# INTERNET AND VIDEO GAME ADDICTION IN MIDDLE AND HIGH SCHOOL STUDENTS

## A RESOURCE GUIDE FOR EDUCATORS

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#### Warning signs of internet and video game addiction in teens

Time warp -- the inability to determine time spent on gaming/cyber activities

Lying about gaming/cyber activities

Changes or disruptions in sleep patterns

Constant craving for games/cyber activities

Withdrawal from family and friends

Loss of interest in hobbies and recreational activities

Gaming/internet use for more than two hours a day more than four days a week

Poor performance in school

Physical consequences: weight gain, carpal tunnel syndrome, stiff neck, nerve pain, eye strain

Inability to see the negative consequences of gaming/cyber activity

Excessive buying of video or computer games

Eating meals at the computer

Glorifying gaming/cyber activity

Emotional disturbance when games/electronic devices are taken away

Mood swings

Withdrawal symptoms after playing games/cyber activity: headaches, malaise, lightheadedness

Continued gaming/cyber activity despite serious adverse consequences

Persistent inability to limit or cut down on gaming/cyber activity

Ever-increasing amounts of time spent gaming/engaging in cyber activity

Obsessing about gaming/cyber activity when not playing or online

#### Facts about video game use and abuse:

Although gaming addiction is not yet officially recognized as a diagnosable "disorder" by the American Medical Association, there is clear and convincing evidence people of all ages, especially pre-teens and teens, are facing very real - sometimes severe consequences - associated with compulsive use of video and computer games.

Video games have become increasingly complex, detailed, and compelling to a growing international audience of players. Armed with better graphics, more realistic characters, and greater strategic challenges, it is not surprising many teens would rather play the latest video game than spend time with friends and family, play sports, or go to a movie and dinner.

With this said, not all gamers are addicts – many teens can play video games a few hours a week, successfully balancing school activities, grades, friends, and family responsibilities. However, for some, gaming becomes an uncontrollable compulsion. Studies estimate that 10 to 15 percent of gamers exhibit signs that meet the World Health Organization's criteria for addiction.

Many teens develop cravings/preoccupation with gaming, tolerance (needing more and more time playing to get the same "high"), depression and agitation when "unplugged," an inability to regulate time spent on gaming, and most of all an inability to change gaming behavior even after negative consequences have occurred (failing grades, loss of friends, social withdrawal, chronic fatigue, back pain, etc.).

#### What Makes a Video Game Addictive?

Most teens like to spend at least part of their free time playing video games. Unfortunately, what starts out as pure recreation can become an addiction. Soon, friends, family, school, and even personal hygiene are neglected as every spare moment is spent on gaming.

But what makes a game addictive? Are there certain characteristics that make some games more addictive than others? Why are some teens more susceptible than others to this kind of addiction?

To begin with, video games are *designed* to be addictive. Game designers are always looking for ways to make their product more interesting and thereby increase the amount of time people will spend playing.

Games are designed to be difficult enough to be challenging, while allowing players to achieve small accomplishments that motivate them to keep playing. In this respect, the design of video games is similar to the design of slot machines, which will allow players to have small "wins" that keep them playing.

There are several "hooks" built into games that increase the odds of making play an "addictive" experience:

#### · The High Score

Whether you have tried the latest edition of Halo or Call of Duty or you haven't played a video game since PacMan, the high score is one of the most easily recognizable hooks. Trying to beat the high score (even if the player is trying to beat his own score) can keep a player focused for hours.

#### Beating the Game

The desire to beat the game is fed as a player "levels up" or finds the next "hidden clue."

#### Role-Playing

Role-playing games allow players to do more than just play to beat a level or a score - they get to create the characters in the game and then take off on an adventure unique to their character. As a result of creating an "avatar," a strong emotional attachment to the character is often developed which drives ongoing play.

