“Net Effect”: Abuse, dependency & addiction to technology

David X. Swenson PhD LP
Brandon Olson MS
Objectives

• Describe the pervasive role of technology in our lives
• Distinguish between beneficial and adverse effects of technology
• Describe the “addiction” controversy & continuum
• Identify types of technology addiction and examples
• Recommend interventions for users, parents and therapists

“More than 175 million people use Facebook. If it were a country, it would be the sixth most populated country in the world.” – Mark Zuckerman, Founder of Facebook
What did we do before home computers, internet, and mobile devices?

How did we spend time?
Do you have one in your home?
Gadget ownership among American adults

% of American adults who own each device, as of September 2010

- Cell phone: 85%
- Desktop computer: 59%
- Laptop computer: 52%
- mp3 player: 47%
- Game console: 42%
- e-Book reader: 5%
- Tablet computer: 4%

Source: Pew Research Center's Internet & American Life Project, August 9-September 13, 2010 Tracking Survey. N=3,001 adults 18 and older, including 1,000 reached via cell phone. Interviews were conducted in English (n=2,804) and Spanish (n=197).
Twitter, launched five years ago, delivers 350 billion tweets a day—Nathan Olivarez-Giles, L.A. Times
Social Networking drivers
Why do you use social networking sites?

- Keep in touch with friends: 88%
- For fun: 73%
- Keep in touch with family: 70%
- Reconnect with people: 68%
- Express myself and views: 39%
- Meet new friends: 32%
- Communicate with like-minded people: 29%
- Find information relevant to me: 29%
- Get recommendations: 25%
- Keep in touch with professional contacts: 19%
- For political reasons: 9%
- Make new professional contacts: 9%
- For professional development: 6%
- It's part of my job: 5%

Base: Visit social network last 30 days
Simmons New Media Study, Fall 2009
Teens Use of Technology

Weekly Activities (10 to 18-year-olds)

N=4441 (random sample from large school district in the southern U.S.)

Percent

- Cell phone: 83.0%
- Sent text message: 77.3%
- Internet for schoolwork: 50.8%
- Facebook: 50.1%
- Used cell at school: 50.0%
- Email: 47.1%
- Instant messaging with cell: 46.2%
- Online games: 40.7%
- MySpace: 40.5%
- Gone online with cell phone: 38.6%
- Chat rooms: 37.7%
- Webcam: 31.5%
- YouTube: 16.8%
- Twitter: 14.5%
- Virtual worlds (Gaia, Second Life): 11.5%
- Other: 11.5%

Cyberbullying Research Center
www.cyberbullying.us
### Popular & Appropriate Uses of Internet

