

Ariadne

Understanding MMORPG Addiction

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<http://www.nickyee.com/hub/addiction/home.html>

Introduction

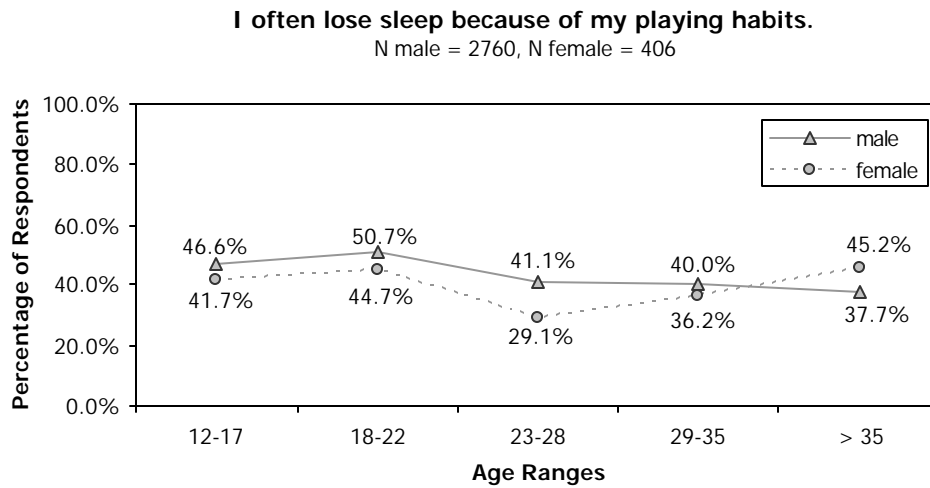
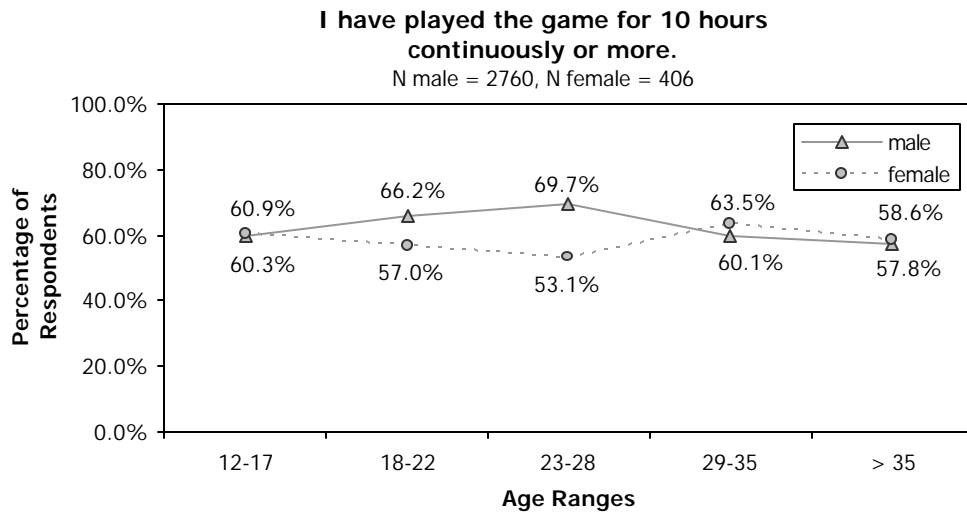
Discussing MMORPG addiction is difficult for several reasons. Many MMORPG players have seen how D&D was stigmatized during the 80's and they view the current trend to brand MMORPGs as dangerous as a contemporary parallel of what happened to D&D. In fact, the recent accusation that EverQuest causes suicides is an exact replay of one line of accusation against D&D two decades ago. It is therefore no surprise why MMORPG players become very defensive when outsiders accuse MMORPGs as being addictive or dangerous with only a few extreme cases as evidence. On certain message boards, the accusations and retorts often degenerate into emotional or unsubstantiated diatribes.

Instead of participating in this polarized debate, the following essay is descriptive rather than prescriptive. Using survey data and anecdotes collected from MMORPG players, the following essay first shows that MMORPG addiction is a very real phenomenon, and then attempts to provide a holistic explanation of MMORPG addiction – in terms of both internal game factors and external personality or situational factors, and shows how the two are intertwined.

