



CAUGHT IN THE “NET”

Recognizing Internet Addiction in Youth

Thirteen-year-old Ryan¹ is excited to receive his first computer and begins spending much of his time learning to use it. His parents dismiss his interest as a phase, but his computer time steadily increases until he is regularly using it more than 10 hours a day. He consumes caffeine drinks in order to stay up late to visit chat rooms and play games. He has difficulty waking up for school and regularly forgets to shower. His teachers notice increasing problems with his hygiene and attention in class, and his grades significantly decline. He skips family gatherings to spend more time on the computer and loses touch with his friends. He is eventually dropped from his baseball team for skipping practices. However, he is not bothered, as his problems and stress seem to disappear the moment he gets online. He has formed several online friendships and spends his time in school ruminating on what he will do the next time he is online. When his parents try to reduce his computer time, he becomes uncharacteristically aggressive, making threats and throwing tantrums. They finally get him to agree to give up his computer for two weeks, but after that time, he immediately reverts to his old ways.²

The Nature of Internet Addiction

The use of technology has exploded over the past few decades as access to high-speed Internet has become more widely available. The educational and social benefits are many: wider access to educational knowledge, increased work efficiency, and ability to stay connected to social networks. However, a growing number of experts, including Kimberley Young, founder of the Center for Internet Addiction; and David Greenfield, founder of The Center for Technology and Internet Addiction, have voiced concern that some computer users are becoming dependent on the Internet to the point that their behaviors resemble that of full-blown addiction.³ Internet addiction refers to a pathological use of computers or technology that is characterized by intrusive urges to engage in online behaviors to an extent that contributes to significant impairments in daily life (e.g., relationships, school, physical health). Internet addiction can take many forms, such as excessive gaming, problematic online gambling, preoccupation with online sexual content, compulsive use of social media or chat rooms, and excessive and compulsive e-mailing or texting. Emerging research shows that brain activation patterns

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found in individuals who are addicted to the Internet are similar to those found in individuals with chemical addictions.⁴ Griffiths⁵ observed the following elements, based on the six core factors seen in addiction disorders, to be present in Internet addiction:

1. *Salience.* The Internet takes priority over other domains [e.g., family, work] in an individual's life. [As indicated in the above example, the desire to use the Internet dominates Ryan's thinking [e.g., constantly thinking about being online when offline], feelings [e.g., experiencing cravings], and behavior [e.g., reduced social activity].]

2. *Mood modification.* Internet use becomes a coping strategy for relieving negative moods or stress. Users may experience a "high" or a sense of euphoric numbing. [Ryan uses the Internet to cope with the problems caused by his excessive computer use.]

3. *Tolerance.* Users increase their time online in order to extend or intensify mood-altering effects. [Ryan increasingly wants to spend more time online.]

4. *Withdrawal.* Users experience negative symptoms [e.g., moodiness, irritability] when their Internet use is eliminated or suddenly reduced. [Ryan shows uncharacteristic aggressiveness when his parents try to set boundaries on his computer use.]

5. *Conflict.* Excessive Internet use begins to impair users' physical, social, educational, and occupational functioning; causing them to experience a loss of control. [Ryan's grades fall, he is dropped from his team, and becomes estranged from family and friends.]

6. *Relapse.* Problematic behavioral patterns return after a period of abstinence or control. [Ryan immediately relapses when reunited with his computer.]

Prevalence of Internet Addiction

Students are a group who are particularly at risk for developing Internet addiction. Researchers have found evidence of Internet addiction among adolescents and young adult students all over the world, with prevalence rates differing by country. For instance, estimates range from 4 percent for U.S. high school students⁶ to 10.7 percent of adolescents in South Korea⁷ and 13 percent among UK university students.⁸

Adolescents and young adults are thought to be especially vulnerable to this form of addiction, as Internet use

may become a strategy for coping with developmental stressors common to their age group, such as identity formation and the establishment of intimate relationships. Students may turn to the online world to escape from difficult developmental tasks because online relationships are anonymous and allow the individual to take on any persona desired.⁹ However, reliance on such behaviors can result in a preference for online versus face-to-face interactions, leading to excessive Internet use and problematic psychological and social outcomes.¹⁰

Risk Factors for Developing Internet Addiction

Emerging research points to genetic risk factors for Internet addiction. One study found that individuals exhibiting problematic Internet usage were also more likely to be carriers of a particular gene mutation that



plays a predictive role in nicotine addiction.¹¹ In terms of personality factors, shyness, social anxiety, low self-esteem, lack of a strong sense of self, loneliness, and introversion have been seen as significant predictors of problematic Internet use.¹² Additionally, individuals with deficits in social skills are more likely to prefer online social interactions to face-to-face interactions.¹³ Such individuals may become attached to the Internet because online relationships produce less anxiety than face-to-face relationships; however, as use becomes excessive, individuals may not develop the social skills necessary to form satisfying offline relationships.

