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## Growing epidemic of videogame addiction

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## Growing epidemic of videogame addiction

### Abstract

Videogames are rapidly becoming more popular with children and adults alike. Ever since the mid 1980s, videogames have been a major part of pop culture and a widely accepted form of entertainment. With more advances of technology and internet, online gaming has also evolved. Massive Multiplayer Online Role Playing Games such as Everquest and World of Warcraft have become a topic of addiction (msnbc.com, 2008). Some individuals have neglected jobs, families, and personal well-being to continue to play these games, with signs of addiction mimicking substance addiction. The American Psychiatric Association is even considering involving videogame addiction as a compulsive behavioral disorder in the DSM-V (msnbc.com, 2008).

# GROWING EPIDEMIC OF VIDEOGAME ADDICTION

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Masters of Arts

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## Abstract

Videogames are rapidly becoming more popular with children and adults alike. Ever since the mid 1980s, videogames have been a major part of pop culture and a widely accepted form of entertainment. With more advances of technology and internet, online gaming has also evolved. Massive Multiplayer Online Role Playing Games such as Everquest and World of Warcraft have become a topic of addiction (msnbc.com, 2008). Some individuals have neglected jobs, families, and personal well-being to continue to play these games, with signs of addiction mimicking substance addiction. The American Psychiatric Association is even considering involving videogame addiction as a compulsive behavioral disorder in the DSM-V (msnbc.com, 2008).

Entertainment has always been a large part of the American lifestyle. Movies have been made since the late 1800's, television since the 1940's, and home video since the 1970's. As the decades progress, entertainment tries to progress in its interactivity. Videogames popped up in the 1970s in arcades and eventually in the home in the late 70s, early 80s. As the internet has become a way of life, the gaming industry has capitalized by connecting individuals in a virtual world. Massive Multiplayer Online Role Playing Games (MMORPGs), allows individuals to talk, play, and interact with friends from the comfort of their own home pc and videogame system. World of Warcraft and Everquest are forerunners and by far the most popular games in this genre with more than 9 million players registered on World of Warcraft alone (MSNBC.com).

Games have become a great way for friends to keep in touch if they are unable to meet in person, spend a night in, or simply have fun. For some people though, the game becomes a way of life. Children and adults alike play videogames on a consistent basis, but for some it has gotten so far out of hand so much so that consideration is being given to adding videogame addiction to the Diagnostic and Statistical Manual from the American Psychiatric Association (ScienceDaily, 2007)..

Individuals may indulge in more than 16 hours a day in these MMORPGs; neglecting jobs, loved ones, responsibilities, and school.. Since the problem is relatively new, EverQuest was released in 1999, mental health workers are trying to determine how to help the individuals who have this addiction. The care giving community is divided because there are other mental health workers who believe there is no addiction process associated with games. Treatments and assessments are currently being created and evaluated to help give a criterion to this disorder (Salguero & Moran, 2002). For the time

being, mental health workers are adapting gambling assessments or gambling criteria.

With more and more individuals connecting to the information age, the numbers of online gaming continues to increase (Phillips, Rolls, Rouse, and Griffiths, 1995)

### Video gaming evolution

#### *History and present*

Back in the 1970's, videogames were only found in arcades. As the turn of the decade approached, videogames found their way into the household on game systems (Atari Years, 2008). Today four out of ten households have videogame systems (Morris, 2007) and 92% of adolescents have played games in the last year (Salguero' & Moran, 2002). It started as a pop culture phenomenon, but rapidly grew into an acceptable form of entertainment worth an estimated 4.2 billion dollars a year. With new technology such as voice chat and video over the internet, individuals can play games with thousands of other avid gamers without leaving the comfort of their home. One type of game that allows individuals to interact with thousands at the same time is called a Massive Multiplayer Online Role Playing Game or MMORPG for short.

