome study, Young (2007) worked with 114 Internet-addicted clients using cognitive restructuring to address underlying negative core beliefs, cognitive distortions, and rationalizations such as "Just a few more minutes won't hurt" for effective management of the clients' symptoms.

Internet addicts also suffer from various cognitive problems that make them feel apprehensive when offline and excessively worry about negative happenings (Davis, 2001). Although addicts are not the only people who worry and anticipate negative happenings, they tend to do this more often than other people. This type of catastrophic thinking may contribute to compulsive Internet use in providing relief from anxiety, stress, and tension in one's life.

Given the dynamics involved with Internet addiction, CBT is an ideal therapeutic framework to treat those who suffer from the condition. This article outlines the three phases of CBT-IA. In the first phase, behavior modification is used to gradually decrease the amount of time the addict spends online. In the second phase, cognitive therapy is used to address denial that is often present among Internet addicts and to combat the rationalizations that justify excessive online use. The third phase uses HRT for continued recovery and relapse prevention. As situational factors play a role in the development of Internet addiction, HRT can be used to identify and treat psychiatric issues coexisting with compulsive Internet use and treat social issues in immediate family and/or marital relationships.

Phase 1: Behavior Modification

Having a specific goal-oriented plan that modifies computer behavior for healthy computer use is necessary in the early stage of recovery. To best implement an effective modification plan, CBT-IA first assesses the client's current use of the Internet. A Daily Internet Log can be used to evaluate computer behavior and to establish a baseline for treatment (Young, 2007). With the constant availability of the Internet, it is important to develop a clear and structured recovery program. The focus should include taking a complete assessment of the client's current Internet use to help

Date and Time	Event	Online Activity	Duration	Outcome

Figure 1. Daily Internet Log.

determine the Internet activities, situations, and emotions that are most likely to trigger online binges. A particular chat room, a certain time of day, or a client's mood just before logging online may all serve as triggers that can lead to inappropriate conduct and abuse. To help pinpoint and determine these triggers, have clients maintain a Daily Internet Log to keep track of when and how they use the computer. Using the chart depicted in Figure 1, clients provide an account of the following items each time they log online.

Clients are asked to record the date and time of each Internet session, the antecedent events leading up to logging online, and the type of online activity accessed (e.g., e-mail, chat, pornography sites, stock quotes, eBay, random Web surfing). Next, clients keep track of how long each session lasts, specifically recording the number of minutes or hours per Internet session. Finally, clients describe the outcome of the Internet session in terms of what actions were completed, what activities were interrupted while online, or the feelings they experienced after each online session. Keeping such a detailed log serves as a baseline of a client's use, identifies high-risk situations that can lead to excessive use, and helps set goals in future treatment planning.

As food addicts measure part of their recovery success through objective indicators as reduced caloric intake and weight loss, Internet addicts can objectively measure part of their recovery success through reduced online hours and abstinence from any contact with problematic online applications. Based on the results of the daily log, clinicians can review how many hours per week is spent online and at which times the client is most likely to be online. Perhaps a client spends more than 50 hours online when she is home alone. Perhaps a client spends 30 hours a week instant messaging and texting people for cybersex when he is at the office. To deal with the immediate concern—time spent on the Internet and the constant temptation of it in a home or office—it is necessary to help clients make measurable changes in their online behavior.

Removing all evidence of problematic online behavior is essential as an initial step for clients. It is symbolic as a means to start fresh and regain control over unhealthy or addictive online behavior. This can be accomplished by *computer restructuring*, or an entire reorganization of how one actually uses the computer. In this step, clients should delete bookmarks or favorite files that lead to the problem online. This could be sex sites, gaming sites, virtual casinos, chat rooms, or eBay. Whatever the doorway was to the problem behavior, this must be removed. Next, set clear time management goals with the client. To help clients, encourage them to take routine computer breaks, get up from the computer at regular intervals, use an egg timer or alarm as reminder that it is time to take a stroll through the office, or go see what a family member is doing in the next room. These techniques help clients wean themselves from the computer and focus on ways to disrupt old patterns of addictive online behavior.