Mapping the Phenomenon

Let us define addiction as “a recurring behavior that is unhealthy or self-destructive which the individual has difficulty ending” for the purposes of this paper. Before trying to understand

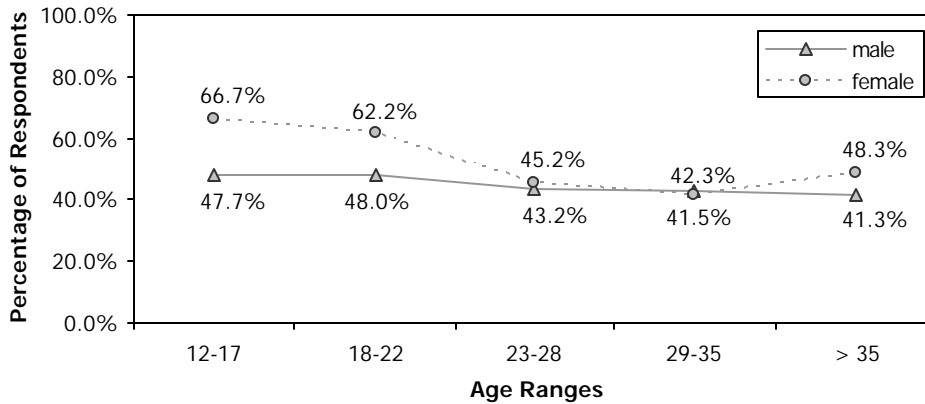
MMORPG addiction, it must first be demonstrated that this is a phenomenon that is real and occurs with a certain degree of prevalence. It is not hard to show that MMORPGs are very compelling and require huge time investments that many players are willing to give.



It can also be shown that many MMORPG players would consider themselves addicted to the game, and that it is fairly difficult to quit playing these games even if one tried to.

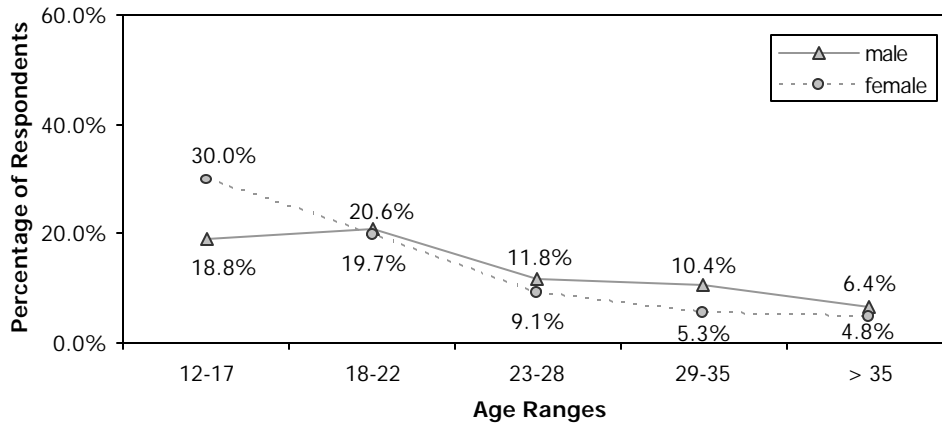
I would consider myself addicted to the game.

N male = 2760, N female = 406



I have tried to quit the game but was unsuccessful.

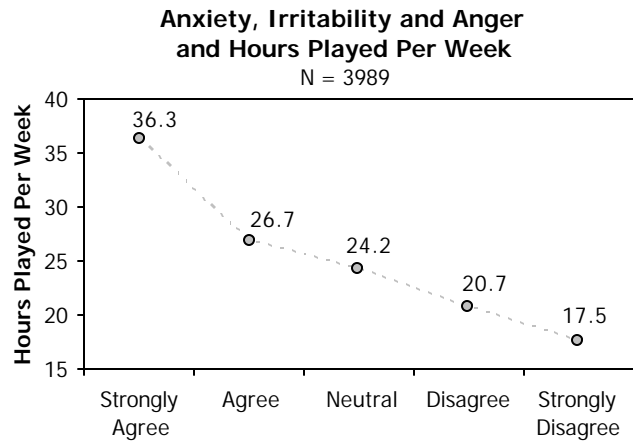
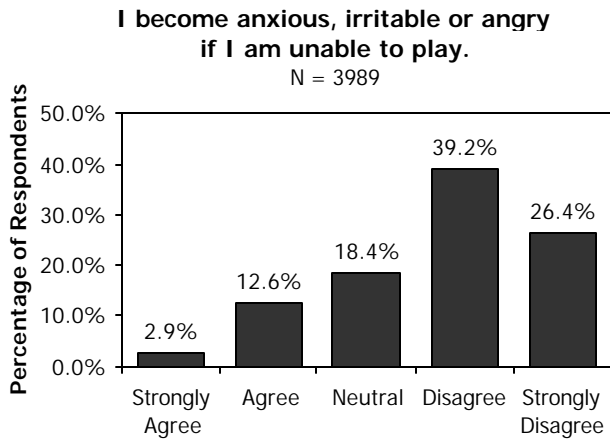
N male = 2760, N female = 406