#### *MMORPG*

Massive Multiplayer Online Role Playing Games have become greatly popular, with a subscription server list of over 9 million people in the United States (Warcraft Commercial, 2007). Massive Multiplayer Online Role Playing Games allow players to pay a monthly fee to connect to a server and join in a game with other individuals (Chappell & Davies, 2006). Two of the most popular MMORPG's are EverQuest and World of Warcraft (msnbc.com, 2008). They allow the players to engulf themselves in a fantasy world where they can create a player of their liking and explore worlds to gain

experience points to build their characters up to a stronger level. With voice enabled, players can join clans and take part in adventures in a virtual world (Chappell & Davies, 2006). Gamers are available to many individuals around the world who may be connected to the server. This connection can give an individual a sense of comradery and belonging (Wan & Chiou, 2007). However, this type of socializing can lead to isolation, neglect of responsibilities, and even addiction.

## Addiction

### *Video game addicts*

Addiction is defined as “1. Compulsive physiological and psychological need for a habit-forming substance” “2. The condition of being habitually or compulsively occupied with or involved in something (Freedictionary.com, 2008).” Addiction has been used to describe a drug habit, gambling problem, or even sexual compulsivity. However the term addiction is beginning to describe videogame players. In an article from MSNBC.com (2007), the top 5 most addictive games were listed. The top two games were EverQuest and World of Warcraft. The application of addiction to videogames has become so widespread that the Diagnostic and Statistical Manual of Mental Health Disorders (DSM) is considering adding videogame addiction/dependence to behavioral addictions in the DSM-V due out in 2012 (ScienceDaily, 2007). It is not just psychologists or parents who view games as problematic. Gaming forums have been littered with topics such as “You know you play too much World of Warcraft when you...” (World of Warcraft.com, 2007) from individuals who are very much into the games themselves but have gained insight on the problem they or others may be having with their videogame consumption. So if addiction is something that usually involves a



substance, habit forming stimulation, or something that causes physical or physiological need, how can something that is not real create such a push for an inclusion as a mental disorder?

### *Gains*

Before looking into the realm of the negatives of videogame addiction, it is a good idea to explore the positives of videogame playing. After all, no one starts something hoping to become an addict or dependent. Videogames have to have some intrinsic or extrinsic value to the individual. One study (Phillips et al 1995) polled 429 males and 379 females and examined their gaming process. In the article, the individuals polled were asked his or her reasoning for playing video games. Some reasons were “to pass time, avoid doing other things, to cheer oneself up, or other reasons” (Phillips et al, 1995, pg. 688). Hills (Hill et al, 2001) stated that many gamers attributed his or her playing as mood changing. Chappell and Davies (2006) found individuals who played, played for a sense of belonging, accomplishment, adventure, and relaxation the end of the day. Cameron and Dwyer (2005) found a sense of achievement for individuals who indulge in gaming.

In one excerpt from Phillips and Davies (2006), an individual describes his fascination of an MMORPG:

The game was frustrating at first...but the difficulty only made my accomplishments more satisfying. I started playing whenever possible...All of a sudden, the linear and confined role-playing game became infinite! I felt free, free of constraints and guidelines, free to create my character's own path instead of

following the footsteps of some strategy guide...every accomplishment was my accomplishment, and every accomplishment brought true satisfaction.

Another individual describes the social world of an MMORPG:

“Even more awesome than the challenge of EverQuest was the social world of EverQuest. I had played online RPG before, but EverQuest was based around cooperation, a dimension completely new to me. The people that I befriended in EverQuest were trustworthy, kind, and personable. I quickly made friends...Our shared triumphs and struggles bound us together. We offered our powers to help one another, we made each other laugh, and we had conversations about real life.”

In one case study (Allison et al, 2006), a young man, Mr.A, described his playing of an MMORPG as finding “an ideal version of the self.” He could put on a new identity like a new suite of clothes, becoming someone who walked on water, healed others, and cast lightning bolts. This was a new life which was in stark contrast to his daily experience of himself as inadequate (Allison et al, 2006). He felt he could do this all in an environment where there were no consequences. He felt free to become the person he wished he could be.

