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 14

Systemic Dynamics with Adolescents Addicted to the Internet

FRANZ EIDENBENZ

As has happened so often in the history of humankind, a new advance in communication technology is now leading to shifts in social and economic paradigms. Ultimately, we see that the Internet opens a whole new ways of looking at the world. Nowadays, the time we have for learning how to make beneficial use of information and communication technology (ICT) is limited. ICT is advancing at an unprecedented pace. Our day-to-day reality has been fundamentally changed over the past decade by new communication capabilities and the flood of information they have unleashed. The Internet generation faces a situation totally different from what their parents have faced. The dynamic rate of change allows no role models anymore, no points of reference. Parents and educators can no longer ask each other: Now how did we handle that? They are familiar with other risks on the road to adulthood but often lack personal experience with cyberspace. They are the first generation challenged to set limits for their children in an area in which the children know more than they do. They should not be daunted by this new situation. They can still draw on their life experiences to set limits. Access to the Internet and cell phones makes young people and children more independent from the adult world, but this independence entails risks as well as opportunities.

ADDICTION AND SYSTEMIC THERAPY

Addiction research shows that family influences play a significant role as risk factors for substance abuse and dependence disorders in youth (Andrews, Hops, Ary, Tildesley, & Harris, 1993; Barker & Hung, 2006; Brook et al.,

1998; Loeber, 1990; Sajida, Hamid, & Syed, 2008; Yen, Yen, Chen, Chen, & Ko, 2007).

Substance abuse in young people is associated with family conflicts, especially with a lack of family communication and a family's inability to resolve problems and conflicts. Psychological problems and a malfunctioning family are crucial risk factors in promoting dependence behavior in young adults (Sajida, Hamid, & Syed, 2008). Kuperman et al. (2001) described and covered in their study the following risk factors for the development of alcohol dependence at a young age: negative parent-child interaction, difficulties with school and human interaction, and early experiences experimenting with different substances (Kuperman et al., 2001).

Liddle and his team reported on protective factors that reduce the probability of developing substance dependence. They include, among others, good academic performance and general family skills (Liddle et al., 2001). Resnick et al. (1997) reported in their research on a number of important protective factors that promote the healthy, nurturing development of young people. Young people feeling close to their parents, perceiving them as caring and having a positive relationship with them, is one influence that has proven positive for development. Others are parents having high academic expectations of children and parental presence and interest in young people and their lives.

These findings are considered highly relevant. After all, a young person's family environment and in particular the perceived family support, the parents' methods and attitudes, as well as the parent-child relationship have all been described in research as not only protective factors for preventing drug dependence but as predictors for the success of therapy in dependence treatment (Brown, Myers, Mott, & Vik, 1994).

These results strongly suggest that the family environment should be included in the treatment of young people for dependencies. Schweitzer and Schlippe (2007) presented systemic approaches as their therapy of choice for young people with addiction problems, noting the close but often ambivalent relationships many addictive clients have with their parents. Numerous studies have shown that planned and continual work with families, as opposed to their occasional inclusion, is efficient and effective especially with adolescents (Sydowe, Beher, Schweitzer, & Retzlaff, 2006). In various studies, Liddle and his team (Liddle, 2004a; Liddle et al., 2001) showed and proved the efficiency of multidimensional family therapy (MDFT). This form of therapy proved effective in reducing substance abuse and in promoting pro-social behavior, improved academic performance, and better functioning family life. Family-oriented interventions have the maximum effect in the treatment of addictive young people, so many are calling for their more frequent use. When compared to cognitive behavioral therapy (CBT), MDFT has proven the more lasting treatment method (Liddle, Dakof, Turner, Henderson, & Greenbaum, 2008).

In a meta-analysis of 47 randomized controlled trials, the effectiveness of systemic family therapy was demonstrated for young people with substance disorders and psychiatric comorbidities, and its effect remained stable over longer catamnestic periods (Sydowe, Beher, Schweitzer & Retzlaff, 2006).

In connection with the treatment of online addiction, Barth and his team (2009) mentioned that parents are becoming a focal point of therapeutic interest. Multiple interventions are undertaken to strengthen parental monitoring. The intent is to focus on the young person's problematic behavior as well as to examine its role in family dynamics.

In their study, Yen and his team compared substance-linked addictions with online dependency. They showed that Internet addiction and substance dependencies among young adults occur in connection with the same negative family factors (Yen, Cheng, Chen, Chen, & Chih, 2007). This fact suggests that systemic therapy is effective for online addiction and for substance-linked addictions and can achieve comparable effects. More precise research is needed in this area, however. Given the existing and increasing need for treatment, the field cannot afford to wait for scientific proof of this effectiveness. The object at present must be to gather experience from actual clinical practice to develop treatment approaches and then evaluate them scientifically.

ONLINE COMMUNICATION

The Internet and the applications associated with it are virtual spaces that can be viewed as separate worlds where different conditions and rules of social interaction apply. Knowledge of these conditions and rules is essential to the understanding and treatment of online addicts.

Face-to-face or offline communication is more personal and identities are defined. Making contact is complex and involves anxiety; separation is sometimes difficult. The perception of self and others is complex and all five senses are involved. That means that in general offline communication is more sensual and connected with physical experiences (Eidenbenz, 2004).

Screen-to-screen or online communication creates the possibility of anonymity or a selectable identity. People "feel less restrained and express themselves more openly" (Suler, 2004). Suler calls this phenomenon the online disinhibition effect.

Establishing contact and separation is easier and free of anxiety. Projections in how we imagine our communication or game partners are more intense and the perception is less sensory and physical than in face-to-face communication. In the online world, people just behave differently: "When people have the opportunity to separate their actions online from their in-person lifestyle and identity, they feel less vulnerable about self-disclosing and acting out" (Suler, 2004).