The use of filtering software is another effective method to help reach this goal. Filtering software such as Net Nanny, CyberPatrol, or SurfControl, typically used by parents to block access online sexual content from their children, can help clients to self-regulate online use. The software can

be programmed to automatically block a multitude of online applications such as porn sites, chat rooms, or gaming sites by shutting down a Web browser if attempts to access these materials are made. For many, this stops the behavior immediately, and many describe the experience as a "cold shower" that breaks the trance associated with the addiction. With it, clients feel empowered to control the temptations that often led to relapse and keep them on the path of abstinence and recovery.

Phase 2: Cognitive Restructuring

The second phase of CBT-IA addresses the maladaptive cognitions that serve as triggers that initiate binge behavior over the Internet. Maladaptive cognitions such as overgeneralization, selective abstraction, magnification, or personalization are associated with addictive Internet use. For instance, some Internet addicts suffer from distorted thoughts about the self that include rumination (e.g., constantly thinking and worrying about the problems associated with the individual's online use) and extreme self-concepts favoring the online self (e.g., "I am worthless offline, but in the online world I am someone"). They may also suffer distorted thoughts about the world such as "Nobody loves me offline" and "The online game world is the only place that I am respected." According to Davis (2001), maladaptive cognitions characterized by such all-or-nothing thinking can intensify and perpetuate the individual's Internet addiction. For example, if a gamer creates and controls an avatar (an online game character) who can achieve various goals in online games, he or she may perceive the offline real world as less desirable, which may lead to his or her psychological dependence on using online games to improve or maintain his or her self-esteem. Internet addicts may also develop a cognitive bias that they are better treated by others in the virtual world and feel psychological discomfort or dissatisfaction with their real lives.

This type of thinking gives them permission to engage in the Internet. CBT-IA uses cognitive restructuring to break this pattern. Cognitive restructuring helps put the client's thoughts "under the microscope" by challenging him or her and, in many cases, rescripting the negative thinking that lies behind him or her. In doing so, CBT-IA can help clients understand that they are using the Internet to avoid situations or feelings. Our moods are driven by what we tell ourselves, and this is usually based on our interpretations of our environment. Using cognitive restructuring with clients will help them reevaluate how rational and valid these interpretations are. For instance, clients who use online games as a way to build self-esteem or feel better about their lives will start to see that they are using the Internet to satisfy needs that are not being fulfilled in their real lives. By doing so, clients do not find healthy ways to build self-esteem in their immediate relationships but they seek this out via the Internet.

Cognitive restructuring can also help clients attack the assumptions and interpretations that keep them online. For instance, challenging the assumption of an addicted online gamer who believes that the online world is the only place he or she is respected will help the gamer see that there are other places where he or she is respected. The gamer can see that other areas such as work or school offer opportunities in real life to build esteem. Over time, challenging this type of negative thinking will help the addict realize that real life can offer many of the things that the online world can. By challenging these rationalizations, the addict can see how he or she avoids finding those same feelings in the real world and that the virtual world is only temporary.

Helping clients become aware of their cognitive distortions will help them recognize when they are engaged in this type of negative self-talk and make them harder to ignore. Once clients become aware of their patterns of faulty thinking, they can begin to challenge these thoughts more independently of therapy. In this way, they will find it more difficult to rationalize or justify their Internet use and to break the cycle of associating Internet use with a better life.

Clients often feel overwhelmed because, through errors in their thinking, they exaggerate their difficulties and minimize the possibility of corrective action. To help the client stay focused

on his or her moderated treatment goals, CBT-IA helps clients identify the major problems or consequences caused by addiction to the Internet. To identify consequences, have the client generate a list of the five major problems caused by addiction to the Internet and a parallel list of the five major benefits for cutting down or abstaining from Internet use. Reassure clients that it is well worth it to make their decision list as broad and all-encompassing as possible, and to be as honest as possible. This kind of clear-minded assessment of consequences is a valuable skill to learn, for any recovery from an addiction, and one that clients will need later, after they have cut down or quit the Internet, for relapse prevention.