Having other psychological problems also appears to be a risk factor for problematic Internet use. Research indicates that nearly 80 percent of individuals who have Internet addiction also suffer from other psychological disorders,¹⁴ such as depression and anxiety,¹⁵ social phobia,¹⁶ ADHD,¹⁷ and other addiction or impulse-control disorders.¹⁸ Thus, Internet use can become a form of self-medication; distressing experiences in offline life are soothed or numbed by Internet use that provides a “high” or sense of escape. Problems in the environment, such as poor parent-child relationships, also render individuals more susceptible to problematic and excessive Internet use.¹⁹

Research indicates that problematic Internet use contributes to negative consequences in virtually all domains of functioning. Excessive Internet use appears to change the structure of the developing adolescent brain, particularly in areas associated with cognitive and behavioral control.²⁰ Excessive time spent using the Internet also has physical repercussions such as insomnia,²¹ back pain, sight problems,²² and poor hygiene.²³ Pathological Internet users also experience negative psychological effects, such as losing interest in activities that they used to enjoy and developing distorted thoughts about themselves and the world [e.g., that they are effective only on the Internet and that the online world is the only place where they are respected and safe].²⁴ These factors contribute to poor functioning across academic and interpersonal domains. One study indicated that problematic Internet use is negatively correlated with high grades,²⁵ likely because the inordinate amount of time spent online interferes with study habits, sleep, and concentration. The Internet begins to take precedence over other life roles, causing the user to neglect other relationships,²⁶ resulting in detrimental effects on families and friendships. [See Box 1.]

Evidenced-based Prevention and Intervention Programs

Efforts to prevent addiction can be enacted in family, church, and educational spheres. Children and adolescents who lack rewarding or nurturing relationships and who have poor social skills and difficulty making friends are more susceptible to turning to virtual interactions to meet their need for attention and friendship. Those at a higher risk may remain invis-

The Internet provides opportunities for children and young adults to browse, search, and research topics of interest, share images with friends, post and watch videos, network socially, play games, or chat on message boards and forums through online games, game consoles, webcams, or apps. These activities, while entertaining and enjoyable, can also expose children and young adults to a variety of dangers online, many of which result from online behaviors such as friending individuals they don't know or sharing personal information online. Internet users are easily exposed to inappropriate, explicit content, sexual predators seeking to groom them, identity theft, cyberbullying, cyberstalking, and more. In addition to being detrimental to families and friendships, Internet use can result in damaged reputations, victimization, and even violent acts committed against users. The Websites below provide helpful tips schools can share with parents through e-newsletters, letters sent home, and parent-teacher association meetings.

What Risks Do Children Face Online? The NetSmartz411 Website clearly outlines the dangers children face online and what can be done to protect them: <http://www.netsmartz411.org/NetSmartz411/KnowledgeDetail.aspx?id=400232>. All Websites in Box 1 were accessed February 1, 2016.

National Society for the Prevention of Cruelty to Children gives several tips on how to talk to children and young adults about online safety as they use social media and devices such as mobiles, Smartphones, tablets, and more: <https://www.nspcc.org.uk/preventing-abuse/keeping-children-safe/online-safety/>.

Stay Safe Online Teen and Young Adult Resources provides links to resources designed to help older teens manage online reputation, privacy on mobile apps and in social networks, and avoid sexting, sextortion, and cyberbullying: <https://staysafeonline.org/data-privacy-day/teen-and-young-adult-resources>.

Microsoft YouthSpark Hub Resources and Research shares a variety of resources to help teachers and parents teach students how to be safe online, protect their identity, and text and share photos safely: <https://www.microsoft.com/about/philanthropies/youthspark/youthsparkhub/programs/online-safety/resources/>.

ible because they tend to be quiet, shy, socially awkward, depressed, and isolated. Finding these marginalized individuals, nurturing them, coaching them, and actively seeing that they are included can be saving. One of the most severely shy clients I [CF] ever worked with told me that his life was “saved” by an outgoing peer in graduate school who took him under his wing and would not take “no” for an answer whenever a social opportunity arose. This shows that building strong bonds with parents, youth ministers, and teachers can provide the most basic form of prevention for addiction.

The next step in prevention is increasing awareness of the problem. Administrators and school counselors can raise awareness during in-service staff programs and parent-teacher meetings by distributing information regarding the basics of Internet addiction, warning signs [see Figure 1], and local resources. Because inadequate social skills and lack of a strong sense of self appear to be risk factors for Internet addiction, Young²⁷ suggests that the adoption of a broad prevention approach such as Life Skills Training [which has been successful in prevention of tobacco

use among adolescents by enhancing social and personal competence) may also be effective for preventing Internet addiction.²⁸ On university campuses, residence-hall directors can offer educational programs, similar to drug and alcohol prevention programs, that educate students regarding the warning signs and risk factors of Internet addiction. Seminars can also be conducted to educate faculty, counseling staff, and administrators about Internet addiction and how to recognize it in their students. Schools can help educate parents about preventing Internet addiction by sharing tips on proper monitoring of Internet use, including setting boundaries for when and for how long the computer is used, and by frequently encouraging participation in activities that are incompatible with Internet use.²⁹ In church communities, ministers have a particularly important role to play in prevention and can use similar techniques to raise awareness among families and reach out to youth in whom they recognize warning signs.