Belonging has been identified by Maslow (Ormrod, 2006) as a basic need for all people. People search for sense of belonging in many areas of life. Some individuals having difficulty finding their personal and social niche have found connectivity in games like these. There is that common bond that brings people together, it just so happens to be in the form of a virtual world (Phillips & Davies, 2006). Stereotypically there are many individuals at middle schools or high schools whom are labeled as “nerds”. Movies and television exploit them. The popular television show South Park has even parried these

individuals who play World of Warcraft. The show did touch on a good point though, by showing how this game can control lives, but also went to extremes when it came to physical presence (South Park, 2008). These individuals have a tendency to be outcasts and are not typically involved in school's extracurricular activities. Young individual can search over the world wide web to find others with whom they can connect. The games give them an option to seek acceptance, rather than withdraw. For instance, a study by Griffiths, Davies, and Chappel (2004), found that individuals on an MMORPG questionnaire rated playing for social reasons as their number one reason for playing.

### *Motivation and satisfaction*

When people perform a specific action or behavior, it is typically derived from some sort of joy. This was demonstrated in a study by Wan, Chin-Sheng, Chiou, and Wen-Bin (2007). They found that individuals who qualified as "addicts" on their videogame addiction scale, derived more satisfaction from playing games than did people who were not deemed as videogame addicts. Thalemann, Wolfling, and Grusser (2007) also found this same trend, as excessive playing was maintained by prolonged sensation and a motivational component.

This motivation can come in two forms: intrinsic or extrinsic. Intrinsic motivation comes from an inner desire to perform an action, while external comes from outside stimuli (Thalemann, Wolfling, and Grusser, 2007). It is described that these intrinsic motivators are created by the individual. Meaning that individuals will take something salient and make it into a motivator. An external motivator may be something as simple as wanting to get to a next level in a game. Whether intrinsic or extrinsic, both can lead to a greater desire to continue play.

Other individuals may get a sense of euphoria while playing videogames. The excitement of playing stimulates the reward receptors of the brain and the individual will gain a sense of calm (Thalemann, Wolfling, and Grusser, 2007). Videogames give the player not only psychological satisfaction, such as stress relief, but also biological and sociological benefits through the mind's reward system, as well as social acceptance. So how can something that seems to give in so many positive ways turn into a behavior deserving of the term addiction or dependence? As the definition of addiction refers to something that can give individuals confidence, and then becomes an obsession which leads to a destruction of reality.

### *Gender and age differences*

When videogames are usually mentioned, many think of young kids, especially young males. This may have been true 20 years ago, but this is no longer the case. As time passes, young children who grew up playing videogames become young to middle-aged adults who play videogames. Griffiths, Davies, and Chappell (2004) devised a study to compare these adolescent and adult videogamers. The two groups were relatively the same when comparing number of hours played, but one major difference was discovered. It appeared that adult gamers would neglect social activities to continue their gaming usage, as compared to adolescence giving up on education and employment to continue theirs. This difference could be due to more adolescents growing up in an age where their friends play online, as compared to adults who grew up without the internet and online gaming.

Gender has also changed over the years. Women and girls are becoming more involved in videogame playing. A study by Phillips, Rolls, Rouse, and Griffiths (1995)

devised a questionnaire to determine playing behaviors of 11-16 year old children. Of the 868 returned surveys, 387 females reported playing games. Even though there is not much difference between quantity, males were more likely to spend more time playing at one sitting, and played more times per week. Salguero & Moran (2002) also found that males played more often than did females (79% compared to 32%).

### *Misdiagnosing*

Videogames are rapidly growing and the nine million individuals who are registered on World of Warcraft's servers prove that (World of Warcraft, 2008). The idea of addiction with this growing population leaves the door open to other diagnosis and past misdiagnosis. Ju-Yu Yen et. al (2007) found that individuals who met their criteria for internet addiction, reported having more symptoms of ADHD than those not meeting the criteria. Bioulac, Arfi, and Bouvard (2007) found similar results. Children diagnosed with ADHD reported having more problems when playing games, such as stopping under own power, than did non ADHD diagnosed individuals.