#### Discovery

The exploration or "discovery hook" is most often used in roleplaying games. One of the most popular online games EVER is World of Warcraft. During the game the player spends time exploring imaginary worlds. The thrill of discovery fantasy civilizations/cultures can be extremely compelling – *especially for teens and adults who are dissatisfied with their online lives.* 

#### Relationships

Online role-playing games allow teens to build relationships with other players who are also online. For some teens, this online community becomes the place where they are *most* accepted, admired, and desired -- which draws the teen back again and again.

Massive Multiplayer Online Role-Playing Games (MMORPGs) are especially addictive because there is no ending to the game. Unlike standard games like Super Mario Brothers (where you win when you save the princess), the MMORPG goes on and one – with new adventures and challenges unfolding.

In addition to the psychological addiction, it is now believed there is a strong physiological element to addictive game playing. Researchers at Hammersmith Hospital in London conducted a study in 2005 which found that dopamine levels in players' brains doubled while they were playing. Dopamine is a mood-regulating hormone associated with feelings of pleasure. The findings of this study (and many others conducted in China, Korea, and the United States) show that gaming is chemically addictive and can permanently change/rewire the brain.

Although there is ongoing debate about whether gaming addiction is a diagnosable disorder, compulsive gaming behavior undeniably exists. The combination of intentional programming by designers and the predisposition many teens have to addictive behavior means this is a real issue that parents, teachers, and friends should be aware of and take action to prevent.

#### Social Consequences of Gaming Addiction

Imagine this scenario: a teen's cell phone starts to ring. It's a friend from school calling. The friend is calling to hang out. After all, it is Friday night. Instead of answering, the teen says: "I'll call him as soon as I finish this level of the game." One hour passes. Two hours. Then three hours. The call is never returned or even acknowledged.

Teens addicted to gaming encounter situations like this all of the time -- situations in which they have to choose whether to interact with the real world or continue living in their fantasy world. Sadly, the real world rarely wins.

It is important to understand addicted gamers not only ignore real-life relationship, but also the tend to talk so much about gaming – to the exclusion of everything else – that friends lose interest in being friends. Many compulsive gamers cannot or will not engage in real world conversations or be a source of support or encouragement to friends and family. Because their friends talk about other subjects, they begin to feel left out, which in turn causes them to feel irritated or offended. It doesn't occur to the gaming addict they have chosen to be left out by devoting all their time to gaming.

The physical consequences of video game addiction can lead to social consequences as well. For instance, an addicted gamer who loses sleep because he's playing so much simply doesn't have the energy to invest in relationships. Lack of sleep may also make him irritable and difficult to be around.

The lack of social interaction that results from compulsive gaming can have **long-term** social and developmental consequences. An addicted teen may never develop effective social skills, which can stifle the ability to create and maintain healthy relationships in college and beyond. Suddenly, a gamer is 21 but has the social skills of a 15-year-old. He does not know how to make friends, talk to girls, or just "hang out" and enjoy people's company. The social anxiety and lack of skills created by the isolation of compulsive gaming feeds the process of addiction. The gaming addict will likely retreat to his online world where relationships are established and easier to negotiate.

Another part of the addiction dynamic with video games is most children and teens do not feel they have control over their day-to-day lives. They are generally told what to wear and eat, when to go to sleep and wake up, how to spend their day, and who their friends should be. In a video game, the child/teen is in control, whether they are driving a race car, mastering a Jimmy Hendrix guitar lick, or leading a revolution.

Additionally, there is the excitement of gaming. A "good game" will get a player's pulse racing and adrenaline pumping, even if they are sitting on the couch holding a controller. Games with a time component amplify this excitement, such as Jewel Quest where the player may be down to one second before everything "blows up."

"Kicking the habit" is very challenging. Video game and computer addicts cannot avoid computers. They need to use technology for homework and communication. The dynamic for a compulsive gamer is similar to an alcoholic who has to live and work next to a bar. Thus, parents need to set clear limits and monitor usage. This means the computer, smart phone, and gaming system need to be used in a public place (e.g., living room, den, kitchen) and need to be turned off at a time that allows the teen to wind down for sleep.