A key feature of CBT-IA is to focus on the denial often associated with Internet addiction. Internet addicts are often ambivalent about treatment. Initially, they may go into therapy with mixed feelings because they have not taken full responsibility for the behavior and are not sure if they really want to give up their Internet use. The addict often feels like the Internet is a healthy outlet only to rationalize the behavior, "This isn't hurting anyone else," "It's no big deal," and "It is not the Internet, it is the stress in my life." They minimize the hurt their behavior causes to loved ones: "Hey, it's just a machine," or "It's not really extramarital sex, it's just words on a screen." In some instances, the addict feels dragged into therapy by a loved one and begrudgingly enters treatment. CBT-IA confronts clients when they contradict themselves in therapy. At first, they may readily admit to having an addiction. In the next session, they may minimize the same behavior. CBT-IA helps clients that they need to take ownership of the problem. Clients cannot expect that they will stick to a structured behavior/Internet time management plan if they cannot admit their addiction. This is an important focus in the second phase of CBT-IA because it reminds clients that it takes a daily commitment, especially if they do need to be at the computer for work or school, and if they are not ready to make this commitment for themselves, and not for anyone else, then abstinence will be difficult to maintain.

Phase 3: Harm Reduction Therapy

In the third phase of CBT-IA, HRT (Marlatt, Blume, & Parks, 2001) is used to identify and address any coexisting factors associated with the development of Internet addiction. These factors can include personal, situational, social, psychiatric, or occupational issues. Often, addicts falsely assume that just stopping the behavior is enough to say, "I am recovered." But there is much more to full recovery than simply refraining from the Internet. Complete recovery means investigating the underlying issues that led up to the compulsive behavior and resolving those issues in a healthy manner; otherwise, relapse is likely to occur.

As we have seen, Internet addiction often stems from other emotional or situational problems such as depression, anxiety, stress, relationship troubles, marital problems, and/or career difficulties. Although the Internet offers a convenient distraction from these problems, it does very little to actually help clients cope with the issues that lead to where they are today.

Internet addicts often become dependent on the Internet because it provides an instant and permissible means of avoiding life problems (Young, 2004). They can turn on the computer and, with a click of button, make whatever other problems that are going in their lives temporarily disappear. In the same way people can use alcohol, food, drugs, or gambling to avoid life's problems, so does the Internet addict. HRT becomes an important way for the addict to identify the underlying issues contributing to the addiction as part of recovery (Marlatt et al., 2001).

HRT is based on the belief that substance abuse and dependence develop in individuals through a unique interaction of biological, psychological, and social factors. HRT is a nonjudgmental approach to helping people experiencing alcohol and drug problems to reduce the negative impact of substance use, abuse, or dependence in their lives. HRT acknowledges that people use alcohol and drugs for various reasons. It addresses the complex relationship that people develop

with these psychoactive substances over the course of their lives. In HRT, concerns related to drug and alcohol use are addressed simultaneously with their social and occupational impacts as well as their psychological and emotional implications in an integrated treatment approach to these "co-occurring disorders" (Marlatt et al., 2001).

As part of CBT-IA, HRT is used to address the coexisting issues in the Internet addicts' lives. Cyberspace becomes a fantasy world inside their computers that can momentarily take them away from their problems. The reinforcing effect drives the compulsive behavior as people find a safe and readily available way to escape using the Internet. HRT in practice with Internet addicts involves several things. First, HRT involves identifying and treating underlying psychiatric issues coexisting with compulsive Internet use by using, when indicated, appropriate medications. Dual diagnosis with depression, anxiety, or obsessive-compulsive disorder is common among Internet addicts, as well as comorbid addiction to alcohol or drugs, so these would also need to be treated. Twelve-step recovery may be involved later as part of treatment.