Team x-box.com reported on a study by Dr. Charlton (2008), where he found that many individuals addicted to videogames resembled signs of aspergers syndrome. He also found that as individuals moved closer to symptoms of videogame addiction, the more they would exhibit negative characteristics that are typically related to aspergers (teamxbox.com, 2008). These rising numbers and misdiagnosis are just a few reasons why videogame addiction should be considered for admission as a mental diagnosis.

*Addiction in a new sense*

Earlier the definition of addiction was described as something that essentially has a psychological or physiological hold on an individual (freedictionary.com, 2008). Gambling, drugs, and alcohol have been viewed as something that can lead to addiction. They are all labeled in the DSM-V TR and have a criterion that allows practitioners to diagnose the disorder respectfully. Videogame addiction is new concept that many researchers have struggled to properly diagnose. There are no specific criteria available in the DSM to help a counselor diagnose symptoms. Young (2004) suggested that the DSM criteria for addiction be amended to help diagnose addiction to computers. Many researchers are devising their own questionnaire by modifying addiction to gambling or to a substance to help understand this growing phenomenon (Cameron & Dwyer, 2005). Phillips et al.(1995) devised a questionnaire for videogame addiction based off DSM IV-TR criteria for Chemical Dependency.

Jerald J. Block M.D. (2008) took another approach and suggested incorporating Videogame addiction into compulsive-impulsive spectrum disorders. His criteria includes:

1. Excessive use. Often with a lost sense of time
2. Withdrawal. This includes feelings of anger, tension, or depression when videogames are unavailable.
3. Tolerance. The need for newer/better equipment, games, or more hours of use.
4. Negative repercussions. Arguments, lying, poor achievement, social isolation, and fatigue.

Many individuals will suggest many different ways, reasons, and suggestions regarding videogame addiction and its incorporation into the DSM-V. The real wonderment is how this can mimic dependency so closely that it has enough power to stand alone.

### *Dependency Criteria*

As mentioned earlier, there are no specific criteria set for diagnosing videogame dependency/addiction. However, researchers have manipulated the DSM-IV-TR criteria to create questionnaires or experiments allowing them to examine research on this growing phenomenon, and many have new discoveries how specific behaviors mimic chemical dependency.

According to the DSM-IV-TR (2005), the first criterion for chemical dependency is tolerance. Tolerance is described as an increase of a substance to achieve desired effect or receiving a diminished effect from the same amount of substance. Individuals with chemical dependency will develop an ability to drink or use more of their drug of choice in order to receive the desired high. An interpretation of tolerance could be from an individuals reluctance to stop playing until they feel personally satisfied as stated in a study by Phillips, Rolls, Rouse, and Griffiths (1995). Another idea comes from Block's (2008) third criteria of videogame dependency; tolerance can be inferred from the ever increasing amount that is spent on gaming systems, accessories, and games as it is now a 4.2 billion dollar industry.

The second criteria of chemical dependency of withdrawal (DSM-IV-TR, 2005) is a substance is induced to prevent withdrawal symptoms such as physical and physiological changes. A study conducted by Yee (2002) found that individuals playing a

MMORPG would become agitated, became angry, an irritable if not allowed to play as desired even when not enjoying the gaming experience. Hills, Hill, Mamone, & Dickerson (2001) found that even a depressed mood would not hinder individuals from playing on-line games. According to the *Addictive Personality* by Nakken ( pg. 7, 1996), individuals with an addiction or dependency will get temporary relief when performing or using what the individual is addicted to. That is essentially what the second criteria describes. Performing an act in order to avoid going through irritability, anger, or cravings for an individual's game. Phillips, Rolls, Rouse, and Griffiths (1995) found supporting evidence of this. It was reported that a subgroup reported feeling better after playing videogames, hence relieving stress and irritability.