Most importantly, parents should help their children find alternatives to video games. Rather than restrict and limit use/access, parents should also try to get gamers to participate in sports, join the school band, afterschool clubs, or just play outside with the neighbors. Parents need to learn not to be afraid of the words, "I'm bored." The truth is, if a gamer gets bored enough, he/she may try to find something to do offline.

Who is most vulnerable to internet and videogame addiction? Research shows that cyber and videogame abuse, dependence, and addiction are most likely to occur in students diagnosed with depression, attention deficit hyperactivity disorder (ADHD) and Asperger's Syndrome.

It should come as no surprise that since addicts generally have brainbased hardwiring that predisposes them to multiple addictions, teens addicted to the cyber/video world are also at **high risk for substance**  **abuse and behavioral addictions.** Substance abuse and cyber addiction often go hand-in-hand.

#### **Current Research on Teen Use of Media/Technology**

According to the Center for Media and Child Health at Harvard *All media should be considered educational*. The challenge facing educators and parents is determining what children/teens are learning from media.

Parents and educators need to understand all media is a powerful *environmental health influence*. Used thoughtfully, media can be of great benefit by connecting, informing, and educating. On the other hand, used thoughtlessly and without monitoring, media can do great harm, contributing to long-term social-emotional and physical health problems.

Did you know 79% of children **two and under** watch TV, 61% watch for an average of 1 hour and 20 minutes on a typical day, and 26% have a TV in their bedroom?

Only 6% of parents are aware of the impact of media on their children.

Media exposure to *sexual content* contributes to early sexual activity (as much as 2 years early).

Media exposure to *tobacco* contributes to early smoking.

Media exposure to *alcohol* increases initiation/binge drinking

Research has shown exposure to media violence contributes to anxiety, nightmares, and even posttraumatic stress disorder.

Repetitive exposure to media violence contributes to progressive desensitization to violent imagery and an increase in physical aggression.

According to the Kaiser Family Foundation young people spend more time using media -- TV, movies, music, computers, cell phones, and

video games -- than engaging in any other single activity except sleep!

The media students use and create play a key role in the development of their growing sense of self, of their world, and how they will learn to interact with their world.

For any given student the way media shapes their sense of self and the world depends on the *content* of the media they take in and integrate, as well as the student's age, the amount of media, and whether the use is active and critical.

8 to 18-year-olds use media for 7hours and 38 minutes each day

In addition to the 7 hours and 38 minutes per day, 8 to 18 year olds spend an average of 33 minutes talking on the phone *AND* 1 hour and 35 minutes texting.

8 to 18-year-olds spend one quarter of their media time using multiple media sources.

### Children and teens using multiple media sources are exposed to 10 1/2 hours of media content each day.

99% of homes have televisions.

More homes have 7 or more televisions than have 1 television.

45% have television on "most of the time."

63% have TV on during meals.

47% of heavy users of the internet and video games have poor grades.

33% of heavy users of the internet and video games have an increased incidence of anti-social behaviors.

20% of heavy users report low personal contentment/depression.

#### "Sexting" Stats

In a nationally representative survey of 12 to 17 years old conducted on landline and cell phones, the Pew Research Center's Internet and American Life Project found:

4% of cell-owning teens ages 12 to 17 years old say they have sent sexually suggestive nude or nearly nude images of themselves to someone else via text messaging.

15% of cell-owning teens ages 12 to 17 years old say they have received sexually suggestive nude or nearly nude images of someone they know via text messaging on their cell phone.

Older teens are much more likely to send and receive these images: 8% of 17-year-olds with cell phones have sent sexually provocative images by text and 30% have received a nude or nearly nude image on their phone.

The teens who pay their own phone bills are **more likely** to send "sexts:" 17% of teens who pay for all of the costs associated with their cell phones sent sexually suggestive images via texts. Only 3% of teens who do not pay for, or only pay for a portion of the cost of the cell phone, send these images.

#### **Achieving Cyber Wellness**

The goal for all users of the internet is achieving "cyber wellness." Cyber wellness is a term that refers to the positive well-being of internet users and to a healthy cyber-culture.