Playing with and developing virtual identities accommodate the search for personal identity so typical of adolescence. The chance of donning a mask also

has a certain fascination for adults. Anonymous figures on the Internet are generally younger, better looking, smarter, and also wealthier than in reality. It is quite tempting to be all that, at least for a while. The problem begins when you look in the mirror and can no longer accept yourself the way you are, preferring instead to immerse yourself in a virtual world. The inability to accept yourself or reality can lead to compensatory usage (Eidenbenz, 2008), as is often the case with addicts.

Repeated experiences in virtual worlds leave tracks in the brain and result in priming effects. Future action follows these tracks if pleasant stimuli are associated with them (Spitzer, 2005). Virtual worlds can unleash the kind of intense emotional reactions associated with a release of dopamine. Young people are particularly vulnerable to these reactions, as the adolescent's frontal cortex, the part of the brain responsible for self-discipline and self-control, is not yet fully mature (Jäncke, 2008; Small & Vorgan, 2008).

If sufficiently clear structures and limits are put in place by the parents, a young person can make complementary uses of the Internet that can expand or enrich real life.

ROLE DIFFUSION AND ROLE DIVERGENCE

The photojournalist Robbie Cooper photographed people with their screen characters, also known as avatars (Cooper, 2007).

The first picture (Figure 14.1) shows a boy who spends 55 hours a week playing the online role-play game EverQuest. He says: *"I just want to win*

Figure 14.1 (*Photograph by Robbie Cooper.*)

Figure 14.2 (*Photograph by Robbie Cooper.*)

respect from people in the game, to be somebody in the EverQuest world. But it cost me. Everything else in my life started to suffer—my social life, my schoolwork, even my health" (Cooper, 2007). Judging from this huge investment of time, he is obviously making compensatory use of the game.

The young man in the second pair of photos, Figure 14.2, devotes even more time to weekly gaming in Star Wars Galaxy, 80 hours a week. In this instance, a handicap excludes other leisure-time activities, so the virtual world enriches the boy's life without replacing other activities: *"Online you get to know a person behind the keyboard before you know the physical person. The Internet eliminates how you look in real life, so you get to know a person by their mind and personality"* (Cooper, 2007).

This is a case of complementary usage and does not constitute addictive behavior.

The very idea of Internet addiction is still a bone of contention today. Addiction, it is argued, arises from behavioral patterns, not from the medium itself. Grohol (1999) and Kratzer (2006) stated that the Internet is not the cause of the disorder, noting that the disorder is an expression and symptom of hidden personality problems or primary disorders, such as depression. Hahn and Jerusalem (2001), however, argued quite correctly that the applied criteria are normative descriptive characteristics from phenomenology and not etiological characteristics, as is the case with alcohol dependency.

Instead of *Internet addiction*, the Swiss Addiction Professionals Association (2008) recommends the term *online addiction*, because it expresses a pivotal

aspect of the fascination as well as the addiction involved. You could say that *online* means being connected with a worldwide network in the here and now, having your finger on the pulse of the times, being linked to current information or to other people.

Online addiction will be used to refer to a spectrum of excessive behaviors and impulse control problems based on known addiction criteria, as cited by Kimberly Young (1998) and by Hahn und Jerusalem (2001), two researchers at Humboldt University in Berlin.

Addiction and Communication

The communicative aspect plays an important role for many online addicts. They often communicate by keyboard or with earphones and microphones, not only in chats and communication systems but also in online computer games. The medium appears to be more appealing when other individuals are active online behind the monitors as opposed to having an electronically controlled partner on the other end. Games and other types of usage in real time appear to have greater potential for being addictive. Young (1998) said that gaming addicts have been found to have a ratio of online to offline play time that is extraordinarily high compared with other users (Rehbein, Kleimann, & Mössle, 2009).

The availability of a large circle of virtual contacts such as, for example, in Facebook and the alluring opportunity of regressing to an "ocean feeling" of the kind felt in connection with the Internet appear to satisfy a desire to be connected to other people (Bergmann & Hütter, 2006).

For affected individuals, the contacts they build up in virtual worlds successively replace the ties they have in real life (Petry, 2010). They are scarcely aware that they are simultaneously neglecting and losing social contacts in the real world. One possible hypothesis would be that a dependency on interactive media (i.e., online addiction) is linked to a desire for communication or is related to communication problems. This is one reason why building and encouraging real human contact and the conflicts associated with it is so crucial to the treatment of online addiction.

Understanding and treating online addiction entails more than a careful analysis of the new media, a subject to be covered in detail later. It also requires knowledge of substance-related addictive disorders, according to Schweitzer and Schlippe (2007). There are many parallels between these two forms of addiction, yet also many essential differences.

Aside from parallels that emerge from the joint diagnosis of addiction, the following similarities are worth noting and relevant to treatment:

- Motivation to change or seek treatment is minimal.
- Change is sought only after great pressure is applied.
- There is denial or trivialization of usage and its effects.

Aspects that differ from substance-related addictions include:

- Information and communication technologies are viewed as positive.
- There is high availability and inconspicuous usage.
- Costs are low and not based on usage (flat rates).
- There is a lack of knowledge about the risk of addiction and its potential harm.
- Abstinence from new media is possible only temporarily or not at all.

Besides these parallels to substance-related addictions, other aspects must be considered in the treatment. Based on their own research, Hahn and Jerusalem (2001) mentioned the risk of high expectations in the new media combined with minimally developed control of impulses to use the media. Availability and low costs will be even more widespread in the future, and living without an Internet connection is already becoming seemingly impossible.

Online addicts seem to have difficulty in using the new media in a self-controlled manner, especially the sector or area in which they are addicted.

TREATMENT

Different psychological treatment methods are suggested in the pertinent literature, but it is still impossible to give evidence-based therapy recommendations (Petersen, Weymann, Schelb, Thiel, & Thomasius, 2009).