Referring to Block's (2008) second criteria, his concept of incorporating feelings of agitation, anger, and irritability with withdrawal, seems to be consistent with Yee's (2002) findings and the definition of behavioral addiction according to Nakken (1996). An individual from Phillips and Davies (2006) stated that plating started out as a normal fun game. It then escalated to the point where that was all he could think about. He had to play it. This type of behavior not only tolerance by desire to play more, but also the effects he received when not indulging in the game. According to the DSM-IV-TR (2005) Tolerance and Dependence must be present in order for dependence to be diagnosed, but there must also be other criteria.

The third requirement for dependency is a substance being taken in larger amounts or over a longer period of time than what was intended (DSM-IV-TR, date). Phillips, Rolls, Rouse, and Griffiths (1995) found through questionnaires that many individuals reported playing longer than intended. They also reported that parents of



these individuals also thought that the adolescents played too much as the adolescents played at least 6 days a week for more than an hour at a time. Griffiths, Davies, & Chappell (2004) found a small amount of individuals played over 70 hours a week as compared to the norm of 26.25 hours. A significant difference in playing time, resulting in neglecting responsibilities.

An editorial in a psychiatry newsletter (Sattar & Ramaswamy, 2008) depicted an individual who spent his entire life playing an MMORPG:

“For the past 2 years, he spent increasing time playing Everquest, sometimes stretching to 52 hours of uninterrupted play. After his fiancée complained, he tried to stop but could not...”(Sattar & Ramasawamy, 2008, pg. 869). This is just a small example of how cutting down can be a tough thing to do. This example also parallels Block’s (2008) first criteria of videogame dependency: Excessive use with a loss of time. Minutes, Hours, and eventually even days can go by if uninterrupted.

The fourth determining factor of dependency according to the DSM-IV-TR(2005) is a persistent desire and unsuccessful efforts to cut down or control the substance. This is described as trying to make a conscious effort on numerous attempts to decrease taking a substance, or in this case, playing a videogame. An excerpt from Sattar & Ramaswamy (2008) depicts this very well. “His only friends were those on-line. He made several attempts to decrease his on-line gaming...He tried to stop cold but he could not (Sattar & Ramaswamy, 2008, pg 869).”

In this case, it seems the individual attempted to discontinue his use by “cold turkey” technique: the abrupt and total withdrawal...by an addict or user (Websters, 1995). This individual’s behavior mimics an addict’s behavior to a substance by trying to

stop without help or reduction. This result typically ends with the individual unable to quit, as demonstrated in this excerpt.

The fifth element for dependence is classified as spending a large amount of time doing activities necessary to obtain the substance (DSM-IV-TR, 2005). This particular characteristic may not fit into the criteria as most of these behaviors can be contextual as most games and systems are not illegal to individuals; with exceptions of M Rated games.

The sixth characteristic of dependency is neglecting social, occupational, or recreational activities in order to continue use of usage (DSM-IV-TR, 2005). The social acceptance mentioned earlier may eventually turn into social isolation. Individuals may neglect family, friends, school, activities, or any other events in order to play games. Block's (2008) forth principle for videogame dependence mentions this idea of social isolation under negative repercussions. This is reiterated in the book *Addictive Personality*. Nakken (1996, pg. 11) states that priorities are misplaced. The addict will place objects before any other relationships or events.

Phillips, Rolls, Rouse, and Griffiths (1995) found that 25.9% of the individuals involved in their research questionnaire neglected homework to play videogames. Wan, Chin-Sheng, Chiou, and Wen-Bin (2007) reported that a significant amount of individuals spent more time in internet cafés playing games than they did in school or school-related activities.

A specific area focused on in Griffiths, Davies, Chappell (2004) article was that of sacrifice. They found that adult and adolescents alike sacrificed other areas in life to continue playing videogames. A majority, 19.3% for adolescents and 27.5% of adults,

reported sacrificing another hobby or past time. Passing on work and/or education was second, followed by socializing with friends, family, or partners. Sacrifice is done every day, but as it seems according to these examples that the important areas of life begin to receive less merit.