For teens, cyber wellness involves an understanding of the risks of harmful online behavior, and awareness of how to protect themselves and others from harmful behavior, and recognition of the power of the internet to affect positive change in oneself and their community at large.

The internet and gaming are here to stay and educators and parents need to help teens develop ways to use the internet and gaming to enhance their quality of life while simultaneously enhancing their broader social communities. *Educators and parents need to prepare teens to be critical thinkers, creative producers of content, and proactive citizens within their "cyber community."* 

Cyber wellness also includes embracing the potential positive effects of cyber-action:

- 1) empowering learning
- 2) improving teamwork
- 3) improving work-life balance through telecommuting
- 4) improving job marketability
- 5) creating political and social opportunities for disenfranchised and marginalized populations
- 6) providing opportunities for information and "user" generated content across socioeconomic and cultural boundaries (art, photography, music, writing, etc.).

Students are becoming *active producers and consumers* of online content, services, and communication. With these opportunities come unprecedented freedoms to express oneself as well as bring new and complex responsibilities and risks. This fundamental change in young people's relationship with new media means it is imperative adults empower children and teens with the necessary tools, knowledge, and skills to make informed decisions about appropriate and safe use of new technologies.

Cyber wellness also involves *balance*: the ability to take advantage of the opportunities to be creative, to connect, to empower, to entertain while simultaneously taking advantage of *off-line opportunities* to experience travel, food, new cultures, teamwork, collaboration, love, and committed partnerships.

Cyber wellness necessarily includes physical and emotional health: exercise, healthy dietary practices, recreational interests that include connection to nature, and relaxation/rejuvenation practices that maintain health.

Achieving balance in the 21st century is perhaps the greatest challenge for both youth and adults. The dynamic and constantly changing world of new technology and media can easily consume one's time and energy, whether a person is in early elementary school or is an adult. The opportunities for recreation and distraction are also at an unprecedented level via the internet and gaming. The combination of stimulation and unlimited access to both cyber and gaming media can lead easily to an imbalance in one's life -- especially for at risk youth.

Who is most at risk for a "cyber-imbalance"? Students with neurological, psychiatric, and environmental challenges and deficits: ADHD, depression, anxiety disorders, trauma, and autism spectrum disorders, poverty/lack of resources.

In assessing risk there is continuity between online and offline behaviors: the teens that are struggling with offline challenges are most likely the same teens who are struggling online.

Achieving a true balance between cyber and three-dimensional worlds is an ongoing challenge for the 21st century. The crucial first step is awareness of the need to carefully analyze and question the way children and teens interact with new technologies and media. Educators and parents must adopt a critical stance at all times and help children and teens to be a positive force online and offline.

#### The Center for Media and Student Health at Harvard recommends the five C's for shaping media's influence on your student or teen:

**Control time**: No more that 1 to 2 hours per day (max).

**Content matters:** All media are educational. Some teach accurate, healthful lessons, while others teach distorted and harmful lessons.

**Context is important:** Where, when, how, why and WITH WHOM young people use media strongly influences whether the media enrich or harm students.

**Critical thinking:** Teaching students active, critical media use is essential for healthy development.

**Create and model media mastery:** What we feed student's minds is as important

as what we feed their bodies. Teach student's a healthy media diet and continually engage in a discussion about media rather than passively consuming media.

#### Achieve Cyber Wellness Through the "Digital Diet"

#### "DIGITAL DIET"

- 1) Limit technology to two hours per day (non-work or school related use).
- 2) Spend one hour per day, one day per week, and four days per month completely "unplug" from all forms of technology.
- 3) Institute a "tech curfew:" no recreational use of technology after 9:00pm.
- 4) Keep all forms of technology out of bedrooms at all times.
- 5) Turn off smart phones at 9:00pm (no texting, surfing, etc.)
- 6) Collect all tech gadgets after curfew and have them "sleep" in the kitchen or family room at a common power bar.
- 7) Take family "field trips" at least once per week (parks, food, beach, museum, hiking, movies).
- 8) Exercise as a family: biking, hiking, swimming, treadmill, sports, boogie boarding, bowling).
- 9) Do not have conversations or meals with any "tech" devise in hand (eyes "up" and focused on your conversation partner).
- 10) Structure your "tech" day: set specific times for emailing, Facebook, chat rooms, eBay, research, etc.

