
CHAPTER 15

Closing Thoughts and Future Implications

KIMBERLY S. YOUNG and CRISTIANO NABUCO DE ABREU

AS WE live in a world of growing dependence on technology, it is hard to tell the difference between necessity and addiction. There are times when it is necessary to use technology in ways that are meaningful and productive. Besides, we live in a phase of history in which knowledge is no longer passively absorbed by the individual; that is, nowadays we can act and interact with information in order to establish it as a new expression of our personal and social reality. This makes us eyewitnesses to one of the biggest changes in the history of science: the possibility to interact in real time with people and information. Although many are the descriptions of the Internet's impact in modern life, one of the biggest impacts that can be cited is the progressive change of the *mores* (from the Latin, customs) that regulate and govern human behavior. Less than two decades ago, no adolescent would have even considered the possibility of sharing with someone the experiences of his or her most recent sexual event, but nowadays details of such experiences are blogged so that a few million people may have access. Rather than bringing people near the information, the Internet is contributing to the creation of new forms of relationship (and existence), just to name one example. The concept of intimacy, therefore, is gaining more and more new dimensions. More than ever, then, the rules governing human relationships are being directly affected by virtual life. The good news is that we move forward with giant steps toward the future. The bad news is that we may not be very prepared to deal with them.

So, this book is not trying to focus on the negative aspects of Internet use or mobile technologies. Perhaps the new technologies are just a new stage of our personal vulnerabilities; therefore, the book is not trying to demonize

technology. It is pointing out that there is a serious danger in the overreliance on technology to fulfill emotional, psychological, and social needs. Although many of the mental disorders being observed have existed for a long time—for example, Roman *vomitoria* (places used for vomiting after taking part in banquets) may have been an early manifestation of bulimia nervosa, or even some religious women of the Middle Ages who fasted to attain holiness (for instance, St. Catherine of Siena) may have actually been rehearsing the first acts of what would be considered in future to be anorexia nervosa—the Internet addiction and new technologies have never before been present. Therefore, their understanding and analysis are still under scrutiny by researchers and clinicians.

For instance, the BlackBerry is a must-have gadget. A lingo has sprung up around the devices, with heavy users calling themselves “CrackBerry addicts,” referring to the highly addictive form of cocaine. The surreptitious glance downward, head bowed, to check for e-mail during a meeting is referred to as a “BlackBerry prayer.”

While many users say owning a BlackBerry makes them more efficient, some researchers—and some spouses, as well—say the wireless devices offer their owners new ways to distract themselves, often annoying others in the process. The seemingly exponential growth of portable technology has sparked fears that people are becoming addicted or swamped by gadgets and their uses. One major consequence of this phenomenon is that the line between work and private life is much more blurred, now that e-mail and cell phones provide a 24-hour link between employers and staff. That is, the former private life has lost its total intimacy. Furthermore, experts believe that even the decision-making process of the average person can be adversely affected. However, others think that the bombardment of various communications can enhance the brain’s ability to process information.

Researchers have become concerned about the addictive nature of handheld devices and the effect on decision-making processes. They fear that individuals lose spatial judgment while using them, so instead of walking through the door you walk into it. You are more prone to have a car accident if you drive. Because of this danger, many states have initiated laws to stop people from texting while driving. The reality is that with such portable technology, you take it with you anywhere, and like with any other addiction, the more time people spend using their technology the less time they spend in socializing or in family time.

Some people have become concerned about “interruption overload” and “continuous partial attention” associated with BlackBerry use. Our ability to multitask prevents us from being fully present at the task at hand. Being forced to divert attention to interrupting messages can cause memory loss and decreased memory accuracy, besides contributing to a state of emotional anesthesia or emotional numbing. The technology makes it difficult to make decisions because of this mental parsing of our brains’ attention and memory.

It is easy to dismiss an addiction to mobile technologies as harmless. We live in a world that strongly encourages mobile phone use, especially among teenagers. However, new studies have found that mobile phone addicts can be seriously affected at the psychological level but, as they don't show any physical symptoms, their dependency goes unnoticed to others, contrary to what is noticed in the abusive use of alcohol or other substances. About 40 percent of young adults admit using their mobiles for more than four hours a day. Most of them say they spend "several hours a day" on their phones. Many are "deeply upset" if they miss calls or messages, and some of them say they think they hear the phone's ring tone when in fact they have not received any call. Generally, mobile addicts tend to neglect important activities (job or studies), drift away from friends and close family, deny the problem, and think about their mobile constantly when they do not have it with them. Most mobile addicts are people with low self-esteem, who have problems with developing social relationships and feel the urge to be constantly connected and in contact with others. They can become totally upset when deprived of their mobile phones, and switching off their phones causes them anxiety, irritability, sleep disorders or sleeplessness, and even shivering and digestive problems. It is common for owners to "humanize" these devices with names and also attribute feelings of safety and support to them.

To disengage from technology dependency, in whatever form it takes—be it to Facebook, texting, playing role-playing games, viewing online pornography, or checking e-mail—the core of recovery must be to understand new ways to relate to others.

We have seen a theme throughout this book that technology has facilitated new ways of obtaining information and connecting with others. For those who suffer from depression, anxiety, social phobia, or Asperger's syndrome, online connections provide those individuals new ways of developing and continuing relationships. Social media such as Facebook and MySpace model how connections are formed in the real world and provide that information through a set of applications that allow people to share information, photos, or videos of events. Instead of trying to build a community, social networking is trying to make new connections. Certainly, for those who have trouble connecting in the real world, online communication is an alternative medium to build connections. This is important. Throughout the book, we have seen in various chapters how interactivity through online communication and applications has been a major source of addictive behavior. Children and adolescents have engaged in multiuser role-playing games to the point of excess. Adults have engaged in virtual communities such as Second Life to the point of excess. These are a few examples illustrated through the text. This shows that the interactivity of online applications is most compelling.

Yet, too much dependence on technology also creates new social problems as people become socially withdrawn, disliking real-life meetings, avoiding working in collaborative teams, and fearing face-to-face contact, while preferring only online communication. Perhaps this explains why the social

networks have increased exponentially in recent years. It is possible that these spaces make people feel more heard or they can more easily express their personal difficulties and anxieties. Therefore, the virtual life connects people on one hand and separates them on the other.

We can see how the Internet has changed the way we live. We can do research, book hotels, make airline reservations, shop, instantly keep in touch with family and friends, and make new friends and connections. It is difficult to differentiate healthy from unhealthy Internet use because of its utility as a productive tool. We have examined much of the latest research that focuses on the most problematic areas of Internet use—those areas being interactive applications such as online role-playing games, sexual chat rooms or interactive porn sites, or multi-user Internet gambling sites—to help therapists understand the most common reasons individuals may be seeking treatment. These provide theoretical concepts to guide the evaluation process and treatment planning.

The book examines several treatment strategies that vary depending on the client's age, presenting problem, and individual situation. This type of specificity is highly relevant when treating a person who suffers from Internet addiction. In clinical practice, a 16-year-old who is addicted to multiuser role-playing games may need a different treatment approach than a 50-year-old man who is addicted to Internet porn. These variables have been fleshed out and elaborated upon throughout the book, enabling therapists to use it as a reference guide as they encounter clients with a wide variety of Internet-related issues and concerns. Even if a client presents with depression or anxiety, when the Internet plays a factor in these other psychiatric conditions, therapists will be able to utilize this information to facilitate treatment planning.

Like many addictions, treatment is often necessary to fully recover from Internet addiction. Sometimes it is not enough to simply go cold turkey. Having a professional to talk with enables clients to explore deeper issues that led to the maladaptive or unhealthy online behavior. The technology and the Internet may be symptoms of other problems a client is experiencing. Therapists need to help clients address these problems, identify new goals, and learn new behaviors and/or responses while we, as clinicians, still learn how to better assess and treat the impacts of the overuse. Although we are seriously committed as professionals, our knowledge is still embryonic. Therapists ultimately must help clients understand why they use technology and whether it is a way of avoiding or escaping from a real problem.

Therapists vary greatly depending on the level of training, the type of education and experience they have had, and the amount of knowledge that they have about the Internet and technology. It is not unusual to find professionals who claim to be totally ignorant regarding these new pathologies, though specialized and trained professionals in this area are slowly emerging. Therefore, this book provides a comprehensive examination of Internet addiction, technology addiction, and the overall impact technology has on human behavior. The information contained in the book helps therapists learn and appreciate

the role of technology in the client's life. It also opens an important discussion about how technology can have a profound emotional and psychological impact.

We see that the Internet is not a benign tool but technology. Its misuse has consequences that may need clinical intervention. We also see that in extreme cases, residential care may need to be considered. Interestingly, addicts from all walks of life falsely assume that just stopping the behavior is enough to say, "I am recovered." There is much more to full recovery than simply refraining from the Internet. Complete recovery means addressing the underlying issues that led up to the behavior and resolving them in a healthy manner; otherwise, relapse is likely to occur. This book describes how compulsive online use often stems from other emotional or situational problems such as depression, attention deficit/hyperactivity disorder, anxiety, stress, relationship troubles, school difficulties, impulse control problems, or substance abuse. While using the Internet offers a convenient distraction from these problems, it does very little to actually help clients cope with the underlying issues that led to the compulsive behavior.

As we write this, new inpatient treatment centers are opening around the world and in the United States, such as the Redmond, Washington, program, reStart. This is a 45-day inpatient facility completely devoted to Internet addiction recovery. Often addicts refuse treatment until they become deeply in debt, are about to lose (or have lost) their jobs, are facing legal charges, are threatened with divorce or separation, or are thinking about suicide. Once problems have become this severe, it is important to seek professional help for evaluation. Some addicts may require more or less time, so recommendations will be made following an initial assessment. In most cases, the treatment program or a residential care facility is specifically designed to fit the needs of the client, and most sessions focus on individual treatment, educational groups, and family therapy where appropriate to best manage and address the intense feelings surrounding the addiction.

The need to be online may be so powerful that treatment may require clients to go through a kind of detoxification program. In the same manner an alcoholic goes through a detox program to dry out, detox programs such as the Video Game Detox Center in the Netherlands have emerged to wean clients from excessive online use. While the concept of detoxification as part of the recovery from alcoholism is well understood, it is still a relatively new intervention applied to the Internet but one that must be explored in severe and intensive cases.

With the growing popularity of the Internet, increased awareness within the mental health field will help clinicians provide knowledgeable care and intervention for the Internet-addicted client. Since this is a new and often laughed-about addiction, individuals may be reluctant to seek out treatment, fearing that clinicians may not take their complaints seriously. Drug and alcohol rehabilitation centers, community mental health clinics, and clinicians in private practice should be aware of the negative ramifications of compulsive

use of the Internet and recognize the signs, which may easily be masked by other comorbid conditions or by legitimate use of the Internet.

While this book provides one of the first comprehensive resources to empirically examine Internet addiction, the field is still quite new and further research should continue to investigate its impact, risk factors, and treatment effects. Areas for future research should also explore systematic comparisons with various treatment modalities such as cognitive therapy, behavior modification, psychoanalysis, gestalt therapy, interpersonal therapy, group counseling, or in vivo counseling within an online community to determine their therapeutic impact and efficacy for this new client population. Future studies should also investigate treatment differences among the various types of Internet abuse and through the different therapeutic modalities. Studies should examine whether treatment outcomes vary along each subtype. Methodologically, as many studies rely on self-reported data to gauge changes in online behavior, psychological health status, and social functioning, the results may be biased. Because client self-reports may be inaccurate, future studies should include the requirement that the reports be verified by relatives or friends close to the client and/or by periodic computer monitoring to ensure greater reliability of self-reported data. Finally, as the mental health field devotes more resources to recovery from Internet addiction, future studies should evaluate how specific treatment intervention impacts long-term recovery. We know that many forms of psychotherapy are shown to be effective in the short term, but not efficient in the long term. 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 needs. In this same manner, matching which types of Internet addiction respond best to which treatments can increase outcome effectiveness, and such treatment matching is likely to increase long-term recovery.

To pursue such effective recovery programs, continued research is needed to better understand the underlying motivations of Internet addiction. Future research should also focus on how psychiatric illnesses such as depression or obsessive-compulsive disorder play a role in the development of compulsive Internet use. Longitudinal studies may reveal how personality traits, family dynamics, cultural aspects, or interpersonal skills influence the way people utilize the Internet. Last, more outcome studies are needed to determine the efficacy of specialized therapy approaches to treat Internet addiction and to compare these outcomes against traditional recovery modalities. This is especially true for various client populations impacted by Internet addiction—children versus adults, for instance.

The main theme emphasized throughout the chapters in the book and in our final chapter is prevention. Prevention of Internet addiction is the key element. We can see how prevention has been well established in alcohol and drug dependency. We know that awareness helps in prevention of many medical disorders. We understand that prevention works. Prevention and awareness

also play a significant role in Internet-related conditions. If we could institute more awareness programs for Internet addiction, people would not believe it is a harmless tool. As the various authors and contributors for this book have outlined, the Internet and technology in general have a potential impact. This certainly can be a positive impact, and again, our book is not meant to demonize the Internet and technology, but rather it takes the view that the establishment of responsible computing programs to help people understand the potential negative aspects will ameliorate the consequences.

It is our hope that this book will help clinicians facilitate their practices in this new and evolving field. Internet addiction has grown tremendously since first identified in 1996 at the American Psychological Association. It is a field with tremendous impact. Almost everyone all over the world utilizes the Internet for a wide variety of reasons. Still in its infancy, the Internet itself has had a tremendous impact. We have only begun to understand its full potential. The journey along the way has been incredible. The Internet has made life easier in many ways by its many applications. It has also made life more difficult through its potential for addiction. We can only hope that this new knowledge will spark more research to better understand the future of technology and how it will continue to influence our way of life.

Before concluding, we would like to thank all contributors to this book, from widely different countries, for helping with the team task of refining and improving the knowledge and therapies involved in the treatment of Internet addiction. We also thank John Wiley & Sons for believing in our project and for giving us all the necessary support.