<table>
<thead>
<tr>
<th>Activity</th>
<th>% of adult internet users in the U.S. who do this online</th>
</tr>
</thead>
<tbody>
<tr>
<td>Send or read e-mail</td>
<td>92</td>
</tr>
<tr>
<td>Use a search engine to find information</td>
<td>87</td>
</tr>
<tr>
<td>Look for health/medical info~</td>
<td>83</td>
</tr>
<tr>
<td>Look for info on a hobby or interest</td>
<td>83</td>
</tr>
<tr>
<td>Search for a map or driving directions</td>
<td>82</td>
</tr>
<tr>
<td>Check the weather</td>
<td>81</td>
</tr>
<tr>
<td>Look for information online about a service or product you are thinking of buying*</td>
<td>78</td>
</tr>
<tr>
<td>Get news</td>
<td>78</td>
</tr>
<tr>
<td>Go online just for fun or to pass the time</td>
<td>72</td>
</tr>
<tr>
<td>Search for info about someone you know or might meet*</td>
<td>69</td>
</tr>
<tr>
<td>Visit a local, state or federal government website*</td>
<td>67</td>
</tr>
<tr>
<td>Buy a product</td>
<td>66</td>
</tr>
<tr>
<td>Buy or make a reservation for travel</td>
<td>66</td>
</tr>
<tr>
<td>Watch a video on a video-sharing site like YouTube or Google Video</td>
<td>66</td>
</tr>
<tr>
<td>Use an online social networking site like MySpace, Facebook or LinkedIn.com*</td>
<td>61</td>
</tr>
<tr>
<td>Look for &quot;how-to,&quot; &quot;do-it-yourself&quot; or repair information</td>
<td>59</td>
</tr>
<tr>
<td>Do any banking online</td>
<td>58</td>
</tr>
<tr>
<td>Look online for info about a job*</td>
<td>54</td>
</tr>
<tr>
<td>Look for information on Wikipedia</td>
<td>53</td>
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<tr>
<td>Use online classified ads or sites like Craigslist</td>
<td>53</td>
</tr>
<tr>
<td>Get news or information about sports*</td>
<td>52</td>
</tr>
<tr>
<td>Do any type of research for your job</td>
<td>51</td>
</tr>
<tr>
<td>Take a virtual tour of a location online</td>
<td>51</td>
</tr>
<tr>
<td>Look online for news or information about politics*</td>
<td>50</td>
</tr>
<tr>
<td>Upload photos to a website so you can share them with others online</td>
<td>46</td>
</tr>
<tr>
<td>Pay to access or download digital content online*</td>
<td>43</td>
</tr>
<tr>
<td>Look for info about a place to live*</td>
<td>39</td>
</tr>
<tr>
<td>Download music files to your computer</td>
<td>37</td>
</tr>
<tr>
<td>Get financial info online, such as stock quotes or mortgage interest rates</td>
<td>37</td>
</tr>
<tr>
<td>Play online games*</td>
<td>36</td>
</tr>
<tr>
<td>Categorize or tag online content like a photo, news story or blog post</td>
<td>33</td>
</tr>
<tr>
<td>Read someone else's online journal or blog*</td>
<td>32</td>
</tr>
<tr>
<td>Rate a product, service or person using an online rating system</td>
<td>32</td>
</tr>
<tr>
<td>Look for religious/spiritual info</td>
<td>32</td>
</tr>
<tr>
<td>Post a comment or review online about a product you bought or a service you received</td>
<td>32</td>
</tr>
</tbody>
</table>

[http://www.pewinternet.org/Trend-Data/Online-Activites-Total.aspx](http://www.pewinternet.org/Trend-Data/Online-Activites-Total.aspx)
Internet Users by World Region

- Asia: 399 million
- Europe: 315 million
- North America: 233 million
- Latin America: 96 million
- Africa: 33 million
- Middle East: 19 million
- Australia/Oceania: 18 million

A study by the China Youth Association for Network Development (CYAND) reported that 1 in 7 young internet users showed signs of Internet addiction—24 million youth.

http://www.chinadaily.com.cn/china/2010-02/03/content_9417660.htm
The Problematic Use of Technology
Types of potential overuse

- Checking e-mail
- Checking stocks
- Facebook, Twitter, etc
- Texting
- Multitasking
- News browsing
- Web surfing
- Online gaming
- Online shopping/bidding
- Online simulations
- Chatrooms
- Online gambling
- Online pornography
- Cybersex
- Cyber bullying
“Stickiness”: What makes a good game?

- Immersibility
- Multi-sensory
- Novelty, surprise, change
- Easy initial advancement & Graduated challenge (levels)
- Supportive member community
- Rapid feedback on actions
- Developmental skill acquisition
- Alternate personality/traits
- Reputation, fame, expertise
- Compelling and organized story line
- Opportunity to learn from experiences
- Equal opportunity (to participate/win)
- Creative control to affect outcomes
- Divergent choices & consequences
- Clarity, simplicity of rules
- Endless supply of incremental goals
Do you check/update Facebook or Twitter after you go to bed?

The Retrevo Gadgetology Report was conducted on 1000 online users in 2010.
How long can you go without checking in on Facebook?

- 46% for long time
- 40% for at least once a day
- 29% for few times a day
- 15% for couple hours
- 11% for under age 25
- 20% for over age 25
Can you be interrupted for an electronic message at any time?