But just because these games are compelling and many players diagnose themselves as being addicted to them, does that immediately translate into an addiction? One line of evidence is the strong parallel between MMORPG addiction and substance addiction. Two typical symptoms of substance addiction are dependence and withdrawal. Individuals who are dependent on a substance need the substance to sustain a sense of normality and well-being. Individuals who are dependent on a substance suffer from withdrawal when they do not take the substance. Withdrawal is marked by anger, anxiety, irritability, and frustration.

The following charts show that a small subset of players suffer from withdrawal symptoms even though the bulk of players do not, which is what is to be expected. In the same way that one could be a social drinker and not be addicted to alcohol, it is clearly the same with MMORPGs. Just because someone plays an MMORPG does not necessarily mean that they will become addicted to it. And in the same way that people can be addicted to alcohol even though not

everyone who drinks is addicted, it is clear that certain individuals can be addicted to MMORPGs even though not all MMORPG players are addicted. The following charts also make clear that the amount of time spent playing is highly correlated with the likelihood of suffering withdrawal.

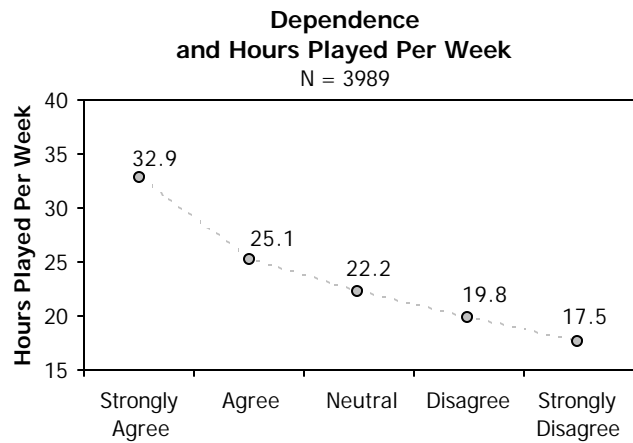
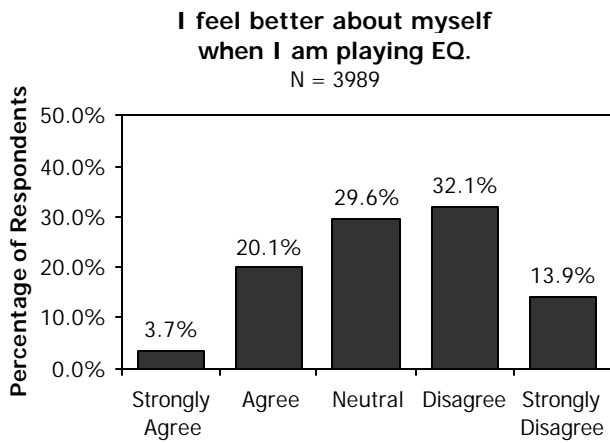


The effects of withdrawal are articulated by several players:

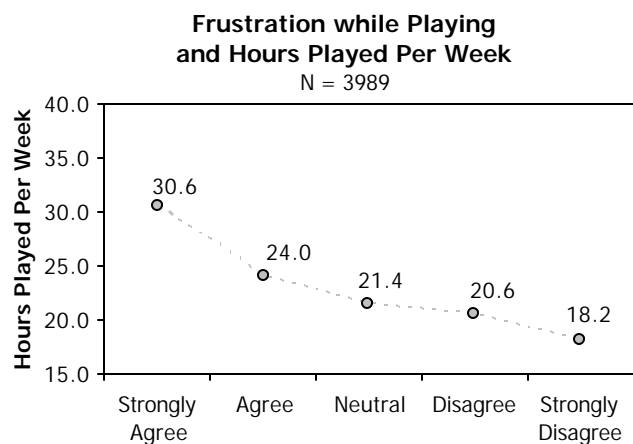
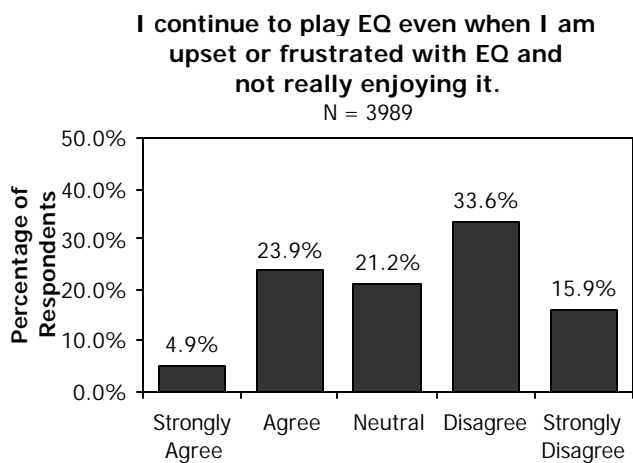
I call myself an addict, because I share the same symptoms as someone who's addicted to smoking, or alcohol, or some other substance. I think about EQ while I'm not playing, I get stressed when I have to go 24 hrs without logging on for a fix, and I wasn't able to quit when I tried. If that's not an addiction, I don't know what is. [m, 22]