Cognitive behavioral therapy (Schorr, 2009) is the approach most frequently mentioned. Stress-coping strategies and training in social and communication skills were two other methods described as helpful, as were family therapy activities. In addition to cognitive-behavioral individual therapy, group therapeutic approaches such as the ones developed by Orzack et al. (2006), Wölfling and Müller (2008), and Schuler, Vogelgesang, and Petry (2009) are also used. The advantage of the latter approaches is that clients interact within a group and real communication occurs. The group is a source of support, and clients have a chance to learn from the experiences of fellow group members. The same would theoretically apply to self-help groups. After repeated attempts to form a group in Zurich, we realized that addicts would not keep appointments without multiple reminders or pressure from the outside. They remained at home instead, unable to tear themselves away from their monitors.

Many approaches have mentioned that the inclusion of the family in the therapy of adolescents is helpful and useful (Young, 2007), but very little has been published thus far on the use of systemic therapy in treating online addiction. Barth et al. (2009) noted that parents and families are becoming the center of therapeutic interest to offset maturity deficits, emotional control, and a lack of control over actions.

Fondation Phénix (Nielsen & Croquette-Krokar, 2008) in the Swiss canton of Geneva offers family therapy to online addicts as one of its services. It

considers family sessions important for working through issues that give rise to conflicts and for supporting parenting skills and promoting a healthy emotional climate.

Young (1999), too, recommended family therapy as a way of promoting communication skills and preventing recriminations. Grüsser and Thalemann (2006) pointed out a further aspect in support of family therapy, namely the family as an important factor in the origin and continuation of dependencies.

Systemic therapy gives due consideration to the client's social environment and incorporates it directly into the treatment. This approach helps the client to establish an emotional point of reference and to rebuild contacts. Systemic techniques such as questions on reality constructs or circular questioning (Schweitzer & Schlippe, 2007) also aid clients in clarifying their own self-images and the way they are perceived by others. Families should be included in treatment strategies. In their study about family factors, Yen, Yen, Chen, Chen, & Ko (2007) noted that "a family-based preventive approach for Internet addiction and substance abuse should be introduced for adolescents with negative family factors."

CENTER FOR BEHAVIORAL ADDICTION: CLINICAL EXPERIENCES

The outpatient clinic Open Door for Zurich received its first inquiries about online addiction from addicts and their family members 10 years ago. In the year 2000 the clinic organized an international conference: "Online Between Fascination and Addiction"; Professor Kimberly Young and Professor Mathias Jerusalem were among the speakers. And 2001 research together with the Humboldt University, Berlin (Eidenbenz & Jerusalem, 2001), made clear that online addiction in Switzerland is an existing problem.

Today, the successor center for behavioral addiction is specialized in treatments of online and game addiction. People from far and wide go there seeking advice. Since 2005 the center has treated between 25 and 40 cases a year with 150 to 200 sessions. The main people seeking help are parents of boys or young men aged 13 to 25 who feel utterly helpless in dealing with their offsprings' excessive computer usage. Cases of young females have been quite rare thus far. We seldom see adults on cybersexual affairs, problematic consumption of pornography, and so on.

The Center (Center for Behavioural Addiction, 2009) is known for this subject matter, so the people contacting it have classified their problems based on self-assessments. The following symptoms are described in the application:

- Decline in performance (school, work)
- Disinterest in social environment
- Decline in offline leisure interests
- Fatigue (chronic lack of sleep)
- Aggressiveness, nervousness if online usage is hindered

The main group of young online addicts has a basic problem with motivation. That is one central reason why families are integrated into the treatment in the vast majority of cases. The parents seeking advice come from all social classes, from physicians to blue-collar workers. A striking number of them are associated with the information technology (IT) industry.

The Client's Environment as a Resource

Clients' failure to acknowledge their illness and their lack of motivation pose serious obstacles to treatment. The further advanced the addiction is, the more difficult it is to influence the client. Young people in particular live in the here and now and are looking for exciting, stimulating experiences. They have trouble judging the long-term impact of their actions on their future prospects (Jäncke, 2007). That is why young people belonging to the risk group of online addicts (cf. Eidenbenz, 2001, 2004; Hahn & Jerusalem, 2001) have to rely on reactions from people in their everyday lives. This assumes of course that parents are willing to set limits, where necessary. In many cases, parents are overwhelmed by this task, especially if they have diverging opinions or have fallen out with each other. This can be especially true of parents who are separated.

If teachers, employers, and other individuals important to clients in their everyday lives can detect early signs of a problem, there is a much better chance of responding or initiating treatment on time. Therefore, different tests exist on the Internet to give clients and the people in their everyday lives an idea about the risks of being addicted. The test developed in 2006 gives clients a direct idea about the risk of being addicted (Eidenbenz, 2006). There is also a need for information material understandable to those in the client's everyday life; of course, prevention work is included, too (Eidenbenz, 2008).

In addition to personal factors and environmental influences, Internet usage itself or, in this case, gaming is a central factor and must be covered in the treatment. For this reason the findings from a recent representative study dealing with the risks of computer games is presented here in more detail. In this study in Germany involving a random sample of young people (n = 44,129) (Rehbein, Kleimann, & Mössle, 2009), it was found that 3 percent of boys displayed addictive gaming behavior; a further 4.7 percent were classified as being at risk; in other words, 7.7 percent were either addicted or at risk. Only 0.5 percent of girls were found to be at risk and 0.3 percent to be addicted. These figures show how minuscule the chances are of an addicted World of Warcraft (WoW) gamer getting to know a girl in his free time.

Online addicts and avid gamers have worse grades in school, even in physical education, which is a sign of their lack of exercise. Addicts have a higher rate of absenteeism and a higher level of anxiety about school. On the scale developed by the authors to measure computer dependency, WoW was by far the game with the largest potential for addiction, followed by Guild

Wars, Warcraft, and Counterstrike. A total of 36 percent of the WoW users played for more than 4.5 hours a day.