- During a meeting: 22% under age 25, 11% over age 25
- During a meal: 27% under age 25, 11% over age 25
- During sex: 11% under age 25, 6% over age 25
- On the John: 24% under age 25, 12% over age 25
- I don’t like interruptions: 62%

http://www.retrevo.com/content/blog/2010/03/social-media-new-addiction%3F
University of Maryland asked 200 students not to use technology for 24 hour period. Afterwards they wrote 110,000 words describing their experiences represented by word size in the Wordle.
Best et al., (2010) reported media multi-tasking of undergrads for an average of 10.06 hours a day, commonly listening to music, watching tv, and using on-line chat/text messaging while performing other tasks.
• People’s ability to juggle two tasks drops off in their 30s and then sharply in their 40s.
• Shifting Mental Gears Costs Time, Especially When Shifting to Less Familiar Tasks
• Time costs are greater with more complex tasks
• Multitasking switching effectively reduced mental efficiency equivalent to a loss of 10 IQ points or losing a night’s sleep
• Mental calculations, such as math, are 40% slower during task switching
• MT produces physical stress resulting in release of stress hormones & adrenaline
• Prolonged multitasking seems to interfere with learning to concentrate on single intellectual tasks

Cost of Interrupted Thought

Grammar and Spellign

- A recent study published by Cranfield School of Management found language and learning deficits in students who used technology excessively.

- More than one-third (39.3 percent) of 11- to 18-year-olds in the survey admitted that text shortcuts damaged the quality of their written English, primarily in terms of spelling.

- Hinders spelling skills, implicitly encourages plagiarism, and disrupts classroom learning, and Over 84 percent of teens admitted to “copying chunks of information from the internet into their homework or projects”.

- “They are hiding these things under their desks so they are not focusing on what’s going on in class,”

- More than 60 percent of the respondents admitted to being “very” or “quite” addicted to the internet – with more than 50 percent reporting an avid use of their mobile phones.

Worse Examples

• A college teen was connected virtually with all her friends through her phone, which she used continually throughout each day and night. When her phone battery died, she had a day long panic attack.

• A 14 year-old boy was unable to use his computer and wanted to contact a friend by phone, but was unfamiliar with how to look up a phone number in a phone book.

• A 12 year-old presented at a mental health center with what appeared to be ADHD, but in fact was a serious sleep disorder from being awakened many times a night by texting from the phone she kept under her pillow.
Change vs Assimilation

Time

Early Adopters

General Usage

Integration

Optimization
## Balance

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Risks</th>
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<tbody>
<tr>
<td>Able to meet new people, internet dating</td>
<td>Internet predators</td>
</tr>
<tr>
<td>Convenient access to online services</td>
<td>Scams, phishing, identify theft, fraud, etc.</td>
</tr>
<tr>
<td>Connect to people not otherwise available</td>
<td>Increasing time in virtual reality and less time relating face to face</td>
</tr>
<tr>
<td>Form communities of learning</td>
<td>Obsessive immersion in games, chatrooms, &amp; social media</td>
</tr>
<tr>
<td>Interesting &amp; challenging simulations</td>
<td>Replacement of reality with virtual life</td>
</tr>
<tr>
<td>Convenience in virtual communication</td>
<td>Decline in face-to-face interaction</td>
</tr>
<tr>
<td>Enhanced learning through immersion</td>
<td>Time loss</td>
</tr>
<tr>
<td>Caring about what goes on in local/global community</td>
<td>Preoccupation with instant and continuous news</td>
</tr>
<tr>
<td>Explore one’s personal values, characteristics and behaviors</td>
<td>Alternate personalities (avatars) become more satisfying than real identity</td>
</tr>
<tr>
<td>Sensory-motor improvement of visuo-spatial perception and motor dexterity</td>
<td>Eye strain, carpal tunnel, weight increase, sleep problems</td>
</tr>
</tbody>
</table>
The “Addiction” Controversy & Process
I'm addicted to the internet because it's more interesting than people.

Is there a pill you can give to everyone else to make them more interesting?