The final principal of dependence according to the DSM-IV-TR (2005) is the continued use despite knowledge of having problems likely caused by the substance. This is knowing that something is detrimental to someone, yet they willingly and decisively continue using. This was described in a letter to a videogame company, posted on their forum wall by a relative of an individual who played a company's videogame: (Zitto, 2007)

“I will list the order of events as they occurred that should tell the story itself.

- 1) She lost her desire to take care of herself and her home and family, started slow and grew more and more until she ended up doing nothing at all.
- 2) All her friends gave up on her, because she gave up on them.
- 3) She lost her job, a career she had dedicated 20 years of her life to.
- 4) Her husband left her and filed for divorce.
- 5) The state took custody of her children she no longer was taking care of, the father assumed custody.
- 6) Her bills were not being paid and her debts went beyond control.
- 7) Her new car was repossessed (Zitto, 2007).”

The loss of control and relentless use of videogames by this described person despite having numerous negative consequences, shows how strong videogame dependence can be. This continued use eventually led to this person's sister's death at age 42. Even with many warning signs and life events, addiction had a hold. Negative repercussions with continued use are also described in Block's (2008) fourth principle of videogame dependence. These are described, but not limited to events such as neglecting social activities as mentioned in the sixth principle, fatigue, arguments, and lying.

Even though Videogame Dependency/Addiction is not fully adapted as a behavioral disorder, individuals can exhibit characteristics that mimic chemical dependency. Anywhere from having withdrawal and tolerance, to neglecting areas in life despite negative consequences. Perceived videogame addiction is so powerful that it can even lead to suicide (Zitto, 2007).

### Treatment

With most disorders, treatment is usually involved in some way. Whether it is in medical form, cognitive, or behavioral change, treatment is devised to help individuals who desire help it but cannot do it alone.

#### *Twelve Step*

Alcoholics Anonymous is a world renowned program that has been in existence since 1939 (Alcoholics Anonymous, 2006). It began in the United States and has slowly migrated to areas wherever alcoholics and addicts reside. Alcoholics anonymous' program is centered around abstinence from a specific substance that is causing problems. The twelve steps are followed in succession as the individual progresses through meetings and treatment (Alcoholics Anonymous, 2006).

Mentioned previously, videogame addiction was compared characteristically to substance dependence. The same types of behaviors that is found in chemical dependency are mimicked in individuals whom have probable videogame dependence/addiction. Taking a look at what has been useful for alcoholics and addicts seems to be a plausible treatment idea for individuals with videogame dependency.

The first step in the twelve steps according to the Alcoholics Anonymous, is to “Admit that we are powerless over alcohol-that our lives had become unmanageable” (pg. 59, 2006). Another way to say at this statement is, “Admit that we are powerless over our ADDICTION-and that our lives had become unmanageable.” This statement covers the seventh principle of dependency; continued use despite knowledge of having problems likely caused by the substance (DSM-IV-TR, 2005). The powerlessness refers to the inability to stop playing games when negative consequences persist. The unmanageable refers to our inability to stop despite continuous efforts.

A philosophy of Alcoholics Anonymous (2006) is that in order for an individual to discontinue their usage, they must have the desire to quit. This can also be incorporated into videogame dependency. A person who does not desire to quit, will not until the consequences are too severe, as demonstrated by the previously mentioned individual who died at 42 due to her use (Zitto, 2007).

This therapy concept also looks at what is going on underneath their addiction. “There are those, too, who suffer grave emotional and mental disorders...(Alcoholics Anonymous, 2006, pg. 58). This, like many theories, believes that the addiction to a substance is covering some sort of distress in the individual’s life.

Alcoholics Anonymous is not a stand alone therapeutic approach, but rather a concept that can be incorporated into a behavioral modification counseling theory such as Cognitive Behavioral Theory. It can be used as a baseline with the counselor's particular theory and give an individual dealing with dependency a place to begin and gain insight.