Dysfunctional stress regulation, a factor proven in a longitudinal study in Berlin (Grüsser, Thalemann, Albrecht, & Thalemann, 2005), also goes a long way toward explaining this addiction. This term refers to a technique people use to escape from dealing with real-world problems or conflicts. Other key variables that were emphasized were the role of experiencing power and control, and gaming as the sole source of a sense of achievement. Young people less adept at empathizing and communicating with others in conflict situations also showed an increased risk. Being the target of serious violence from parents in childhood is a further risk factor. Another disconcerting finding is that 12.5 percent of all addicts answered "Yes, often" when asked if they had ever considered suicide as opposed to 2.4 percent of the normal group.

This picture coincides with our experience that eight out of 10 young gaming addicts are WoW players. Therefore this game will be explored in greater depth at this juncture.

Working with this type of Internet addiction requires a minimal understanding of online games. It is important for young people that the therapist shows an interest in the world (the virtual world) in which they spend so much of their free time. The therapist does not necessarily have to be well-versed in the various online role-plays, but it is important and helps to build trust if the professional can pose the right questions and use key terms such as *avatar* (the player's visual on-screen in-game, also known as character), *level* (levels of advancement achieved by the avatar), *raid* (battle), and so on.

This is the only way that a therapist can build up a differentiated picture of the client's virtual identity and its connections to and status within the online community. These questions might include the following: "What level do you play at? What kind of avatar do you have? Do you have multiple avatars? Are you in a guild or a clan? What status does the clan have and how many of you are there? How many raids do you do per week and when do you do them?"

The following interview was conducted with a client at the end of therapy and is included here to give the reader an insight into a young person's viewpoint. This example shows the crucial influence of environment on a client's willingness to submit to treatment.

Interview with Martin, 16 Years Old, Information Technology (IT) Apprentice

Interviewer: Martin, you live with your brother at your mother's and were addicted to WoW. How did your gaming career start?

Martin: I played Nintendo and Game Boy in preschool. When I was 8 we played on my father's computer. He is a computer specialist. I first got into 3-D online games when I was 12. Then my brother got me onto the strategy game Counterstrike and from there I started playing WoW about a year and a half ago.

Interviewer: How did you find out about the game?

Martin: I did a six-month introductory course in the IT department at a major bank. Half of my fellow trainees played WoW, some of them very intensively.

Interviewer: And then?

Martin: I got into the role-play quite quickly. First I would play an hour a day; then the time I'd spend increased rapidly. WoW is a game that drives you forward. You constantly set new goals, want better and better sets of armor and weapons, and then you play more and more frequently.

Interviewer: How long were you playing during your most intensive period?

Martin: That was six months ago. I gamed five to six hours each night after work. On weekends, I would get up at 1:00 in the afternoon and play until 1:00 or 2:00 at night.

Interviewer: Didn't you ever have the feeling you were playing too much?

Martin: No. I always compared myself to friends who were gaming even more than I was.

Interviewer: Didn't anyone ever try to stop you?

Martin: Of course. My mother tried all kinds of things. There were several times she hid my monitor, also my keyboard. We argued a lot about gaming; also because I didn't abide by her rules. She even wanted to take me to a psychiatrist, but I refused. That just sounded too weird.

Interviewer: What triggered you to want to change your gaming behavior?

Martin: I realized my friends had stopped asking me to go out with them. Add to that the big pressure my mother was applying all the time. She actually took away my PC for 14 days.

Interviewer: How did you react to that?

Martin: I was furious.

Interviewer: Was it boring for you?

Martin: I watched more TV, started to draw again, and read books.

Interviewer: You two had a counseling session together. Why did you agree to it?

Martin: Another thing was that my supervisor at work brought up my excessive gaming to me directly and pushed me to get counseling.

Interviewer: Had your performance declined?

Martin: No, but she knew I often overslept in the morning. Sometimes I would also call in sick when I did that. And my mother had talked to the supervisor.

Interviewer: And today? Do you still play?

Martin: Yes, but I have been able to cut down my gaming time with the rules we set during counseling. I abstain from gaming one day a week and play only until 10:00 at night.

At the start of therapy, therapists must create a stable setting that allows them to work through this issue until lasting and constructive progress can be made.

Initial Situation

As with other forms of addiction, parents, family, or partners suffer from the online addicts' excessive behavior whereas the addicts themselves scarcely acknowledge that they have a disorder. The classic initial situation is that a parent calls and complains about his or her son's excessive gaming behavior, but the son refuses to come in for therapy, claiming he has no problem. Here is the first core challenge: how to motivate the young man to come in for therapy. The initial situation should be exploited. The parents have a problem. They cannot cope with the situation and are highly motivated to take action. The therapy can get off to a good start if the parents can persuade their son to show up for an initial session. This is a decisive step toward restoring the parents' hierarchical position, which is often shifted in families struggling with addiction. It is also recommended that the parents talk with their son and make it clear that the problem can be resolved only in cooperation with him and any siblings he may have. The sense of solidarity in the system increases the chances of establishing a new equilibrium in the family without putting the whole blame on the young person.

Various authors (Petersen, Weymann, Schelb, Thiel, & Thomasius, 2009; Yen, Ko, Yen, Chen, Chung, & Chen, 2008) have pointed out comorbid disorders such as depression and associated low self-confidence, low drive, a desire for recognition, and attention-deficit/hyperactivity syndrome (ADHS), as well as substance-related disorders. Besides asking which underlying disorders play a role in the young person's online addiction, the therapist should consider other family members in the diagnosis (e.g., an overprotective mother and the interaction of the system as a whole).

Family members and possibly other individuals from the client's everyday life should participate at least in the initial sessions. Young addicts are more likely to agree to therapy if this approach is taken, especially if they see the prospect of their own issues being taken seriously or feel that the difficulties they are facing are understood by others.

It is also equally important to lay the groundwork for enabling the therapy to continue over an extended period of time. Without support and also pressure from parents and siblings, young people usually cannot muster motivation for any more than two to three sessions at most. Even if they want therapy, it is difficult for them to give their therapists priority over their virtual world and to keep appointments. Family sessions eliminate the problem of young addicts not showing up for appointments. Young people will participate even in extended therapies if they continue to feel pressure and solidarity from the system.