Doctors never want to treat the underlying problem.
The Addiction Continuum

Preoccupation: frequent and preferred use of a media but without adverse consequences

Dependency: psychological habituation, with highly rewarding experiences without tissue-related withdrawal; periodic involvement is needed to obtain a feeling of satisfaction or avoid discomfort

Addiction: craving for tech involvement that dominates one’s life to the exclusion and impairment of other aspects of a healthy/normal lifestyle

How much should addiction be based on duration of use?
Reinforcement of Dependency

If you place food out at exactly 7:15 am every day, Scrat will come at exactly that time and not come at any other time.

If the food is present only when the yellow light is on, Scrat will check for food only at that time and ignore the location the rest.

If the food is randomly available at no specific time and with no cues, Scrat can’t predict when it will come and checks for food every few minutes—just like e-mails...
Who is most likely to become excessively involved?

- Young, well-educated, & college students (Kandell, 1998)
- People conditioned to receive external encouragement and support reinforced through social media
- Discouraged unemployed (Khajehmougahi & Alasvand, 2010)
- Schizotypal adolescents (Mittal, Tessner, & Walker, 2007); self alienated persons who feel safe with avatars
- Excessively shy & introverted students (Ebeling-Witte, Frank, & Lester, 2007); Socially anxious & emotionally lonely (Hardie & Tee, 2007)
- High Facebook users see themselves and are seen by others as more extraverted (Harbaugh, 2010)
- Higher levels of depression and compulsive tendencies (Özcan, & Buzlu, 2005; Öztürk et al., 2007), impulse control disorder, low self-esteem (Armstrong et al., 2000; Petrie & Gunn, 1998)
- Note: as technology becomes more available and less costly, demographic differences will likely disappear, as gender and racial differences have for IA.
- Vulnerable persons tend to prefer internet chat & shopping, while non-dependents use it for e-mail and information searching (Whang et al., 2003)
Quitting is difficult, but moreso for the younger gamer

(Yee, 2002)
Video games hook men more than women

• “More than 230 million video and computer games were sold in 2005, and polls show that 40 percent of Americans play games on a computer or a console. According to a 2007 Harris Interactive survey, young males are two to three times more likely than females to feel addicted to video games, such as the Halo series so popular in recent years. “

• School of Medicine researchers have shown that the part of the brain that generates rewarding feelings is more activated in men than women during video-game play.

• Males are three times more likely to get addicted to video games than females.

“Hyper”texting?

- Two-thirds of teen texters say they are more likely to use their cell phones to text their friends than talk to them by cell phone
- Of the 75% of teens who own cell phones, 87% use text messaging at least occasionally
- Half of teens send 50 or more text messages a day, or 1,500 texts a month, and one in three send more than 100 texts a day, or more than 3,000 texts a month
- Older girls who text are the most active, with 14-17 year-old girls typically sending 100 or more messages a day
- 59% of girls text several times a day to “just say hello and chat”; 42% of boys do so. 84% of girls have long text exchanges on personal matters; 67% of boys have similar exchanges.
- 54% of text-using teens have received spam or other unwanted texts.
- 26% have been bullied or harassed through text messages and phone calls
- 15% of teens say they have received a sexually suggestive nude or nearly nude image of someone they know by text

http://bensoncheng.wordpress.com/2010/05/07/teens-cell-phones-and-texting-statistics/
Neurological changes?

- A multi-university research team from China & US examines addicted vs control students who spent 10 hours daily, 6 days a week playing online games.
- MRI scans showed gray matter changes in the brain: dorsolateral prefrontal cortex, rostral anterior cingulate cortex, supplementary motor area, and parts of the cerebellum with shrinkage as much as 10-20%.
- What it means: impaired short-term memory and decision-making abilities, reduced inhibition of inappropriate behavior, & diminished goal orientation.
- These impairments may also interfere with insight, awareness of consequences, and judgment to reduce internet use.
- Limitations: small study, correlational study.

Proposed diagnostic criteria for internet addiction

1. **Preoccupation**: strong desire for the internet. Thinking about previous online activity or anticipation of the next online session. Internet use is dominant activity in daily life.

2. **Withdrawal**: manifested by dysphoric mood, anxiety, irritability and boredom after several days without internet activity.