### *Cognitive Behavioral Therapy*

Cognitive Behavioral Therapy, or CBT for short, has been around since the 1970's (Corey, 2005). Breaking this term down, it involves dealing with how individuals perceive incidences and our behaviors following our perceptions (Corey, 2005). By focusing on our perceptions and gaining insight, individuals can then actively alter behaviors to better their ways of life. Cohen and Sutker (2006) identify using CBT on individuals with alcoholism by assessing potentially high risk situations and processing through alternative behaviors. They also looked at intrapersonal characteristics such as self-efficacy, outcome expectancies, motivation, and cravings. Looking at techniques, one recommended intervention is relaxation (Corey, 2005). This may alleviate some anxiety associated with withdrawal or feelings of loss of control.

This CBT approach can then be followed up by Motivational Enhancement Therapy (Chou, Condon, and Belland, 2005). This is a collaboration between the counselor and the individual struggling with videogame dependency. First is creating a treatment plan. Here is where goals that are attainable are set. Having a goal to strive for may alleviate anxiety that can be associated with stopping cold (Chou, Condon, and Belland, 2005).

### *Medications*

An extreme form of treatment may be incorporating medications. As mentioned previously, this disorder has been misdiagnosed in the past (Biouloac, Arfi, and Bouvard, 2007) and may be covering more significant problems such as depression or mental illness (Alcoholics Anonymous, 2006). Medications may be used to help with depression or anxiety as described in an excerpt by Sattar and Ramaswamy, "...with gabapentin 100 mg 3 times daily for anxiety and escitalopram 10 mg daily for his depression was recommended (2004, pg. 869-870)." Using medications can be incorporated in treatment, but used to help maintain moods while involved in therapy.

### *Harm Reduction*

Alcoholics Anonymous considers the only way that individuals can deal with dependency is to stop completely (Alcoholics Anonymous, 2006). However, others believe that this can be a severe form of treatment. An alternate form of treatment is Harm Reduction. Marlatt describes this idea as, "help active users to manage their ongoing drug use(pg. 14, 1998)." in his book, Harm Reduction in reference to drug usage. Harm reduction encourages positive change and confronts addiction and dependency with a nonjudgmental approach (Marlatt, 1998, pg. 14).

The ultimate goal is to achieve abstinence through lessening the amount of a dependent behavior over time in hope that the conscious decision will be made by the individual (Marlatt, 1998, pg 81). Harm reduction and conventional treatments have and will be debated over. The key is to find what works for each individual.

Young (1999) suggested possible ways to help treat internet videogame playing through a harm reduction model. One suggestion is carrying around reminder cards.

These are things that can be portable that will remind the addict of what they stand to lose if they continue their current behaviors or return to their old ways. Another is taking a personal inventory. Create a list of things that have become neglected in life while dependent on internet videogames. A final suggestion is to count on social support. Get to know other individuals who can be counted on in time of need.

### *Conventional Ideas*

Therapies can be a great idea for those in severe need of help, but not all insurance companies will provide coverage, and paying out of the pocket may not be an option for some. Here are a few things that may help curb the amount of time gaming addicts become involved in. In Fall 2007, Microsoft released a patch for their X-Box live service. This allowed parents to place a time limit per day, week, or month that the video gaming system is allowed to be played (xbox.com, 2007). Another option is to regulate through parental controls if the individual is younger. This allows parents to select what games can and cannot be played through specific systems (xbox.com, 2007). Therapies may be the final answer, but they do not have to be the initial one.

### Conclusion

Videogames are a part of American life. A 4.2 Billion dollar a year industry seems to be going nowhere but up. It has made its way into popular culture. South Park, an animated television series, has even spoofed individuals who spend much of their time playing games (South Park, 2006) Kids and adults seem to enjoy them alike, but when that enjoyment becomes obsession and a detriment is when the behavior needs to be looked at. There are many options for videogame addiction/dependency, only each individual will know which is right for them.



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