EQ is highly addictive and quitting entirely is something VERY difficult to do. After all, if you do quit... everything you worked so hard for (your stats, equipment, friends) is gone forever since characters are stored solely on the Verant servers. The only thing you can take with you is the stories. And those anecdotes will haunt you endlessly until you give in to the urge to re-immense yourself in Norrath just one more time. [m, 27]

A stronger piece of evidence is the parallel of dependence and the use of MMORPGs to feel better about oneself. The data also shows that dependence is highly correlated with hours played per week.

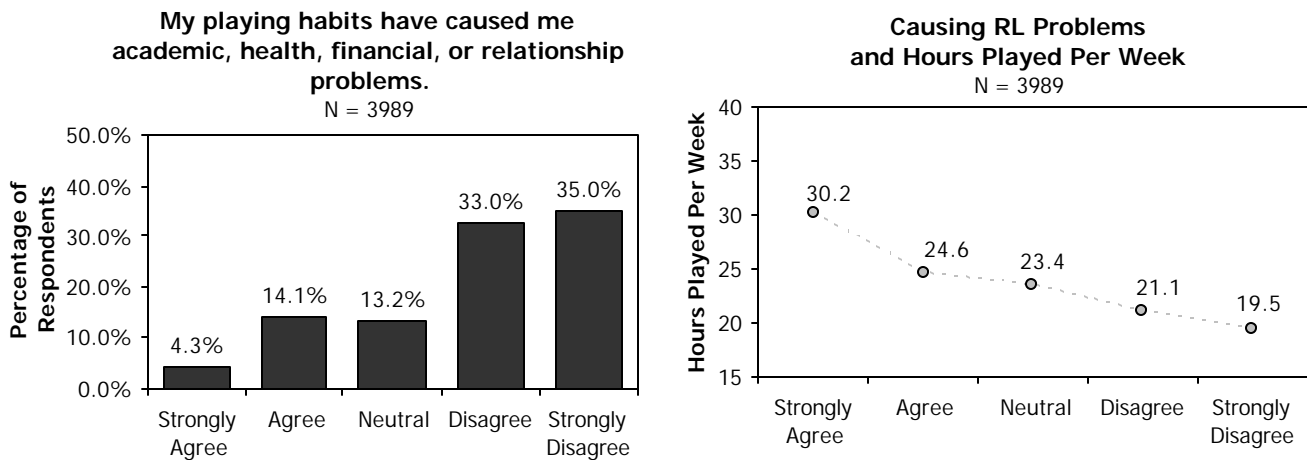


Critics may argue that similar responses could also have been solicited from individuals who partake in many healthy hobbies: such as dancing, tennis or skiing. Someone who loves to play tennis or ski might be irritable and frustrated if they weren't able to because of weather conditions; and being on the court or the slopes may produce a kind of satisfaction that boosts self-esteem. It is only when an individual partakes in an activity in the face of negative or self-destructive behavior that the use of the word addiction is appropriate, and these behaviors are seen in MMORPG players.



The very things in the game that cause extreme anger and rage in real life are the same reasons I still play I suppose. For example, after finally "dinging" into level 54 with one of my characters, I was running into Fironia Vie and got jumped by a nasty NPC necro that took my level. It enraged me, but its also the very reason that even though it was 3 in the morning and I had to be up at 8 for work I played for another 2 hours to get the level back. That's Evercrack. [m, 25]

The effects of self-destructive behavior are seen more clearly when players are asked directly whether their game-play has led to real life problems.