3. **Tolerance**: marked increase in internet use required to achieve satisfaction.

4. **Difficult to control**: persistent desire and/or unsuccessful attempts to control, cut back or discontinue internet use.

5. **Disregard of harmful consequences**: continued excessive use of internet despite knowledge of having a persistent or recurrent physical or psychological problem likely to have been caused by internet use.

6. **Social communications and interests are lost**: loss of interests, previous hobbies, entertainment as a direct result of and with the exception of internet use.

7. **Alleviation of negative emotions**: uses the internet to escape or relieve a dysphoric mood (e.g., feelings of helplessness, guilt, anxiety).

8. **Hiding use from friends and relatives**: deception of actual costs/time of internet involvement to family members, therapist and others.

9. **Exclusions**: Not better accounted for by another condition; duration of 3 months & 6 hours non-work/academic use daily.

Diagnostic Controversy: Internet Addiction

- AMA: AMA's Council on Science and Public Health (CSAPH) concluded that there is currently insufficient research to definitely label video game overuse as an addiction, but since symptoms are similar to addictions, they recommended consideration in DSM-5.
- Some professionals disagree and believe that addiction should be reserved only for the ingestion of chemicals.
- APA cites several studies but acknowledges that it is controversial and requires more research.
- DSM-5: possibility of “behavioral addictions”
- Currently considered an “Impulse Control Disorder” or compulsion, yet a compulsion does not have a euphoric component as IAD does.
- Other countries have not been so hesitant to adopt the diagnosis: In Korea, about 86% of Internet addiction cases have some other DSM-IV diagnosis present. In one study, the average patient had 1.5 other diagnoses. In the US most computing occurs at home and symptoms first present in comorbid disorders. Technology also changes faster than the research on the media.

http://ajp.psychiatryonline.org/cgi/content/full/165/3/306
Effects & consequences
A bit preoccupied?
Risky Behavior

• 20% of kids who have cell phones use them to go online, and the parents of 20% of those don’t know they do it (Schaffhauser, 2008)

• Half of teens post their real age, and 40% post the name of their city on social networking sites (Thomas, 2009).

• While 25% of 13-15 y/o think it’s unsafe to post personal information, only 14% of 16-18 y/o feel that way (Thomas, 2009)

• 40% of kids are exposed to online porn, and 10% of those become very or extremely upset about it (Schrock & Boyd, 2008)

• 66% of teens report cyberbullying is serious, with a third noting it more serious than physical bullying (Thomas, 2009).
“Sexting”

• Sexually suggestive pictures, video, or messages posted or received on electronic devices

• 51% of teen girls say pressure from a boy is the reason they send sexy messages or images; only 18% of boys cited such pressure from girls; 23% of girls & boys cite pressure from friends to send or post sexual content

• Consequences include: felony restrictions, life long registration, moving residence, changing schools, restriction from all social networking sites, incarceration

• Teens are more vulnerable to blackmail because they are easy to intimidate and embarrassed to seek help—can lead to social problems, anxiety, behavior problems, depression, substance abuse, suicide/homicide
Eyes in the office
Office internet access has jumped 27% since 2001. How has little brother responded?

<table>
<thead>
<tr>
<th>Offices monitoring employees</th>
<th>78%</th>
</tr>
</thead>
<tbody>
<tr>
<td>What employers are monitoring</td>
<td></td>
</tr>
<tr>
<td>Internet use</td>
<td>63%</td>
</tr>
<tr>
<td>Email</td>
<td>47%</td>
</tr>
<tr>
<td>How employers respond</td>
<td></td>
</tr>
<tr>
<td>Termination</td>
<td>27%</td>
</tr>
<tr>
<td>Disciplinary action</td>
<td>65%</td>
</tr>
</tbody>
</table>

By the numbers

- The average business loses $357,000 annually due to non-work related browsing. A company with 1,000+ employees can expect to lose closer to $35 million.
- 31% of employees admit to sending confidential information to recipients outside of the office.
- Employee “insiders” commit 70% of all work-related computer crime with losses upwards to $455 million. Some argue the real number is closer to $5 billion.
- The average fraud committed by employees inflicts a loss of $110,000 per business and $15,000 to each individual victim.