In terms of intervention, support and faith are crucial in the recovery effort. In treating addiction as a spiritual disorder, the 12-step program for chemical addictions emphasizes accepting one's own powerlessness

Figure 1. Warning Signs of Internet Addiction in Adolescents*

1. Internet use interferes with normal everyday activities such as getting ready for school, family dinners, and sports practices.
2. Normal bedtimes are ignored, and the adolescent appears exhausted in the morning.
3. Users sneak online or lie about the extent of Internet use.
4. Users can't focus on homework long enough to finish an assignment without logging on to the computer or tablet for recreational use (e.g., social media, gaming).
5. If parents try to cut down their Internet time, adolescent users become belligerent and abnormally irritated or violent.
6. Users lose interest in things that used to excite them, such as hanging out with friends or playing sports.

*Kimberly S. Young, "Parenting in the Digital Age": <http://netaddiction.com/childrenonline>. Accessed February 20, 2015.

and the need for God's divine intervention to lead the individual struggling with addiction away from the path of abuse.³⁰ Step 2 states, "Came to believe that a Power greater than ourselves could restore us to sanity."³¹ This is not to say that one can "pray an addiction away," as wonderful and powerful prayer is. Rather, it speaks to the human need to quench the deepest thirsting that cannot be satisfied by whatever addictive behaviors compulsively and repetitively seek to fulfill. Jesus invited, "Let anyone who is thirsty come to me and drink" (John 7:37, NIV).³² Coming to Jesus means coming to be loved and accepted so that "rivers of living water will flow from within" (John 7:38, NIV). Teachers, clergy, family, and friends can play an important role in helping individuals recognize the extent of damage their excessive Internet use has been causing in their lives and guiding them to the appropriate help.

Once an individual is motivated for recovery, behavioral modification can be implemented with the support of loved ones or a professional therapist. This can include setting a timer for usage, matching time spent

online with in-person social interactions, and increasing scheduling of non-computer-related activities. If modification attempts are unsuccessful or if the person is suffering from an underlying psychological disorder such as depression, professional counseling may be warranted. Emerging research supports the use of cognitive-behavioral therapies (CBT) as an effective treatment for Internet addiction.³³ CBT highlights how underlying distorted thoughts about oneself and the world (e.g., I am weak when I am offline, but online I am somebody.) are linked to problematic and compulsive behavior and teaches skills for changing those thoughts and behaviors. For many, social skills training, building self-esteem, and treating co-morbid psychological disorders will also be a focus of treatment, as these factors likely are contributing to the addiction.

For adolescents, a combination of individual and family therapy is recommended³⁴ and can even be implemented in school settings. In family approaches, the psychotherapist meets with individual members of the family and then meets regularly with the entire family to support the target individual (the one presenting with Internet addiction); everyone is made partly responsible for the problem, rather than blaming one family member. In a recent study of Chinese adolescents with Internet addiction, a six-session family therapy that focused on building parent-adolescent communication skills and training parents to address their child's psychological needs (e.g., autonomy, interaction, achievement) was effective in significantly reducing Internet addiction behaviors.³⁵ Joining 12-step programs (such as Internet and Tech Addiction Anonymous, <http://www.netaddictionanon.org/>) or support groups can also be tools for recovery. Rather than abstinence, learning to manage and regain control over Internet use, as well as treating underlying problems leading to compulsive use, are principles in effective recovery.

Conclusion

While in the process of writing this article, I (CF) was visiting a beautiful valley deep in Argentina's countryside. Yet, something felt wrong—my cell phone had neither signal nor access to the Internet. Really?! For those in my generation, this experience may only be a minor inconvenience, as I was quickly able to return to the Andes and enjoy God's creation. However, for those in my generation (MV), this experience may be an inkling of something much more pervasive. Internet addiction is a phenomenon that is quickly but silently invading homes and afflicting youth. It is thus a growing concern for parents and educators.

Most people rely on the Internet for daily tasks and enjoy using it for personal benefits, and thus the Internet itself is not the enemy. However, for vulnerable individuals who are lonely, shy, have low self-esteem, inadequate relationships, and who may be struggling with depression or anxiety, the Internet can become a tool for escape and relief. Unknowingly, addiction can develop as the user's dependency on the Internet to meet social and emotional needs increases. For individuals with an addiction, the Internet becomes the organizing principle of their lives, thus pulling them farther away from the natural order and human experiences God intended.

Research³⁶ shows that problematic Internet use can have long-lasting negative consequences, including changes to the developing brain and severe impairment in academic and social functioning. Parents and educators are encouraged to be watchful for signs of addiction in their young people. Because Internet use becomes pathological when it takes the person away from real life, young people's faith and relationship with God can be pivotal in helping them recognize how their behaviors are di-

verting them from God's calling. With ongoing support from loved ones and professionals, Internet addicts can learn to accept the need for divine intervention in reorganizing their priorities so that the Internet becomes a tool that is used in a healthful manner. ✍

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