THERAPY PROCESS: PHASE MODEL

The systemic approach suggested here is solution and resource oriented and is adopted from Carole Gammer's model of phase-based family therapy (Gammer, 2008). The approach also integrates various elements of cognitive behavioral therapy, particularly Kanfer's self-management therapy (Kanfer, Reinercker, & Schmelzer, 2006). The therapy process is divided into four phases of therapy intended to represent an ideal course of treatment. The entire therapy process generally takes between six and 18 months.

Start-Up Phase (One to Three Sessions)

The goal in the start-up phase is to create a cooperative working relationship and to obtain information for conducting an individual and systemic analysis of the problem (diagnostics) and for forming hypotheses.

The first therapy session should ideally be attended by the entire family. After having everyone introduce themselves and establishing a respectful and open attitude within the group, the therapist asks all present about resources and about any immoderate behaviors—for example, the father working excessive hours.

This approach is a way of putting the problem in perspective (others in the family may also display tendencies toward addiction) and to take pressure off the addict. Then everyone is asked what they would like to change and what problems they would like to discuss as a family. To relieve the identified patient of further pressure, he should not be addressed first or last in this round. Normally he will not raise any issues at first, except a desire for fewer restrictions to be placed on his Internet access. Asked whether they are otherwise satisfied with their parents and have a large enough allowance and so forth, most young clients give their parents high ratings. The object is to have the gamer raise issues he would like to see changed in real life, particularly in connection with his parents. He should be given opportunities to express the problems that young people normally have with their parents. The therapist can be available as a mouthpiece and the ally of the client at this stage. Sometimes young people do not want to say anything at first, feeling that the only reason they are there is because their parents pressured them into coming. They should not be criticized for this. If a client remains silent, other family members can be asked to speculate on why he is not saying anything. In the first session, the young person should receive positive reinforcement by having his good traits also mentioned. The parents should be able to endure a certain amount of confrontation.

The client's addictive behavior is discussed in the course of the session. It is important for the therapist to show an interest in the client's behavior specifically as it relates to the game, focusing on triggering factors and mood-regulating aspects. When does the client play, in which situations, and what

other leisure activities does he have? The role and function of the avatars in the group are also important, along with their identity—for example, set of armor and status. This information allows hypotheses to be formed on the function of the addictive behavior and on any deficits the client may have in real life.

The initial sessions often also serve as crisis interventions, in which conflicts are clarified and de-escalation options are discussed. Initial rules on computer usage are laid down, and the parents are encouraged to set clear limits. It is helpful if clients draw up a weekly schedule and record how long and how frequently they play and include other Internet activities in which they are involved. The act of recording and the way clients deal with this task, namely whether they can do it and if so, how they do it, provide more precise information for establishing further hypotheses. At the same time, the young clients should be encouraged to formulate their own issues outside gaming activities and to justify them effectively.

When forming hypotheses, the therapist should draw on the entire system to arrive at a systemic diagnosis. How clearly defined are the hierarchies within the family? In which situations do the parents prevail and how do they do so? Is there evidence of sibling cooperation? How does the system deal with conflict? The client's individual behavioral patterns should also be integrated in diagnostic deliberations (e.g., strategies for avoiding conflict and stress, impulsiveness, withdrawal tendencies, and traumatic events). The therapist should develop a strategy for working on pertinent issues in the phase that follows, and should explain this strategy in general terms to the family.

It is recommended that two to three sessions be suggested for the start-up phase, followed by an interim evaluation.

Changes in symptoms, even minor changes, should be achieved as early as the start-up phase. For example, the amount of Internet consumption should no longer be determined based on assumptions but recorded precisely in a log. A good approach is to cloak this log as a homework assignment. Most importantly, however, the family should come again with the client. Siblings and clients can give their opinions on that, but the parents should ultimately make the decision based on the therapist's suggestion. They should prevail over young people on this issue.

MOTIVATION PHASE (THREE TO FIVE SESSIONS)

The motivation phase focuses on understanding the obvious circumstances that cause and maintain addiction and on addressing related topics such as recognition, respect, and methods for dealing with conflict and stress (Wölfling, 2008). Parallel to these activities, the client should reduce his Internet usage and be required to build up a minimum of self-control.

Clients themselves have difficulty in admitting they have a problem. Admission is essential for making a change, and family members can help clients

greatly in taking this step. Clients will not be willing to take further concrete action until they realize that excessive gaming has negative effects on their lives and that they no longer have control over their gaming behavior. It is important that family members take an approach toward the client that is firm in terms of the limits set on gaming but interested in terms of the content of the game. Speaking in the first person for themselves, family members should express how their son's or brother's addiction has affected them and which risks they see for the client and for relationships within the family.

It is important to find out exactly what fascinates the client about the game and how he could have comparably satisfying experiences in real life. The extent of gaming should then be reduced in stages, based on rules and goals jointly worked out by the client and family members. Both positive and negative consequences can be formulated in connection with implementing these rules and goals.

Everyone should work together to uncover the causes of the addictive behavior step-by-step. These causes could include, for example:

- *Lack of say:* Does the client or, for example, his sister have any say in what happens in the family, and if so, with regard to what?
- *Lack of respect:* Do the family members express respect and recognition toward each other?
- *No sense of achievement:* Does the client ever have a chance to be a hero in the family?

When the client actively criticizes the people and situations in his everyday life, for example his father, he has taken an important and necessary step toward showing a willingness to face conflict.

At the same time, the client must build up alternative recreational activities in his real life. Counselors and family members should all support this renewal of interest in the client and encourage him to act on it.

Exploratory Phase (Three to Eight Sessions)

This phase seeks to promote an in-depth exploration of the causes of online addiction as well as active discussions and respect within the family and alliances at parental and sibling level. Points of conflict with the parents and siblings are clarified and processed.