Still, the skeptic may argue that it is hard to draw a line as to where hobby ends and addiction begins. However, the point isn't where the line is drawn, but that there is some point along the spectrum where most people would agree that the amount of self-destructive behavior that is caused by game-play is dangerous to the point of being labeled as an addiction. There are also many anecdotes like the following which even the most stalwart skeptic would be hard-pressed to argue as being healthy and normal. (Readers interested in perusing a large list of anecdotes can find them at the EverQuest Widows message board hosted by Yahoo Groups.)

I could take a guess that I was playing about 90+ hours a week. I was living in San Fran at that time. EBay was paying our rent (for my boyfriend and I). We had closeted ourselves inside our 1 bedroom apartment for days at a time. We went out only to buy food and cigarettes. I called my family on the east coast maybe once a month, he called his maybe once every 2 weeks. Food consisted of fast food or anything hand held or anything that could be cooked in under 20 minutes. We literally saw no one but each other for months at a time, we didn't bother with friends or cultivating friendships.

We were kicked out of our apartment in January 2001, we fled back to the east coast, to our families. I left the dude within weeks of moving back east, losing my computer and all access to EverQuest. <poof> Having no crutch and no co-dependent in my life at that point, I actually attempted socializing again. I called old friends and hung out with my family. So, I attempt to "normalize". Interacting with more than 1 person at a time was just impossible. I could not speak with more than 1 person at a time, if there were 2+ people in a room, I had to leave it. The noise.....living with other people, holy

christ the noise, I felt as if I had just come out of a bubble after 12 months and my ears could suddenly clearly hear everything around me. [f, 23]

The above data shows the spectrum between healthy and addictive game-play. It is also clear that there is no one discrete point where a player suddenly becomes addicted. In fact, the data shows that players can be addicted to these games to different degrees. The claims that MMORPGs are completely healthy or completely addictive are both extreme to the point of absurdity, and are not supported by the empirical data provided. But why are these games addictive? And why do certain players become addicted while others do not? The rest of this presentation tries to answer these questions.

The Psychological Side of Addiction

In discussing addiction, some people may feel that physical addiction is the core issue with alcohol or cocaine addiction and that it makes no sense to talk about addiction with regards to MMORPGs – a non-physical “addiction”. They point out that online gaming addiction is not a physical substance that alters your brain chemistry the way heroine or cocaine does. In “The Heart of Addiction”, author Lance Dodes provides several lines of evidence why the physical side of addiction is not the core issue with any addiction:

- There are other well-recognized non-physical addictions such as gambling or shopping. (pg. 70)
- Many people with addictions routinely switch between physical substances of different pharmacological type (ie. alcohol and cocaine). If the physical dependence on a particular substance were central to the addiction, then switching between drugs that cannot substitute for each other would be impossible. (pg. 71)
- There are people with addictions who only use one drug but never get physically addicted to it. This happens in people who binge drink. The binge drinking doesn't have time to create tolerance and physical dependence, but the episodes are very self-destructive. (pg. 71)
- There are individuals who addictively use drugs incapable of producing physical addiction, such as LSD or marijuana. (pg. 72)
- Relapses after detoxification are frequent. If physical addiction were the real problem, then the addiction should be “cured” after detoxification. This is not the case. (pg. 72)
- Historical cases of war veterans in Vietnam who were addicted to heroine but had a 95% remission rate when returning to the US. This remission rate is unheard of with narcotic addicts treated in the US. This case demonstrates that there is something else at work apart from the physical nature of addiction. (pg. 73)

For Dodes, the real addiction is a psychological one and not a physical one. He argues that “physical addiction is neither necessary to nor sufficient for an addiction” (pg. 75). The central point that Dodes tries to make in his book is that helplessness drives and precedes every addictive act, and that the “addictive behavior functions to repair this underlying feeling of helplessness. It is able to do this because taking the addictive action creates a sense of being empowered, or regaining control over one’s emotional experience and one’s life” (pg. 4). Clearly, physical addiction is a very real issue, but as the historical case of the Vietnam veterans showed, pure physical addiction is much easier to treat when compared with the psychological addiction of narcotic addicts.

Dodes argues that it is almost pointless to claim that objects are addictive because “it is the *person* [original emphasis] who endows the object or activity with the property of being addictive” (pg. 117). But perhaps a better way to think of it is that there are two sides to addiction – underlying frustrations or motivations that push you, and objects or activities with the matching profile that pull you in. In other words, there are aspects of MMORPGs that are inherently compelling and encourage players to invest a lot of time and get attached to their characters, but the degree of the attraction/addiction depends on how many external factors are pushing the player into this particular outlet. These will be referred to as “Attraction” and “Motivation” factors respectively from this point on.

Attraction Factors

There are three main Attraction factors of MMORPGs that encourage time investment and personal attachment. One of these is the elaborate rewards cycle inherent in MMORPGs that works like a carrot on a stick. Rewards are given very quickly in the beginning of the game. You kill a creature with 2-3 hits. You gain a level in 5-10 minutes. And you can gain crafting skill with very little failure. But the intervals between these rewards grow exponentially fairly quickly. Very soon, it takes 5 hours and then 20 hours of game time before you can gain a level. The game works by giving you instantaneous gratification upfront and leading you down a slippery slope. And it overlays different reward cycles so you’re always close to some reward – whether this be a level, a crafting skill, or a quest.

The game is set up to make you want the next best thing. "Oh look what that guy has! How do I get that?" The answer is always to spend more time online either getting higher level to go camp the item, or to just go camp the item (or slight variation, camp the

quest items that result in the new item). But you are rewarded for playing more. Better items, more freedom on where you can go. [m, 21]

A more elaborate analysis of the rewards cycle can be found in the Virtual Skinner Box essay (<http://www.nickyee.com/eqt/skinner.html>)

The other main Attraction factor is the network of relationships that a player accumulates over time. There are several reasons why relationships of a platonic or romantic nature occur so frequently in MMORPGs. The anonymity and computer-mediated chat environment facilitates self-disclosure, and many players have told personal issues or secrets to online friends that they have never told their real life friends or family. The high-stress situations inherent in the game also help build trust and bonds between players very rapidly. Of course, another important reason is that the games were designed so that you have to group to achieve most goals. You can find a more elaborate analysis of the formation of online relationships in the Online Relationships presentation (<http://www.nickyee.com/hub/relationships/home.html>).

A network of online friends encourages players to invest more time to the game for several reasons. First of all, a player now plays to catch up or remain around the same level as their friends. The pace is set by the player that levels the most, and oftentimes causes a chain reaction of others trying to catch up. Secondly, a playing schedule, whether tacit or explicit, may be created and there is an expectation that each player will show up to join the group. And finally, the more friends you have, the more obligations you have to fulfill. If you play a cleric, you may be asked for rezzes. If you play a druid, you may be asked for teleports. And many of these requests take a substantial amount of time, but this is all part of the normal expectations of what friends do for each other. Being in a guild is one way in which these obligations become structured and recurring. Thus, having a network of friends encourages both a higher level of personal attachment and time investment.

The third, and final, Attraction factor is the immersive nature of these virtual environments. This factor works by encouraging players to become attached to their characters and the virtually valuable items that they own. The immersive nature also encourages players to become personally invested to what happens to their characters, and to be empathetic towards their characters. In the same way that a movie or fairy-tale enchants you, the immersive quality of MMORPGs tries to enchant you with a fantasy, and make you feel that you are part of something grand and extraordinary.

Clearly, these three Attraction factors are not equally attractive to different players. Data collected for the Facets study [link] showed that individuals who are competitive, aggressive and rational are more likely to be interested in the achievement and rewards cycle of the game. Female gamers are more likely to be interested in the relationship aspect of these games. And gamers who are imaginative and open-minded are more likely to be interested in the immersive quality of MMORPGs.

Motivation Factors

Attraction factors on their own are probably compelling enough to extract a large amount of time investment and personal attachment from players, but a subset of players who are playing obsessively may also be influenced by Motivation factors.

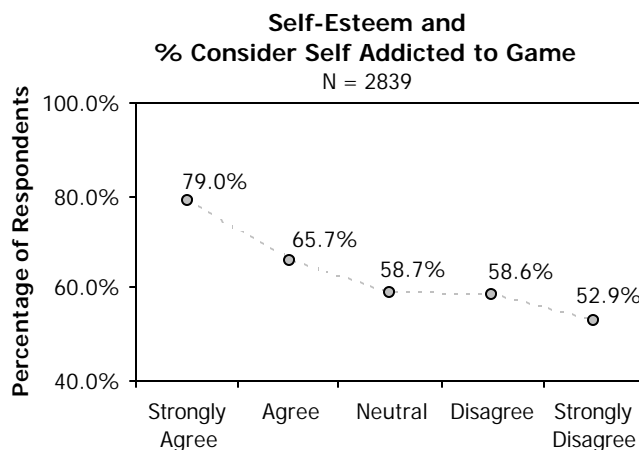
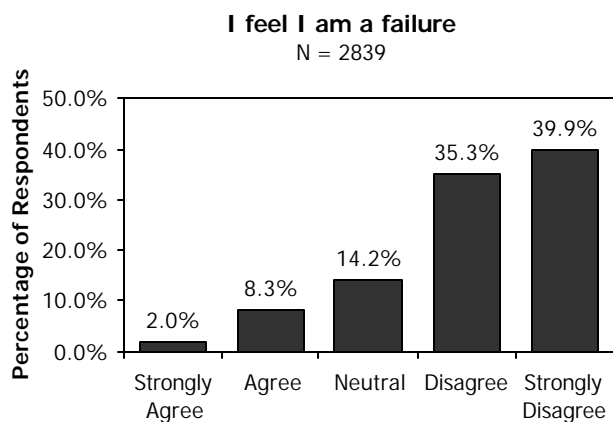
As Dodes mentions in his book, an addictive behavior functions by empowering the individual and thereby easing the sense of helplessness that they may be experiencing. In essence, Motivation factors are real life pressures or problems that can use Attraction factors as outlets. MMORPGs are surprisingly good outlets for a variety of common real life issues that people struggle with.

Individuals who have low self-esteem issues in real life can temporarily overcome these issues in virtual worlds. In an MMORPG, they may be able to feel strong and competent in ways that they are unable to in real life. In this way, an MMORPG empowers the player and reduces their sense of weakness and vulnerability. The following two players describe this compensation.

I've always been shy around people and never had a great social life and online gaming pretty much become the outlet for that. I've basically spent every waking hour online playing games so I could basically make up for my poor self-esteem in the games by leveling my characters so I'd be better than most and socializing a lot so I'd become a liked person. I recently tried to quit EQ, but after a month I was too bored with normal life again so I got sucked right back into it. [m, 20]

I think I am addicted. I think about EQ a lot, it makes me feel a little more powerful than I am in real life. It lets me feel like I'm actually accomplishing some amazing, like killing a dragon with a lot of my friends and I'm actually doing something useful, but I'm really just typing on a keyboard. [m, 19]

Survey data provides support that a player's self-esteem is correlated with the likelihood that they are addicted to an MMORPG.



While it makes more sense to think that it is a pre-existing sense of low-esteem that causes some players to become drawn into MMORPGs, some may argue that it is playing the game that causes the low-esteem. However, the data shows that not all players have low-esteem, and if it is playing too much that leads to low self-esteem, it still doesn't explain why some players choose to play too much to begin with. Therefore, it makes more sense to think that it is a difference among players, low self-esteem in this case, that is causing the different degrees of addiction, instead of thinking that the game causes low self-esteem.

A close variant of low self-esteem is poor self-image. Individuals who do not like the way they look in real life can throw away their flesh and bone bodies for a few hours and live in the mask of their attractively-shaped avatars. The attention that a shapely female avatar receives may be intoxicating to an individual who suffers from self-image problems.

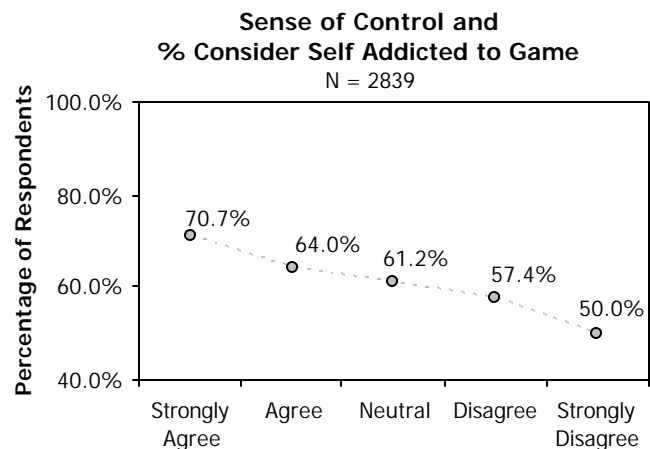
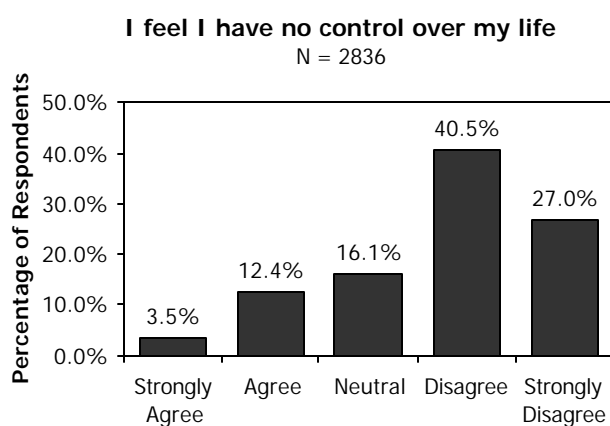
Another common problem that many individuals face is a sense of feeling trapped in their circumstances, or a sense that they have no control over their own lives. What an MMORPG offers them is a place where they can make a difference by granting them super-human powers, or a sense that they have control over the choices of their characters. An individual who isn't in the position to make decisions in real life may in an MMORPG cast the life-saving heal or be asked for assistance in a group battle. An individual who is ordered around in his everyday life may be able to lead a group and be admired for his abilities. In this way, an MMORPG empowers the player by giving them control and the sense that they can make a difference.