#### Assess Student's Cyber and Gaming Use

#### STUDENT TECHNOLOGY ADDICTION TEST

SCORING:
DOES NOT APPLY= O
RARELY=1
OCCASIONALLY=2
FREQUENTLY=3
OFTEN=4
ALWAYS=5

1. How much time does your student spend playing video games <i>per day?</i>
none
1 to 2 hours
3 to 5 hours
6 to 8 hours
more than 8 hours
2. How much time does your student spend on the internet <i>per day</i> (playing on-line games, researching areas of interest, down loading music and videos, YouTube, chat rooms, instant messaging)?
none
1 to 2 hours
3 to 5 hours
6 to 8 hours
more than 8 hours
<ul> <li>3. Does your student refuse to accept time limits set for video gaming and on-line use?</li> <li> does not apply</li> <li> rarely</li> </ul>
occasionally
frequently
often
olicii always
aiways
0-1-2-3-4-5 score
4. Does your student eat meals while online or when gaming?
does not apply
rarely
occasionally
frequently
often
always
0-1-2-3-4-5 score

		park play, camping) in favor of gaming and/or being online?
		_ does not apply
		_ rarely
		_ occasionally
		_ frequently
		_ often
		_ always
<b>0-</b> 2	1-2-	3-4-5 score
	6.	Does your student engage in lengthy discussions/monologues about video games and/or on-line activities?
		_ does not apply
		_ rarely
		_ occasionally
		_ frequently
		_ often
		_ always
<b>0-</b> 1	1-2-	3-4-5 score
	7.	Has your student gained weight as a result of video gaming and on-line activities?
		_ no
		_ yes
		_ <b>,</b>
	8.	Does your student complain of body aches/pains related to video gaming and/or on-line use? (carpal tunnel syndrome, stiff neck, back pain, eye strain)
		_ does not apply
		_ rarely
		_ occasionally
		_ frequently
		_ often
		_ always
<b>0-</b> 1	1-2-	3-4-5 score
	9.	Does your student neglect household chores in order to continue gaming or
		staying on-line?
		_ does not apply
		_ rarely
		_ occasionally
		_ frequently
		_ often
		_ always
n-1		3-4-5 score

10. Does your student prefer to spend time gaming or being on-line rather than spend
time with family?
does not apply
rarely
occasionally
frequently
often
always
0-1-2-3-4-5 score
TOTAL SCORE=

#### **Scoring:**

- 0-7 Average gaming and online use (student is spending no more than 1.5 hours per day on-line or gaming and is able to participate successfully in home, school, and social roles and functions).
- 14 21 Gaming and online use are causing significant day-to-day problems (student is spending more than 3 hours per day on-line and/or gaming, is constantly arguing about screen time, is refusing to attend to chores and homework, is beginning to show signs of social isolation and is preferring electronic forms of entertainment to all "off-line" forms of recreation).
- 28 35 Gaming and online use are causing severe problems (these problems include complete social isolation, depression, chronic fatigue, school failure, defiance/non-compliance related to limits on technology use, weight gain, orthopedic problems, loss of sense of reality, and addiction symptoms such as emotional agitation and/or depression when "off-line).

#### Games that pose the greatest risk:

0 to 10 scale (0=no risk and 10=risk for addiction)

10/10: MMORPG's (massively multiplayer online role-playing games) such as Entropia Universe, RuneScape, Final Fantasy, and World of Warcraft.

8/10: RTS (real time strategy games) such as Civilization, Age of Empires, Command and Conquer.

7/10: FPS (first person shooter) such as Halo, Call of Duty, and Counterstrike.

5/10: Manage and Control Games (God Games) such as Sims, Roller Coaster Tycoon, Black and White.