Findings based on statistics gathered from The American Management Association, Business Week, The Gartner Group, IDC Research, Nielsen and ZDNet.
“Facebook Depression”

• More than half of adolescents log on to a social media Web site at least daily, and about 25% say they log on to their favorite social media sites 10 or more times daily.

• Doctors and researchers have warned parents against allowing children who may have problems with self-esteem or depression from spending time on social networking sites.

• They compare themselves to the friend tallies and photos of people looking happy, and comparatively feel worse.

• Co-rumination, or complaining with others, especially among teen girls regarding romantic upsets, tends to worsen moods and adds to disappointment.

• Lacking adequate coping skills, the complaints spiral into depression and hopelessness.

• Studies with adults show similar relationship between time on internet and depression, but it is unclear which is causal.

Davila & Starr, 2011; Morrison, 2011, Okeefe, 2011)
The Physiology of Addiction
Brain scan while gaming
• Dopamine levels can be affected by heredity and trauma
• Frequent release of dopamine reduces the number and sensitivity of dopamine receptors—more stimulation is required to achieve the same pleasure (desensitization & tolerance)
• Cravings are stimulated by cues or delay in involvement in the stimulating activity
How media becomes addictive

- Variable (intermittent) ratio reinforcement schedule
- Create a state of anticipation/expectation
- Dopamine keeps users craving more; it drives stimulation seeking
- Some people have as much as a 9% increase in dopamine when they listen to their favorite music (cocaine is 22%) (Salimpoor et al., 2009)
- Facebook requests, photo tags, friend updates, direct messages, and chat all create anticipation

http://www.digicombat.com/news/4d1ce8d826f00c1548500000b
Violent gaming activates aggression centers in the brain

• Michigan State University fMRI research shows that violent gaming activates the area of the brain for aggressive cognition & affect.

• “The National Youth Violence Prevention Resource Center reported (2004) the 70 top-selling video games found 49 percent contained 49% serious violence. In 41 percent of all games, violence was necessary for gamers to achieve goals. In 17 percent violence was the primary focus of the game itself. “Mature” rated games are extremely popular with pre-teen and teenage boys who report no trouble buying the games.”

• Research on aggression is inconsistent; it appears that people with conduct problems or mental illness tend to be more reactive to violent games

• Normal youth playing aggressive games showed less activity in areas of the brain related to thinking, learning, reasoning, or emotional control.

http://www.sciencedaily.com/releases/2005/10/051012082710.htm
Interventions
Compulsive Internet Use Scale

How often . . .

1. do you find it difficult to stop using the Internet when you are online?
2. do you continue to use the Internet despite your intention to stop?
3. do others (e.g., partner, children, parents) say you should use the Internet less?
4. do you prefer to use the Internet instead of spending time with others (e.g., partner, children, parents)?
5. are you short of sleep because of the Internet?
6. do you think about the Internet, even when not online?
7. do you look forward to your next Internet session?
8. do you think you should use the Internet less often?
9. have you unsuccessfully tried to spend less time on the Internet?
10. do you rush through your (home) work in order to go on the Internet?
11. do you neglect your daily obligations (work, school, or family life) because you prefer to go on the Internet?
12. do you go on the Internet when you are feeling down?
13. do you use the Internet to escape from your sorrows or get relief from negative feelings?
14. do you feel restless, frustrated, or irritated when you cannot use the Internet?

Treatment for Internet Addiction

• **Abstinence**: Generally not feasible

• **Practice the opposite**: construct a new reduced schedule for using the internet

• **External stoppers**: Use concrete things as prompters to help log off (timers, places to go, things to do)

• **Setting goals**: Set clear and achievable goals to help develop new internet use schedules, prevent cravings/withdrawal/relapse, and give sense of control

• **Reminder cards**: portable reminders of what they want to avoid (lost time with family) and what they want to do (more productive at school/work)

• **Personal inventory**: List all activities that have been neglected since emergence of the online habit