Deeper structural causes meant to be dealt with in this phase could be, for example, the client's conflict with his father, his inability to find closure on a family member's death, or his separation from one of the parents. Gamers often immerse themselves in virtual worlds to wage heroic fights because they have almost no say in their own families. Perhaps the father, frequently absent and working long hours, shows his son little respect, least of all for his hard-won victories in his virtual world. The boy never has a chance to take on a dominant male position. He should be supported in expressing anger

and rage but also in talking about hurts from the present or even events that occurred years ago.

Both parents must participate when setting the rules for game usage to give a strong and consistent guideline to the client. When working through conflicts at this stage, however, the therapist should keep the other parent from actively participating or interrupting. This ensures a level playing field for a face-to-face encounter and a chance to solve personal conflicts with the father or mother. Resolving the conflict constructively is meant to serve as a model and to encourage the client to try out new behaviors and other roles in real life at home and elsewhere in the client's life.

This phase can also address the role played by other siblings who suffer from the psychological absence of their addicted brother but also want to show solidarity with him. Adequate attention is often not given to their own suppressed issues until the acute addiction problem has been resolved.

In this phase a client might be invited, usually in passing, to come alone the next time if he wants to. Siblings do not need to attend each session during this phase. Sometimes older siblings, for instance adult siblings, could be included for the first time in this phase.

Stabilization and Final Phase (One to Three Sessions)

The client will have reached a level at which a satisfactory change is possible when he effectively controls online times, for example, or takes up other recreational activities, improves his academic performance, deals more constructively with conflicts, and so on. At this stage, it is advisable to schedule further therapy sessions at longer intervals or to include at least one control session. This approach helps to prevent a relapse and can be used to stabilize new options within the family and to support further changes.

Even if the client and his family members have had several discussions and he has reduced his gaming, he may still differ greatly from the others in how he views these matters. The client may consider the objective already achieved, whereas his parents still think there is a need for further action. It is important at this stage to recognize the steps in these changes (e.g., stabilizing or improving school performance, the possibility of now having evening meals together, going to bed at a decent hour, or meeting up with friends). During this phase, the therapist should recap achievements retrospectively or prospectively and guide the family in defining further objectives.

In some cases, children rightly complain that their parents will never be satisfied. By the same token, parents are sometimes not fully content with what is achieved in therapy. It is therefore all the more important to stress and praise minor positive changes that do occur. We should be aware that this work involves addicts. When these types of issues are involved, people seldom are fully satisfied.

ABSTINENCE FROM GAMING

If clients do not succeed in controlling their excessive gaming, it may be necessary for them to stop gaming altogether. Complete abstinence from gaming or problematic uses, not from Internet use (Petersen et al., 2009), may be the only solution in severe cases and with certain games such as WoW, contrary to clinical experiences at the beginning of treatment. This cold turkey approach to game addiction entails certain risks. The client will undoubtedly display an extreme reaction (e.g., aggressive behavior breaking through, depressive withdrawal, or, at the very least, a loss of motivation). Parents sometimes try this experiment themselves. After an escalation, many of them vow to never take this drastic step again.

But parents have to know how to respond at the latest when their son or someone else is endangered (e.g., by threats of violence, murder, or suicide). Before reaching this point, young addicts have already gone through a long period of their parents making threats, imposing restrictions, then caving in and letting them pursue their gaming activities again, and tend not to take them seriously anymore. Recently asked about this fact, a young client said he thought there was only a 30% chance his parents would call the police or an emergency psychiatrist. He had certainly been right up to that point.

The therapist should talk with the parties involved about exactly how they want to handle this type of situation. The young person should be aware of the types of threats that would cause the parents to take action. Where appropriate, the parties could check in advance on where the client could be hospitalized if the situation began escalating dangerously. The therapist should give the family a phone number where he or she can be reached if cases like this arise, and should provide pertinent emergency numbers. In most cases, clients are not hospitalized. The point is to have the parents show that they are serious about the limits they set.

CASE EXAMPLE ON SYSTEMIC WORK

The parents of a 15-year-old high school student contacted the clinic about their son. He was spending over 30 hours a week playing the online game World of Warcraft, and had virtually stopped taking part in family life and family meals and was failing at school. They had had many arguments with him about gaming, and their attempt to cut his game playing time to two hours a day had been a miserable failure. At age 11, M. had begun saving his allowance to buy the individual components for a computer, which he then assembled himself. Up to that point, he had always been content and friendly.

The family agreed to come to the clinic with him and his sister, who was two years younger. In the first session, M. complained about not being understood, while his parents said the gaming was having a devastating effect on them. I suggested that we continue the therapy with the entire family, and everyone

agreed. The topic up to the third session was the aggressive arguments the client had with his parents, especially when they tried to restrict his gaming time. Once M. put his hands around his mother's throat when she tried to block his access to the Internet but did not actually choke her.

By their fourth session, the family was dealing somewhat more constructively with conflicts. The client was monitoring his gaming activities with lists he drew up himself and had reduced his gaming time by 10 hours a week. Both father and son had trouble controlling their own impulses, but everyone wanted to live together harmoniously as a close-knit family. In one session, the father and son drew a diagram of the emotions they felt during an argument, which showed a phase-shifted rhythm. The rest of the family commented on the diagram. This approach helped them to gain objectivity and an understanding of the dramatic moments in the argument.

Incidentally, M. had selected two roles in WoW: a healing monk on the one hand and an aggressive warrior on the other. This choice can be interpreted as an expression of how he wanted to develop emotionally.

And alongside his domineering father, it seemed impossible indeed for M. to achieve this situation in the real world, namely, being a heroic and victorious warrior as well as healer or, in other words, being recognized for his achievements while at the same time feeling backing, solidarity, and support in the family.

Various family problems were brought up in the course of the therapy. The son began to confront his father actively after he had been helped by the therapist to formulate his concerns more clearly and was able to overcome his withdrawal tendencies.

He performed better in school and often took part in family meals again. Everyone had made a contribution: The father stopped working such long hours at night, the mother put a Post-it on M.'s monitor 30 minutes before dinnertime, and M. shut off his PC by himself in time to make it to the meal.