HRT sees substance use varying on a continuum of harmful consequences to the user and the community. In doing so, harm reduction accepts small, incremental steps in the direction of reduced harm with the goal being to facilitate the greatest reduction in harm for a given person at this point in time. Therefore, harm reduction places respect for the client's strengths and capacity to change as the starting point. In this third phase of treatment, CBT-IA sessions focus on raising awareness of those issues that led to compulsive Internet use. Clients are encouraged to collaborate in setting up the treatment and choosing goals and strategies that they find useful. These issues can include personal, social, situational, or career issues. If the client is dealing with low self-esteem, work toward finding healthier ways of dealing with these feelings without using the Internet. If the client is having relationship troubles, suggest couples counseling instead of turning to cybersex to address those intimacy issues. If the client views porn at work to handle job stress, teach more effective stress management techniques to help the client relax instead of relying on the Internet. If the client suffers from multiple addictions, address specific ways to cope with the underlying compulsive behavior and to recognize the decision chain that leads to a lapse before it actually occurs. If the client is having career troubles, help him or her to investigate new job options or career opportunities. This reduces the harmful consequences of Internet abuse and helps the client adapt new, healthier coping strategies.

Conclusions

Overall, CBT-IA is a comprehensive and unique approach to treating Internet addiction. In this three-phase approach, the first phase of treatment involves behavior modification related to Internet usage, initial control, and moderate compulsive Internet use. In the second phase, cognitive restructuring identifies cognitive distortions and maladaptive cognitions leading to addictive use of the Internet. In particular, rationalizations that justify use and minimize Internet use as being addictive are identified, challenged, and modified. In the third phase, seeing Internet addiction as part of a dual diagnostic syndrome, comorbid issues are identified, addressed, and treated. Psychiatric conditions should be addressed as well as personal, social, and familial issues contributing to Internet addiction should be dealt with. This occurs through increased awareness of those factors contributing or underlying the addiction.

Although CBT-IA offers a comprehensive and promising new form of treatment for Internet addiction, areas for future research should also explore systematic comparisons with other treatment modalities such as psychodynamic therapies, gestalt, group counseling, or in vivo counseling within an online community to determine their therapeutic impact and efficacy. Future studies should also investigate treatment differences among the various types of Internet abuse.

Subtypes of Internet addiction have been identified in the literature, such as Internet gambling, online gaming, and Internet pornography addictions. Studies should examine if treatment differences exist using CBT-IA to determine if outcomes vary along the various subtypes. As the mental health field devotes more research and resources on Internet addiction recovery, future studies should evaluate how specific treatment intervention impacts long-term recovery. Traditionally, addiction treatment programs for alcoholism and drug abuse have offered patients a mix of treatment approaches. A promising new strategy involves matching patients to interventions specific to their therapy needs. In this same manner, matching which types of Internet addiction respond best to which treatment can increase treatment effectiveness and such treatment matching is likely to increase long-term recovery.

References

Aboujaoude, E., Koran, L. M., Gamel, N., Large, M. D., & Serpe, R. T. (2006). Potential markers for problematic Internet use: A telephone survey of 2,513 adults. *CNS Spectrums*, *11*(10), 750–755.

BBC News. (2005). *China imposes online gaming curbs*. Retrieved August 7, 2007, from the BBC Web site: http://news.bbc.co.uk/1/hi/technology/4183340.stm

Beard, K. W., & Wolf, E. M. (2001). Modification in the proposed diagnostic criteria for Internet addiction. *CyberPsychology & Behavior*, *4*(3), 377–383.

Beck, A. T. (1979). *Cognitive therapy and the emotional disorders*. New York: Plume.

Beck, A. T., Wright, F. D., Newman, C. F., & Liese, B. S. (1993). *Cognitive therapy of substance abuse*. New York: Guilford Press.

Block, J. J. (2008). Issues for DSM-V: Internet addiction. *The American Journal of Psychiatry*, *165*(3), 306–307.