• **Family therapy**: Involve spouse/family when relationships have been disrupted; focus on moderation and controlled use

Parenting Problem? Yes, but parents lack tools

- Parents have no experience in dealing with this
- Typically lower risk (30%) children affected
- Weak or ineffective parental controls (WOW, Vista, S/W)
- Relatives, friends have lots of advice: “Just take away the computer!” “Why can’t you control your kid?”
- Shame prevents parents from seeking professional help
- Early intervention critical to minimizing impact
- Professional advice can be conflicting and confusing
- Treatment options often not reasonable (I don’t advise) to parents: removing computer, treating with antidepressants, send to wilderness program, etc.
- Technical divide presents challenges
Outpatient Treatment of Gaming Addiction:
Behavioral Treatment Protocol

• Identify the actual amount of play time and impact
  • Confront denial, personal responsibility (or motivational interviewing)

• Reduce the amount of play time to agreed upon levels
  • Reduces the indirect reward from play - participation points
  • Reduce the amount of pseudo-play time
  • Reduces social rewards from game play
  • Increase sleep, positive health impact
  • Gradual or rapid decrease as needed

• Increase positive, pro-social activities and rewards
  • Improvements in school, work, relationships = greater satisfaction
  • Counseling, academic, career guidance, goal setting

• Use game as reward for participation in competing activities
  • Premack principle: Activities become reinforcers; people can engage in less desirable activity to get more desirable activity

• Medical and psychotherapeutic treatment of depression/anxiety
Computer Addiction Treatment Methods

- Psychotherapy (CBT) - (45%)
- Family / marital Counseling (34%)
- Behavior Therapy (33%)
- Medication (32%) 11% respondents were psychiatrists
- Abstinence - take away the computer, game (18%)
  - Most intuitive solution - highest risk solution for many
- 12 step programs, on-line, gameaholics anon (18%)
- Controlled Use (moderation) (17%)
- Most often endorsed by specialists in computer/internet addiction
  - Parent Counseling (15%)
  - Social Skills Training (12%)
  - Addiction Counseling (11%)
  - Control / Monitoring Software - (8%)
Computer Locking Devices

Limits when and how long computer can be used. It’s independent of the computer. Can be configured on parent’s computer then installed with no password

http://www.pcmoderator.com/
Individual Interventions

• Make specific time limits. Set an alarm to go off in one hour and end computer time when it rings.

• Set aside "computer-free" parts of the day. If your computer use starts after dinner and extends into the night, get all your computer work done in the morning and don't touch it after dinner.

• Install software to restrict your access to Web sites that you visit compulsively. Find a friend you can trust to keep the passwords for the software so you can't circumvent it.

• Make a list of things you could be accomplishing instead of wasting time on the computer, and post it prominently near your monitor.

• Enlist family members to help encourage you to limit your use. It might be difficult to stop on your own.

• Put the computer in high-traffic area of the house. With others looking over your shoulder all the time, you'll be less likely to overuse the computer. This is especially effective for parents who fear excessive computer use in their children.
Challenges with Internet Addiction Research

• There is disagreement among specialists regarding definition of “addiction”
• Measures have been based on physical addiction models
• Measures have not been extensively validated
• Most studies are based on self report surveys and are only correlational
• Many studies are too small or selective (e.g., based on students)
• Internet and technology behavior is very complex, and not a single construct
• The idea has been popularized far beyond its evidentiary base
• There is little consistency in findings regarding approach or treatment
Take-away message

• Let’s not get too excited about tech addictions: kids naturally get preoccupied, it may be a stage of involvement, it may have benefits

• Technology is here for the long haul with benefits and risks—we need to critically think through its use

• Technology use exists on a continuum from healthy to dysfunctional use, and there is much controversy about what constitutes an “addiction”

• Some types of excessive technology use does interfere with learning, social relationships, work, mental health, and possibly cognitive development

• Parents, teachers, employers, and individuals can find reasonable guidelines for healthy use and therapy intervention
I'm a computer addict... A cyberspace junkie...

It's ruining my social life, my job, my health...

I've got to do something... I've got to get help!!

Maybe there's an on-line support group!