4/10: Educational Games that include geography, math, economics, politics, and history.

3/10: Old School Games such as mazes, races, battles that can be played by the entire family played on old platforms like Nintendo 64, PlayStation 1, or Sega's Dreamacast.

2/10: Physical Simulation Games such as Dance Dance Revolution, bowling, baseball, and boxing.

1/10: Puzzle Games that include logic, language and trivia.

#### **Books and Websites**

Cyber Junkie by Kevin Roberts

Video Games and Your Kids by Hilarie Cash and Kim McDaniel Caught in the Web and Tangled in the Web by Kimberly Young Internet Addiction: A Handbook and Guide edited by Kimberly Young Surviving the Technological Alteration of the Modern Mind by Dr. Gary Small

*Virtually You: The Dangerous Powers of the E-Personality* by Dr. Elias Aboujaoude

*ReWired: Understanding the iGeneration and the Way They Learn* by Dr. Larry Rosen

The Shallows: What the Internet is Doing to Our Brains by Nicholas Carr Alone Together: Why We expect More From Technology and Less From Each Other by Dr. Sherry Turkle

*Game Addiction: The Experience and the Effects* by Neils Clark and P. Shavaun Scott

*Unplugged: My Journey Into the Dark World of Video Game Addiction* by Dr. Ryan Van Cleave

Websites that are very helpful to educators working with students who are at risk for addiction or have crossed the line into addictive behavior include: The Center for Media and Student Health, The Berkman Center for Internet and Society, The Internet Safety Zone, Netfamilynews, Connectsafely, The Internet Safety Zone, reSTART.

#### Group, Family and Individual Therapy

#### For internet and video game addiction

Is one of your student's lives controlled by the internet, electronic entertainment/communication such as video gaming, surfing the internet, YouTube, texting?

#### Signs of internet and electronic entertainment addiction

- Does your student dedicate the majority (or all) of his recreational time to electronic entertainment? Are his grades and health suffering?
- 2. Does your student spend multiple hours per day texting, tweeting, and/or posting on Facebook?
- 3. Does your student organize his schedule around specific television shows and/or internet events?
  - 4. Does your student refuse to leave the house because of his preoccupation with a video game, posting on Facebook, surfing the net?
  - 5. Does your student talk compulsively about electronic entertainment, including monologues about the minute details of a video game?
- 6. Does your student reject any type of physical recreation in favor of sitting in front of a computer or television monitor?
  - 7. Does your student argue and complain whenever he is asked to turn off a video game system or the computer?
  - 8. Does your student say he has friends but spends every weekend alone, playing video games, surfing the internet, Facebooking?
    - 9. Does your student complain that all activities are boring and meaningless except for electronic entertainment?

- 10. Does your student confuse internet acquaintances with true friends?
- 11. Does your student lack any reasonable awareness of the amount of time he spends on electronic entertainment?
- 12. Is your student losing interest in school or work or family? Is your student becoming increasingly isolated?

# What can you do to help a student free him/herself from addiction to the internet and electronic entertainment?

Recommend participating in an 12 week program combining group, family and individual therapy sessions that focus on the development of skills needed to end dependence/addiction to video games, internet surfing, YouTube, texting, and social media sites.

#### Goals of group, individual and family therapy:

Develop self-awareness related to the amount of time spent on electronic entertainment and communication.

Develop self-awareness of the social, psychological, and physical consequences of compulsive gaming, texting, surfing the net, YouTube.

Learn how to cope with boredom without resorting to electronic entertainment and communication.

Learning how to develop recreational alternatives to electronic entertainment (hobbies)

Learn how to cope with powerful emotions without resorting to video games, surfing the net, and texting/posting.

Develop interests in interactive outdoor interactive recreational activities (as an alternative to indoor/solitary activities).

Develop a true social network of like-minded peers for recreation, socialization, support, and romantic partnership.

## Contact Christopher Mulligan LCSW for more information. 310/287-1640 3685 Motor Avenue. Suite 150, LA, CA 90034

www.cyberaddictionrecovery.com