Caplan, S. E. (2002). Problematic Internet use and psychosocial well-being: Development of a theory-based cognitive-behavioral measurement instrument. *Computers in Human Behavior*, *18*(5), 553–575.

Davis, R. A. (2001). A cognitive-behavioral model of pathological Internet use. *Computers in Human Behavior*, *17*(2), 187–195.

Ferraro, G., Caci, B., D'Amico, A., & Di Blasi, M. (2007). Internet addiction disorder: An Italian study. *CyberPsychology & Behavior*, *10*(2), 170–175.

Greenfield, D. N. (1999). *Virtual addiction: Help for netheads, cyberfreaks, and those who love them*. Oakland, CA: New Harbinger.

Hall, A. S., & Parsons, J. (2001). Internet addiction: College student case study using best practices in behavior therapy. *Journal of Mental Health Counseling*, *23*(4), 312–327.

Hansen, S. (2002). Excessive Internet usage or 'Internet addiction'? The implications of diagnostic categories for student users. *Journal of Computer Assisted Learning*, *18*(2), 235–239.

Hucker, S. J. (2004). Disorders of impulse control. In W. T. O'Donohue & E. R. Levensky (Eds.), *Forensic psychology* (pp. 471–487). New York: Academic Press.

Hur, M. H. (2006). Demographic, habitual, and socioeconomic determinants of Internet addiction disorder: An empirical study of Korean teenagers. *CyberPsychology & Behavior*, *9*(5), 514–525.

LaRose, R., Mastro, D., & Eastin, M. S. (2001). Understanding Internet usage: A social-cognitive approach to uses and gratifications. *Social Science Computer Review*, *19*(4), 395–413.

Lee, M. (2007). *China to limit teens' online gaming for exercise*. Retrieved August 7, 2007, from http://www.msnbc.msn.com/id/19812989/

Leung, L. (2007). Stressful life events, motives for Internet use, and social support among digital kids. *CyberPsychology & Behavior*, *10*(2), 204–214.

Marlatt, G. A., Blume, A. W., & Parks, G. A. (2001). Integrating harm reduction therapy and traditional substance abuse treatment. *Journal of Psychoactive Drugs*, *33*(1), 13–21.

Orzack, M. (1999). Computer addiction: Is it real or is it virtual? *Harvard Mental Health Letter*, *15*(7), 8.

Shapira, N. A., Lessig, M. C., Goldsmith, T. D., Szabo, S. T., Lazoritz, M., Gold, M. S., et al.. (2003). Problematic Internet use: Proposed classification and diagnostic criteria. *Depression and Anxiety*, *17*(4), 207–216.

Simkova, B., & Cincera, J. (2004). Internet addiction disorder and chatting in the Czech Republic. *CyberPsychology & Behavior*, *7*(5), 536–539.

Suhail, K., & Bargees, Z. (2006). Effects of excessive Internet use on undergraduate students in Pakistan. *CyberPsychology & Behavior*, *9*(3), 297–307

Twerski, A. J. (1990). *Addictive thinking: Understanding self-deception*. New York: HarperCollins.

Young, K. S. (1998). Internet addiction: The emergence of a new clinical disorder. *CyberPsychology & Behavior*, *1*(3), 237–244.

Young, K. S. (2004). Internet addiction: A new clinical phenomena and its consequences. *American Behavioral Scientist*. *48*(4), 402–415.

Young, K. S. (2007). Cognitive-behavioral therapy with Internet addicts: Treatment outcomes and implications. *CyberPsychology & Behavior*, *10*(5), 671–679.

Young, K. S. (2010). Clinical assessment of Internet-addicted clients. In K. Young & C. Nabuco de Abreu (Eds.), *Internet addiction: A handbook and guide for evaluation and treatment* (pp. 19–34). New York: Wiley.

Correspondence regarding this article should be directed to Kimberly S. Young, PhD, Center for Internet Addiction Recovery, P.O. Box 72, Bradford, PA 16701. E-mail: kyoung@sbu.edu: