Internet Addiction: A Handbook and Guide to Evaluation and Treatment Edited by Kimberly S. Young and Cristiano Nabuco de Abreu Copyright © 2011 John Wiley & Sons, Inc.

# CHAPTER 10

# Working with Adolescents Addicted to the Internet

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A DOLESCENTS MAY be particularly attracted to the Internet. This chapter reviews current research on adolescents and their Internet use. It includes a discussion of the typical online behaviors of adolescents, the benefits of using the Internet, and problems that can result from adolescents' online activities. Warning signs and symptoms that may indicate a significant problem in adolescents' Internet use are reviewed. The chapter also considers developmental issues, social dynamics (i.e., family factors and peer interactions), and cultural components that have been associated with adolescent Internet addiction. Finally, there is a review of how to treat adolescents who are addicted to the Internet, including ways to assess for a problem with the Internet and specific intervention strategies that might be used. There is a particular focus on potential family therapy interventions that could be used.

# INTRODUCTION

The use of the Internet has exploded and continues to grow exponentially. One group has been particularly attracted to this unique form of technology—adolescents. Adolescents may be attracted to the Internet for several reasons. Lam, Zi-wen, Jin-cheng, and Jin (2009) suggested that stressrelated variables are a reason for adolescents to get overly involved with the Internet. Adolescents may have limited coping skills, and the Internet is a convenient and available way for them to try to deal with the tension. Another reason is the ability to express one's true self, which can be particularly attractive to an adolescent dealing with identity development and self-concept issues (Tosun & Lajunen, 2009). The perceived anonymity of the Internet is also an attractive aspect for adolescents, allowing them to engage in behaviors they might not do or have access to in the real world (Beard, 2008). For example, adolescents may be much more willing to engage in the bullying or harassing of others, gain access to pornography, be exposed to sexual behaviors, and find opportunities to be rebellious toward authority figures (Dowell, Burgess, & Cavanaugh, 2009; Kelly, Pomerantz, & Currie, 2006).

This chapter reviews current research on adolescents and the Internet, including the online behaviors of adolescent, the benefits and problems that can result from their online activities, and warning signs and symptoms that may signify problematic use in adolescents. It also reviews the factors and social dynamics that have been associated with adolescent Internet addiction. Finally, there is a review of treatment options for adolescents, with a focus on family therapy interventions.

# ONLINE BEHAVIORS

There are 31 million adolescents in the United States (Tsao & Steffes-Hansen, 2008), with 90% of them having Internet access (Harvard Mental Health Letter, 2009), and more than half of adolescents interacting through social networks online (Williams & Merten, 2008). With this large number of adolescents involved with the Internet, it is important to examine and understand their online behaviors.

Lenhart, Madden, and Rainie (2006) report that nearly half of adolescents who are using the Internet do so in their homes and with a broadband connection. Accessing the Internet at school or a friend's house are other popular places to get online.

The types of online activities that adolescents engage in have broadened (Lenhart et al., 2006). For the most part, adolescent boys and girls engage in the same types of Internet activities (Gross, 2004). The exception to this is file-sharing and downloading content from the Internet, which is dominated by adolescent boys (Lenhart et al.).

Eastin (2005) found that adolescents use the Internet for information, entertainment, and communication. Their information use was measured in his study with items that asked the participants about how they had used the Internet to gather information. Entertainment usage was assessed through items that revolved around playing video games, listening to music, and watching movies. Communication behaviors were assessed by examining items that asked about participants' e-mailing and use of chat areas for social purposes. To a lesser degree, adolescents used the Internet to help develop their identities (e.g., successfully being able to find information online can help develop a sense of self-efficacy), improve their moods (e.g., entertainment media on the Internet could offset or lessen dysphoric moods), and improve their careers or social settings (e.g., gathering information about job opportunities and using the Internet to chat, meet, or e-mail with others). Adolescents also used the Internet to view aesthetically pleasing sights, waste time, and make life easier. In early studies, Gross (2004) reported that adolescents' interactions online are with friends who are also part of their daily lives and affiliated with their lives outside of the Internet. They also reported that their online social interaction takes place in private, through the two most popular communication applications (e-mail and instant messages), and the topics discussed are fairly common yet personal topics, such as friends and gossip (Gross, 2004; Lenhart et al., 2006). Interestingly, nearly 82% of adolescents (roughly 16 million) have blocked someone from communicating with them, as opposed to only 47% of adults (Lenhart et al., 2006).

Subrahmanyam, Smahel, and Greenfield (2006) monitored 583 adolescents in teen-only chat rooms that were portrayed as rooms for adolescents to hang out in and had no dedicated topics, as opposed to rooms that had dedicated topics such as romance, sports, and music. Over a two-month period, the researchers would enter the chat rooms as passive observers until 15 pages of transcript were collected per session. The transcripts were blindly coded for analysis. From 38 chat sessions collected, they recorded one sexual remark per minute and one obscenity every two minutes. However, even with this level of sexual and obscene behaviors, when looking at overall online adolescent behavior, bullying and harassment continued to be the most frequent problems online (Harvard Mental Health Letter, 2009).

Around 57% of adolescents who are online have created content for the Internet (Lenhart et al., 2006). Gross (2004) reported that 55% of online adolescents have used and created social networking profiles. When these personal profile pages of adolescents were reviewed, it was found that 58% included a picture on their pages, 43% revealed their full names, 27.8% listed the schools they attend, 11% revealed their places of employment, 10% listed their phone numbers, and 20% disclosed other online contact information such as their e-mail addresses (Hinduja & Patchin, 2008; Williams & Merten, 2008). Adolescents know that they shouldn't engage in some online behaviors or that they shouldn't disclose this personal information. Lenhart et al. (2006) found that 64% of adolescents admit that they do things online that they know their parents would not approve of them doing. Not surprisingly, 81% of parents said that their adolescents aren't careful with their online behavior and give out too much information.

Williams and Merten (2008) also found that 84% of online profiles described some type of risk-taking behaviors involving substances like alcohol, illegal drugs, stealing, vandalism, or some other type of crime. Some 27% of the profiles reviewed included statements about harm to self or others, including suicidal thoughts, discussions on fights or gangs, or images of weapons.

Williams and Merten (2008) further discovered that online profiles of adolescents had an average 194 friends in their social network and interacted with others an average of every 2.79 days. They proposed that online social networks are a primary way for adolescents to engage in interpersonal communication and maintain relationships on a regular basis. Williams and Merten described how blogging has become a standard form of communication among adolescents, comparable to cell phone use, e-mailing, and instant messaging. Teens are more likely to blog and read blogs than adults, with older girls blogging the most in the adolescent cohort (Lenhart et al., 2006). When Williams and Merten examined these blogs by adolescents, they found that themes often revolve around topics of romantic relationships, sexuality, friends, parents, conflicts with others, academics, popular culture, self-expression, eating disorders, depression, and self-harm. The researchers expanded on this finding by reviewing other research that found the top two reasons adolescents create blogs. The first is the need for creative selfexpression, and the second is to document and share personal experiences.

While the momentum of adolescents using the Internet has continued to increase, Lenhart et al. (2006) found that 13% of American teens do not use the Internet and almost half of those not using the technology have used it before but have since stopped. About one in 10 adolescents report having a bad experience online, that their parents restrict their use, or that they feel unsafe online. These nonusing teens were also likely to report not using the Internet because of a lack of interest, not enough time, or the inability to access the Internet.

# BENEFITS

Although it is easy to focus on the negatives, the Internet is not all bad. It has helped adolescents in many ways, and these benefits should be remembered. Some researchers (Beard, 2008; Williams & Merten, 2008) have explained how the Internet can help adolescents by allowing for increased positive communication and social interactions with others. This has allowed old relationships with peers and relatives to be reconnected and maintained, as well as permitted the opportunities for new friendships to develop. The Internet has also allowed people to find emotional support that may have been lacking. For example, Internet use was observed in one study as a way to help new students feel welcome to their new schools and initiate new friendships (Williams & Merten). Beard felt that the Internet has been a way for those who are isolated geographically to meet others and feel a part of a larger community. The Internet has also been a place for entertainment, with an abundance of games, images, news, and web sites to view. There are also educational benefits to this technology for adolescents. The Internet has allowed adolescents to access information that may have previously been difficult or nearly impossible to review. Likewise, this technology has allowed for adolescents to learn and be exposed to new and diverse cultures and ideas.

With regard to physical and mental health, Beard (2008) went on to say that the Internet can be a way for some people to get relief from anxiety and depression symptoms. Spending time online could help the person get some relief through distraction by engaging in online activities instead of dwelling on their symptoms. The Internet could also help the person gain needed support and education about their physical or mental health issue. It has even been suggested that the Internet may increase a person's sense of self-worth and self-esteem because it allows for others to demonstrate their knowledge and offer assistance and support to those who need help with their physical or mental difficulties.

Beard (2008) stated that this increased sense of self-worth and self-esteem could also occur when assistance is given to others based on their technology needs. For example, those who are knowledgeable can offer advice or demonstrate how to use various applications or programs to those less knowledgeable. The Internet has also allowed people to increase their knowledge about technology. For example, people can access reviews of new technology to ascertain the pros and cons of using or purchasing the technology, they can read user manuals or helpful sites on how their technology is used, or they can be more willing to upgrade to newer technology because of comfort or success over mastering previous technology. It has even been proposed that the Internet is a medium that has allowed for improvement of writing abilities and intellectual growth for a number of people. For example, people who might not normally write or journal can blog and obtain comments on their writing or even submit written works to sites for others to review and give feedback on. People may grow intellectually by having access to an abundance of material on unlimited topics or through discovering new information through Web searches on topics of interest.

#### PROBLEMS

Unfortunately, there are some negative consequences associated with the Internet. Beard (2002, 2008) said that although a benefit of the Internet is the plethora of information and the ability to access it, there are also issues with some of the content that can be obtained on the Internet. Exposure to excessive information can lead to misinformation, gossip, and dangerous information being quickly obtained and easily perpetuated. For example, it is relatively easy to inaccurately self-diagnose a physical problem or learn how to engage in self-harming behaviors without getting caught. There can also be difficulties trying to obtain desired information because of the overabundance of web sites that have to be reviewed and sorted through in order to find the wanted content. Besides dealing with a surplus of material, uncensored and unfiltered information can lead to other issues. For example, there could be increased access to pornographic material, which might also result in problems arising in multiple areas of the person's personal, academic, and professional life.

Beard (2002, 2008) commented on the potential degradation of the family and other interpersonal relationships because time that could be spent together is spent online. This could result in impatience, arguments, and strains in the relationships. Researchers (Beard, 2002; Beard & Wolf, 2001; Park, Kim, Cho, 2008; Young, 2009) have talked about the change in family relationships in more depth. With increased Internet use, the quantity and quality of family communication declines. There is less opportunity to talk with each other since the adolescent is spending more and more time online. The adolescent may ignore or miss aspects of the communication with family members because of preoccupation with online activities. Additionally, adolescents may begin to lie to their family and friends about their Internet use. Park et al. (2008) went on to talk about the decrease in family cohesion with adolescents addicted to the Internet. The bond that family members have with each other may begin to loosen, causing those dealing with the addicted adolescent to feel separated or disconnected. Besides communication and interpersonal relationship problems, the level of Internet use has also led to problems in schoolwork, extracurricular activities, and employment.

One main attraction to the Internet is the sense of anonymity that comes with using this technology. Adolescents can misrepresent themselves by constructing a personal profile online and depict themselves as how they see themselves or how they want others to view them (Williams & Merten, 2008). Since people can test out new identities and misrepresent themselves online, adolescents may be disappointed if an online friend is never met or disappointed after he or she is met (Turkle, 1996). Another danger that can result from misrepresentation is interactions with sexual predators, who can easily engage adolescents in this relatively anonymous environment (Beard, 2008; Dombrowski, LeMasney, & Ahia, 2004).

Beard and Wolf (2001) stated that a negative consequence of the Internet is the maladaptive use of this technology, commonly referred to as Internet addiction. Xiang-Yang, Hong-Zhuan, and Jin-Qing (2006) recognized that the inappropriate use of the Internet harms the user physically and mentally, and this harm is especially damaging for the youth. The notion of Internet addiction in youth has been viewed as something of importance by our society and research community and something that should be further examined. Li (2007) conducted a study in Zhengzhou City of Henan Province in China and found that problematic Internet use is occurring. The incidence of Internet addiction among the urban middle school students was 5% with no significant differences found in gender, grade, and the nature of the school environment. Further research is needed to determine what cultural risk factors exist with problematic Internet use and how factors such as gender and age can impact addiction among adolescents.

Since these potential negative consequences of using the Internet may occur and excessive Internet use could develop, some have attempted to limit the amount of time or types of activities that adolescents can do on the Internet. Tynes (2007) said that although it is important to recognize and understand these negative consequences, it is also important to remember that for the majority of adolescents, we may be doing them a disservice by limiting their use of the Internet. The educational and psychosocial benefits often outweigh the potential dangers that this medium provides. Therefore, the potential benefits should be kept in mind when considering the negative aspects of this technology. WARNING SIGNS AND SYMPTOMS OF PROBLEMATIC INTERNET USE

Many of the warning signs and symptoms that apply to people in general would be relevant to issues with Internet addiction found in adolescents. However, this population may also have some unique warning signs and symptoms that should be highlighted. As previously mentioned, as problems with the Internet develop, several areas of the adolescent's life may suffer, such as school performance, extracurricular activities, hobbies, and after-school employment (Beard, 2008). One reason this decrease in performance occurs is the lack of adequate rest because of online activities (Young, 1998a, 2009). Other warning signs that a problem is developing have been proposed (Beard, 2008; Beard & Wolf, 2001; Young, 1998a, 2009). These signs include behaviors such as poor self-care and weight loss or gain. The adolescent may have increased anger, irritability, edginess, apathy, and mood change. The adolescent may also start to be overly sensitive to questions about online use and act out, especially when time on the Internet is limited by adults.

Beard (2008) felt that changes or conflicts with parental and other real-world interpersonal relationships may occur as problems with the Internet develop. There may be changes in friendships and less time spent with others. Free time is replaced with online activities, resulting in strained relationships. As the adolescent withdraws from others, emotional attachment with those online may increase. The adolescent may even begin to justify the online behavior and resulting real-world relationship problems by believing that the excessive Internet use is really enhancing the person's peer relationships. As a result, the adolescent becomes more dependent on the social contact obtained while online. Additionally, the more adolescents engage in online activities, the more importance they tend to associate with the Internet (Williams & Merten, 2008).

The perceptions that adolescents have on how useful and beneficial the Internet is in their lives has been found to be a predicting factor in whether an adolescent could become addicted to the Internet (Xuanhui & Gonggu, 2001). With this specific population in mind, Ko, Yen, Chen, Chen, and Yen (2005) developed a diagnostic criterion intended for the diagnosis of Internet addiction in adolescents. They hoped that this criterion could provide mental health professionals with a way to communicate and make comparisons between patients. Their criterion consists of nine diagnostic conditions based on three main areas: (1) characteristic symptoms of Internet addiction, (2) functional impairment secondary to Internet use, and (3) exclusive criteria. Their diagnostic criterion shows some promise with high diagnostic accuracy, specificity, negative predictive value, acceptable sensitivity, and acceptable positive predictive value. Although this is a good start, further studies are needed if criteria for this specific population are to be established. These studies need to add additional validity, utility, and acceptance of the proposed criteria.

Some researchers (Beard, 2008; Young, 1998a) have pointed out that the Internet may not be the cause of the problem. Instead, the problem could be how the Internet is used, the sites accessed, the feelings created from being online or on a site, or the reinforcement obtained from online behavior. Likewise, problematic Internet use may be an indication of other problems in the adolescent's life. For example, Young (1997, 1998a) suggested that the Internet may attract adolescents with attention-deficit/hyperactivity disorder (ADHD) because of the abundance of stimulating and rapidly changing material that can be found online. Several researchers (Beard, 2008; Jang, Hwang, & Choi, 2008; Morahan-Martin, 1999; Young, 1997, 1998a) have stated that adolescents may use the Internet to help alleviate depression, anxiety, obsessive-compulsive disorder, social phobia, guilt, loneliness, family discord, and other real-life problems. Unfortunately, as a result of this avoidance behavior, the problems may grow and now feel even more difficult to endure. This could result in the adolescent feeling a deeper need to go online to ease these states.

# RISK FACTORS AND SOCIAL DYNAMICS

There are a variety of risk factors and social issues that adolescents face, and as a result, these aspects of their lives could contribute to their Internet addiction. The time period of adolescence provides unique issues and obstacles that the adolescent must deal with during this phase of life. How well and effectively the adolescent conquers and maneuvers through these factors and issues can have a lasting impact on their online behavior.

*Developmental Aspects* Adolescents are developing social skills during this period that can be used throughout the life span. There has also been some concern that the Internet may help an adolescent escape from face-to-face social interactions and hinder the development of certain social skills that will be needed later in life (Beard & Wolf, 2001).

Adolescents are also dealing with many developmental challenges during this period of life. One of these developmental tasks is the formation of a unified identity. As briefly mentioned earlier, on the Internet, people can create new identities to demonstrate how they view themselves or how they want to be viewed, as well as misrepresent themselves (McCormick & McCormick, 1992; Williams & Merten, 2008). Researchers (Beard, 2002, 2008; Young, 1997, 1998a, 1998b) have stated that this aspect of the Internet is attractive to adolescents and they could be particularly susceptible to this behavior since they are often discontented with their looks and internal factors. The Internet gives the adolescent a chance to try on different personas to determine what fits for them and potentially meet unfulfilled needs. Adolescents can develop online personas through various applications such as online role-playing games and chat rooms.

The anonymity of these sites allows the adolescent to take on screen names or alternative handles that do not represent who they are in real life. Although not as anonymous, Kramer and Winter (2008) discussed how users of social networking sites have the opportunity to consider which aspects of their personalities they want to present in their profiles or which photos convey the best images of them. As a result, they have more control over their self-presentations and can be more strategic than they can in face-to-face encounters. Surprisingly, the researchers found that these self-presentations have been fairly accurate, indicating that there is not as much interest in playing with one's identity on these types of social networking sites.

Additionally, there has been some fear that engaging in this behavior of trying on different personas could potentially delay the appropriate resolution of an identity crisis. Young (1997, 1998a, 1998b) also warned that as the online identity develops, the adolescent may begin to blur the distinction between one's real-world personality and the online persona. Others have argued that even though these new identities and behaviors can be of concern to adults, the behaviors may not be as detrimental as once feared and could be a safe and positive way for self-expression and experimentation (Williams & Merten, 2008). How much this medium has really been used to explore identity issues has also been questioned. Gross (2004) found that when adolescents pretended to be someone else online, it was more likely to be motivated by a desire to play a joke on friends than to explore a desired or future identity.

*Family Dynamics* The Internet could potentially provide a backdrop for several critical family problems (Oravec, 2000). Young (2009) commented on how family stability can be disrupted through events such as separation or divorce. The adolescent may stop participating and interacting in real-life relationships, instead focusing on online relationships that the adolescent feels good about and lessening the interaction with unfulfilling real-life relationships.

Family dynamics, disruptions, and stress can promote the onset of addictive behavior as well as influence how the family enables, encourages, and overlooks the addictive behavior (Stanton & Heath, 1997; Yen, Yen, Chen, Chen, & Ko, 2007; Young, 2009). For example, young people in families that have conflict and poor communication styles are more likely to turn to the Internet as a way to avoid conflict and gain support (Beard, 2008; Yen et al., 2007; Young, 2009), and adolescents who have parents and siblings who habitually abuse substances are more likely to seek out the Internet (Yen et al., 2007; Young, 2009). Turning to the Internet may be an attempt to cope and gain some psychological relief from the dynamics, disruptions, and stress within the family (Beard, 2008; Eastin, 2005).

Families may also rationalize the adolescent's problematic Internet use as a phase and convince themselves that the problem will resolve itself over time (Young, 1998a). Additionally, family factors have been found with Internet addiction in adolescents and substance use. Adolescents whose parents abuse substances are more likely to have an increased risk of using the Internet as a means to cope with problems (Yen, Ko, et al., 2008; Yen, Yen, Chen, Chen, & Ko, 2007).

The family's view of the Internet could also play a role. Young (1998a) stated that many parents are unaware of the online behaviors of their children.

Other parents have banned Internet use for fear of the content that their children may be exposed to online. Neither being unaware nor prohibiting online activity will help parents deal with the issues that may arise from their child's Internet use. Likewise, the adolescent's primary caregiver may view the Internet only in positive terms, or the caregiver may also be engaging in problematic Internet use. As a result, the caregiver is serving as a model for excessive online behavior (Beard, 2008).

*Interpersonal and Cultural Factors* Most people have a need to feel connected to others, and the Internet has provided a new way for this to occur. Beard (2008) felt that adolescents may be particularly attracted to the Internet because they often feel isolated. As a result, the bonds that are formed over the Internet gain even more significance in the adolescent's life. Unfortunately, the Internet may provide only the illusion of a close relationship since these connections may be artificial and easily severed with the click of a mouse.

Adolescents may also deal with peers modeling, expecting, and pressuring them to engage in various online activities or behaviors (Beard, 2008). As previously mentioned, adolescents will often use e-mail and instant messages with friends (Gross, 2004). They also engage in online gaming where they can play against their peers (Young, 2009). Applications that involve twoway communication (e-mail, messaging, and gaming) are thought to be the applications that are most addictive (Beard & Wolf, 2001). As a result of these interpersonal factors, the adolescent may insist on regularly engaging in certain online activities, for various amounts of time, in order to maintain a sense of acceptance and social status.

Additionally, Beard (2008) felt that there are cultural pressures for adolescents to use the Internet more and more. Adolescents receive messages from our culture that they need to become a part of a technologically advanced society if they want to succeed. There is also pressure to use technology in school and work in order to get ahead, be competitive, and be better than others.

Research is actively being done in Taiwan, Korea, and China regarding adolescents and addictive online behavior (Jang et al., 2008; Ko, Yen, Chen, et al., 2005; Lam, Zi-wen, Jin-cheng, & Jin, 2009; Li, 2007; Xiang, et al., 2006; Xuanhui & Gonggu, 2001; Yen, Ko, et al., 2008; Yen, Yen, et al., 2007). These studies have helped us begin to see how various factors in some cultures are influencing the development and maintenance of Internet addiction. Whether these factors are universal or culture specific has yet to be explored. However, this research is a good starting point for us to begin looking at the cultural components that impact Internet addiction.

# TREATMENT

Before treatment can begin, assessment of the adolescent should occur and be ongoing. Beard (2005) described the use of a clinical interview and a

standardized assessment instrument as a way to understand the signs, symptoms, and development of the problematic Internet behavior. His assessment protocol is based on the biopsychosocial model of behavior. As a result, there are suggested questions related to biological, psychological, and social factors that could be contributing to the adolescent's Internet use. The biological questions focus on biological symptoms or problems that may occur in a person engaging in an addictive behavior (e.g., Does your Internet use interfere with your sleep?). The psychological questions focus on how classical and operant conditioning as well as thoughts, feelings, and behaviors may play a role in initiating and maintaining behavior of those addicted to the Internet (e.g., Have you ever used the Internet to help improve your mood or change your thoughts?). The social questions focus on familial, social, and cultural dynamics that prompt excessive Internet use (e.g., How has your Internet use caused problems or concerns with your family?). Besides these areas, Beard also included questions related to the presenting problem (e.g., When did you begin to notice problems with your Internet use?) and questions related to relapse potential (e.g., What seems to trigger Internet use?).

Some researchers (Caplan, 2002; Davis, 2002; Ko, Yen, Yen, Chen, Yen, & Chen, 2005; Widyanto, Griffiths, Brunsden, & McMurran, 2008; Young, 1995, 1998a) have developed Internet addiction self-report inventories that can be completed by the adolescent or someone knowledgeable about the adolescent's online behavior. Although these instruments are a good start and some research has been completed on the psychometric properties of some of these instruments, additional research on the validity and reliability of these instruments could be done. Once an assessment is completed and an appropriate diagnosis can be given, then treatment planning and implementation with the adolescent can begin.

Marlatt (1985) believed that effective treatment for addictive behavior should revolve around the assumption that people can learn effective ways to change their behavior regardless of how the problem developed. Since addictive behaviors are often the result of multiple factors, interventions need to include strategies from a wide array of options, including behavioral, cognitive, and lifestyle changes. For example, the adolescent may need some help in making specific modifications to the environment so that the problematic Internet use will not continue.

As Beard (2005) pointed out, the use of technology and the Internet is becoming more and more ingrained in our society. It may be impossible for the adolescent to completely stop all use of the Internet and to not have some contact with online content. Therefore, the idea of just pulling the plug and going cold turkey for the Internet addict is not very realistic. Instead, the focus on treatment should be exploring ways to engage in controlled Internet use. This could be done by helping the adolescent define clear limits on his or her Internet use. Likewise, the adolescent should be aware of and learn to identify triggers that could cause a relapse so that maladaptive behavior patterns can be avoided and stopped from recurring. The adolescent may need to be reminded of treatment strategies and interventions to help control Internet use, as well as where to seek help if more support is needed.

# FAMILY THERAPY

Beard (2008) stated that when working with adolescents, the therapist is often working and intervening with the caregivers and other family members. As a result, family therapy is often a primary treatment modality. Liddle, Dakof, Turner, Henderson, and Greenbaum (2008) described the Multidimensional Family Therapy (MDFT) model to treatment of an addicted adolescent. With this model the therapy services are provided in various settings and formats such as in the office, in the home, brief formats, intensive outpatient therapy, day treatment, and residential treatment. A therapy session may involve the adolescent alone, the parent(s) alone, or with the adolescent and parent(s) together. Who is involved with a particular therapy session is based on the specific issue to be addressed in that session. MDFT can be delivered from one to three times per week, and the course of treatment is typically four to six months based on the treatment setting, the severity of the adolescent's problems, and the family functioning.

In their study, Liddle, Dakof, Turner, Henderson, and Greenbaum (2008) treated the family across four domains (adolescent, parent, interactional, and extrafamilial). The adolescent domain focused on getting the client engaged in treatment, improving communication skills with parents and adults, developing skills related to coping with everyday problems, emotion regulation and problem solving, improving the client's social skills as well as his or her school and work performance, and establishing alternatives to addictive behavior. The parent domain focused on getting the parents engaged in treatment, improving their behavioral and emotional involvement with the adolescent, developing more effective parenting skills such as monitoring the adolescent's behavior and clarifying their expectations of the adolescent, setting limits and consequences, and addressing the psychological needs of the parents. Additionally, caregivers may want to examine their own Internet behaviors and explore ways that they may model appropriate Internet use (Beard, 2008). Liddle et al. (2008) went on to describe how the interactional domain is focused on decreasing family conflicts, increasing emotional attachments, and enhancing communication and problem-solving skills. Finally, the extrafamilial domain focused on developing family competency in the social systems in which the adolescent is involved (e.g. educational setting, juvenile justice, settings where the adolescent spends spare time).

Beard (2008) added that it is also necessary to examine previous and current family problems since these may be factors in why the adolescent sought out the Internet and began to use the technology in a problematic way. Also, aiding the family in how to handle crises and problems as well as stabilizing the family unit are often goals of treatment.

Just as Liddle et al. (2008) and others (Beard, 2008; Young, 2009) have described, communication skills need to be worked on within the family unit. Beard said that lecturing the adolescent is typically a futile and unproductive intervention. Family members need to learn how to effectively listen to the adolescent, acknowledge the feelings and thoughts the adolescent is experiencing, and convey messages in a way that the adolescent understands and is receptive to hearing. By increasing appropriate communication, the family will be better able to understand the issues at hand and how best to deal with them. Likewise, caregivers may want to take a proactive stance and begin talking to their adolescents early on about the Internet, just as they might do when talking to them about drugs and alcohol.

Young (1995) suggested that the family be educated on how the Internet can be addictive for some people. The family is also encouraged to help the adolescent find new interests and hobbies, take time for himself or herself, and find other activities to fill in the time gained by decreasing the amount of Internet use. Stanton and Heath (1997) suggested that the families need to be supportive and learn how to validate the adolescent for any effort being made. At the same time, they do not want to enable problematic Internet use or aid the adolescent with excuses for why he or she missed school or failed an assignment.

Researchers (Beard, 2009; Young, 1998a, 2009) have advised that mental health workers help the caregivers establish appropriate rules, clear limits, and goals for Internet use. Caregivers also need to be consistent with the new rules and limits that are established. Software can even be used to help monitor Internet use and ensure that the rules and limits are being followed appropriately. If this is not occurring, then the issue can be addressed in treatment and how to alter the variables that caused the limits to not be followed can be explored. Likewise, the caregivers need to learn how to work together. If there is a division between them, then the adolescent may use this to create an even bigger divergence.

Working with siblings may also be vital since they are a part of the family system. It is possible that since siblings are in the same environment as the addicted adolescent, they could be enabling the addictive behavior of the client or be engaging in addictive behavior themselves. This should be examined during the assessment and treatment process. Even if the siblings are not engaging in addictive behavior, implementing some of these strategies within the whole family unit may be useful in helping establish a more structured home environment and better communication among family members. Young (2009) also talked about using a sibling as someone who could assist with implementing some of the treatment interventions. For example, a sibling may be a good person for the addicted adolescent to practice or role-play new communication skills with in a comfortable setting.

Young (1995, 1998a) further recommended that families look for support groups for Internet addiction. If these cannot be located in the immediate

area, then other support groups such as Al-Anon could provide information about dealing with any addiction in the family. Seeing that others are dealing with addictive behaviors can help normalize the family experience, increase a sense of validation, and decrease the sense of isolation often associated with addiction. Likewise, caregivers may want to seek support from parent associations affiliated with schools in order to connect with other caregivers who are experiencing similar difficulties. Although it may sound contradictory, families may find support online through various sites that have been developed to provide education, information, and support for families dealing with addiction as well as sites that focus on the treatment of Internet addiction.

# CONCLUSION

Problematic Internet use is an issue for some adolescents. The causes of Internet addiction are complex and multifaceted (Wang, 2001). The need to continue the examination and awareness of problematic Internet use in adolescents, as well as in other populations, is something that those in the mental health field should do. Mental health professionals should also keep an open mind, take these issues seriously, and actively assess potential problems with every new patient. As the research in this area continues, we will further enhance our ability to assess, diagnose, and treat those dealing with Internet-related issues. Difficulties for adolescents that could arise with the use of new technologies should be examined in a proactive manner instead of waiting after the fact and trying to deal with the issues that have already developed. Technology is going to continue to be an integral part of our everyday lives. Being aware of the potential positive and negative impacts of the Internet can only bring positive results to adolescents and those involved with them.

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