M. noted in retrospect that he had defended the therapy in talks with friends because it also benefited him as part of the family, but especially because his own concerns were now taken seriously and he was no longer blamed for everything.

DISCUSSION AND OUTLOOK

The phase model presented in this chapter is not yet evaluated or standardized in a therapeutic manual. It should be considered as a contribution to the overall discussion and is meant to serve as a guideline for developing a therapeutic process.

However, existing literature makes the assumption plausible that the following factors are related with the development of an addicted online behavior: a client's lack of possibilities in everyday life to influence something directly, to gain a sense of achievement, and to work through conflicts.

The family is the core group that offers models on patterns of action and constructive methods of conflict resolution, or in some cases does not. Compassion, empathy, solidarity, and personal responsibility can be learned in the family and serve as models and resources for the client to make changes within the extended environment. Integrating the system into a treatment of online addiction therefore seems a reasonable and useful approach. As with other addiction therapies, perseverance and loving firmness on the part of therapists and family members are required to bring about changes. The goal is to build a culture that has greater knowledge and awareness of the opportunities and risks in dealing with the new media so that individuals are in a position to determine for themselves how they wish to use these media.

Commitment pays off, because therapeutic assistance can favor and enable constructive long-term development, especially in young people.

More research is needed in the future to assess the effectiveness of different treatment methods. What is now certain is that young people need committed individuals in their everyday lives, whether in the family, at school, or in their circle of friends and acquaintances. In the interest of prevention, the ultimate objective is to create an environment that offers appealing opportunities for challenges, encounters, and participation so that young people can be shaped by the incomparable uniqueness of genuinely experiencing real life with all of their senses.

REFERENCES

Andrews, J. A., Hops, H., Ary, D., Tildesley, E., & Harris, J. (1993). Parental influence on early adolescent substance use: Specific and nonspecific effects. *Journal of Early Adolescence*, *13*(3), 285–310.

Barker, J. C., & Hung, G. (2006). Representations of family: A review of the alcohol and drug literature. *International Journal of Drug Policy 15*, 347–356.

Barth, G., Sieslack, S., Peukert, P., Kasmi, J. E., Schlipf, S., & Travers-Podmaniczky, G. (2009). Internet- und Computerspielsucht bei Jugendlichen, 41. Retrieved September 3, 2009, from http://www.rosenfluh.ch/images/stories/publikationen/Psychiatrie/2009-02/07_PSY_Spielsucht_2.09.pdf.

Bergmann, W., & Hütter, G. (2006). *Computersüchtig, Kinder im Sog der modernen Medien*. Düsseldorf, Germany: Walterverlag.

Brook, J. S., Brook, D. W., De La Rosa, M., Dunque, L. F., Rodriguez, F., et al. (1998). Pathways to marijuana use among adolescents: Cultural/ecological, family, peer, and personality influences. *Journal of the American Academy of Child and Adolescent Psychiatry*, *37*(7), 759–766.

Brown, S. A., Myers, M. G., Mott, M. A., & Vik, P. W. (1994). Correlates of success following treatment for adolescent substance abuse. *Applied and Preventive Psychology*, *3*, 61–73.

Cooper, R. (2007). *Alter ego: Avatars and their creators*. London: Cris Boot.

Eidenbenz, F. (2004). Online zwischen Faszination und Sucht. *Suchtmagazin*, *30*(1), 3–12.

Eidenbenz, F. (2006). Online-Internet-Sucht-Test. Retrieved July 6, 2009, from http://suchtpraevention.sylon.net/angebote_suchtpraevention/selbsttests/selbsttests_i_f.html

Eidenbenz, F. (2008). Onlinessucht, Schweizerische Fachstelle für Alkohol und andere Drogenprobleme. Retrieved July 6, 2009, from http://www.sfa-ispa.ch/DocUpload/di_onlinesucht.pdf.

Eidenbenz, F., & Jerusalem, M. (2001). *Wissenschaftliche Studie zu konstruktivem vs. Problematischem Internetgebrauch in der Schweiz*. Retrieved October 10, 2009, from www.verhaltenssucht.ch

Center for Behavioural Addiction. (2009). *Zentrum für Verhaltenssucht*. Retrieved April 28, 2010, from www.verhaltenssucht.ch

Gammer, C. (2008). *The child's voice in family therapy*. New York: W.W. Norton.

Grohol, J. M. (1999). Internet addiction guide. *Mental Health Net*. Retrieved November 1, 1999, from http://psychcentral.com/netaddiction/

Grüsser, S., & Thalemann, R. (2006). *Verhaltenssucht, Diagnostik, Therapie, Forschung*. Bern, Switzerland: Huber.

Grüsser, S., Thalemann, R., Albrecht, U., & Thalemann, C. (2005). Exzessive Computernutzung im Kindesalter: Ergebnisse einer psychometrischen Erhebung. *Wiener Klinische Wochenschrift*, *117*, 173–175.

Hahn, A., & Jerusalem, M. (2001). Internetsucht: Jugendliche gefangen im Netz. Retrieved July 6, 2009, from http://www.onlinesucht.de/internetsucht_preprint.pdf

Jäncke, L. (2007). *Denn sie können Nichts dafür*, University of Zürich, Department of Neuropsychology. Retrieved July 6, 2009, from http://www.psychologie.uzh.ch/fachrichtungen/neuropsy/Publicrelations/Vortraege/Kinder_Frontahirn_1Nov2007_reduced.pdf

Jäncke, L. (2008). Onlinesucht, Gesundheitsmagazin Puls. *Schweizer Fernsehen*. Retrieved February 18, 2008. www.sf.tv/sendungen/puls/merkblatt.php?docid=20080218-2

Kanfer, F., Reinercker, H., & Schmelzer, D. (2006). Selbst-management-Therapie. In *Lehrbuch für die klinische Praxis* (pp. 121–321). Heidelberg, Germany: Springer.

Kratzer, S. (2006). *Pathologische Internetnutzung eine Pilotstudie zum Störungsbild*. Lengerich, Germany: Pabst Science Publishers.

Kuperman, S., Schlosser, S. S., Kramer, J. R., Bucholz, K., Hesselbrock, V., Reich, T., et al. (2001). Risk domains associated with an adolescent alcohol dependence diagnosis. *Addiction*, *96*(4), 629–636.

Liddle, H. A. (2004a). Family-based therapies for adolescent alcohol and drug use: Research contributions and future research needs. *Addiction*, *99*(2), 76–92.

Liddle, H. A., Dakof, G. A., Parker, K., Diamond, G. S., Barett, K., & Tejeda, M. (2001). Multidimensional family therapy for adolescent drug abuse: Results of a randomized clinical trial. *American Journal of Drug and Alcohol Abuse*, *27*(4), 651–688.

Liddle, H. A., Dakof, G. A., Turner, R. M., Henderson, C. E., & Greenbaum, P. E. (2008). Treating adolescent drug abuse: A randomized trial comparing multidimensional family therapy and cognitive behavior therapy. *Addiction*, *103*(10), 1660–1670.

Loeber, R. (1990). Development and risk factors of juvenile antisocial behavior and delinquency. *Psychological Review*, *10*, 1–41.

Nielsen, P., & Croquette-Krokar, M. (2008). Psychoscope 4. Retrieved July 6, 2009, from http://www.phenix.ch/IMG/pdf/article_psychoscope_final_cyberaddiction_a_l_adolescence_4_2008.pdf

Orzack, M., Voluse, A., Wolf, D., et al. (2006). An ongoing study of group treatment for men involved in problematic Internet-enabled sexual behavior. *CyberPsychology & Behavior*, *9*(3), 348–360.

Petersen, K., Weymann, N. Schelb, Y., Thiel, R., & Thomasius, R. (2009). Pathologischer Internetgebrauch—Epidemiologie, Diagnostik, komorbide Störungen und Behandlungsansätze. *Fortschritte der Neurologie–Psychiatrie*, *77*(5), 263–271.

Petry, J. (2010). *Dysfunktionaler und pathologischer PC- und Internet-Gebrauch*. Göttingen, Germany: Hofgrefe.

Rehbein, F., Kleimann, M., & Mössle, T. (2009). *Computerspielabhängigkeit im Kindes- und Jugendalter: Empirische Befunde zu Ursachen, Diagnostik und Komorbiditäten unter besonderer Berücksichtigung spielimmanenter Abhängigkeitsmerkmale.* Forschungsbericht Nr. 108, Kriminologisches Forschungsinstitut Niedersachsen e. V.

Resnick, M. D., Bearman, P. S., Blum, R. W., Bauman, K. E., Harris, K. M., Jones, J., Tabor, J., Beuhring, T., Sieving, R. E., Shew, M., Ireland, M., Bearinger, L. H. & Udry, J. R. (1997). Protecting adolescents from harm: Findings from the national longitudinal study on adolescent health. *The Journal of the American Medical Association*, *278*, 823–831.

Sajida, A., Hamid, Z., & Syed, I. (2008). Psychological problems and family functioning as risk factors in addiction. *Journal of Ayub Medical College Abbottabad*, *20*(3).

Schorr, A. (2009). *Jugendmedienforschung, Forschungsprogramme, Synopsen, Perspektiven, Neue Gefahren: Onlinesucht* (pp. 380–383). Wiesbaden, Germany: Verlag für Sozialwissenschaften.

Schuler, P., Vogelgesang, M., & Petry, J. (2009). Pathologischer PC/Internetgebrauch. *Psychotherapeut*, *54*, 187–192.

Schweitzer, J., & Schlippe, A. (2007). *Lehrbuch der Systemischen Therapie, Therapie und Beratung II, Süchte: Von Kontrollversuchen zur Sehn-Sucht* (pp. 191–212). Göttingen, Germany: Vandenhoeck & Ruprecht.

Small, G., & Vorgan, G. (2008). *iBrain*. New York: Morrow/HarperCollins.

Spitzer, M. (2005). *Vorsicht Bildschirm! Elektronische Medien, Gehirnentwicklung, Gesundheit und Gesellschaft*. Stuttgart, Germany: Ernst Klett.

Suler, J. (2004). The online disinhibition effect. *CyberPsychology & Behavior*, *7*(3), 321–326.

Swiss Addiction Professionals Association (2008), *Fachverband Sucht*, Retrieved April 28, 2010, from www.fachverbandsucht.ch

Sydowe, K., Beher, S., Schweitzer, J., & Retzlaff, R. (2006). Systemische Familientherapie bei Störungen des Kindes- und Jugendalters. *Psychotherapeut*, *51*, 107–143.

Wölfling, K. (2008). Generation@—Jugend im Balanceakt zwischen Medienkompetenz und Computerspielsucht. *Sucht Magazin*, *4*(8), 2–16.

Wölfling, K., & Müller, K. (2008). Phänomenologie, Forschung und erste therapeutische Implikationen zum Störungsbild Computerspielsucht. *Psychotherapeutenjournal*, 2.2008, 128–133.

Yen, J. Y., Ko, C. H., Yen, C. F. Chen, S. H., Chung, W. L. & Chen, C. C. (2008). Psychiatric symptoms in adolescents with Internet addiction: Comparison with substance use. *Psychiatry and Clinical Neurosciences*, *62*: 9–16.

Yen, J. Y., Yen, C. F., Chen, C. C., Chen, S. H., & Ko, C. H. (2007). Family factors of Internet addiction and substance use experience in Taiwanese adolescents. *CyberPsychology & Behavior*, *10*(3), 323–329.

Young, K. (1998). *Caught in the Net*. New York: John Wiley & Sons.

Young, K. (1999). Internet addiction: Symptoms, evaluation, and treatment. In L. VandeCreek & Jackson (Eds.), *Innovations in clinical practice: A source book* (Vol. *17*). Sarasota, FL: Professional Resource Press. Retrieved October 10, 2009, from http://www.netaddiction.com/articles/symptoms.pdf

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