The rush of leaving yourself behind and being someone else, being able to do things without consequence, that is amazing. I think that is why I love RPGs, because you step

outside of the real world and be whatever you want to be because that's what you like to be. Life without an RPG like EQ would suck. Always the same boring crap trying to climb the economic ladder. Meanwhile, on EQ your killing things and questing for awesome equipment, gaining experience and socializing with total strangers without the fear of being harmed by them. THAT is why I feel I am addicted. [m, 13]

I think anyone that plays more than 20 hours a week is addicted though most would deny it. The sad truth is that in many ways EQ is better than RL. It is easier to succeed in EQ, I can be beautiful, fit and healthy in EQ - in real life I am chronically ill and there isn't much fun or achievement to be had. EQ is more than just an opiate, and much more than just a game. In a very real sense EQ gives me an opportunity to feel free. [f, 36]

Survey data provides support that a player's sense of control of their own life is correlated with whether they are addicted to the game.



Some people may feel undervalued or unable to be useful in real life. An MMORPG provides an environment where players need to depend on each other, and where every character class fills a vital role in a group. For individuals who feel undervalued, an MMORPG allows them to feel useful and needed.

My mother (67 years old) is so addicted to EQ that she spends hours upon hours playing it. Drives my father crazy. She is now going to a convention for EQ players, meeting up with game people from all over the country, and god knows what else. What is it about this game that makes people go over the edge of reality? She "loves" these people. She thinks she is needed by these people. [from a message on the EverQuest Widows message board]

I worry about my game life as much as I worry about my real life. If I am late getting on, I feel like people will be disappointed with me. As a guild leader, when conflicts arise people come to me to resolve them. People look to you to have events, help them get things, quest, etc. I have had people in my own guild leave because they didn't feel we gave them enough of our time or enough "phat lewt". I try to please everyone, but it is unrealistic to think you can be everywhere for everyone, keeping them all happy. It gets to be a heavy burden to bear, and sometimes I end up in tears out of frustration. I am an addict. Will I quit? No. Why? Because I love it. =) [m, 30]

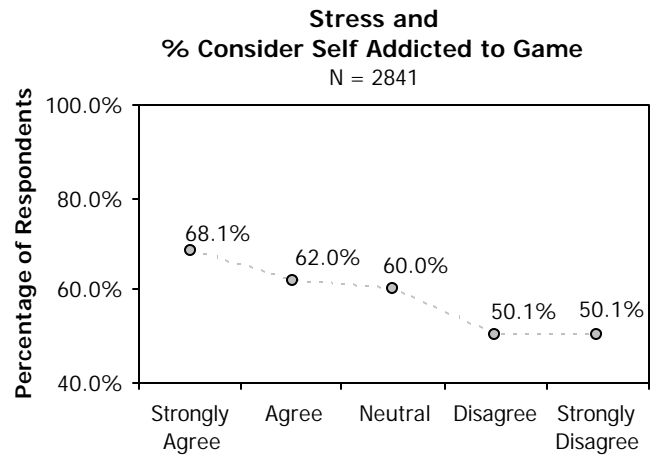
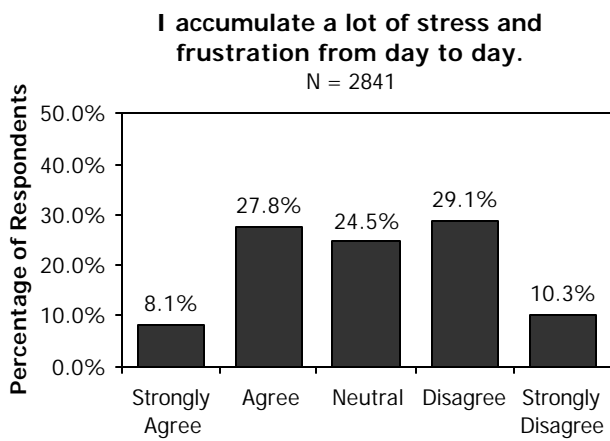
Some people may have difficulty forming and sustaining relationships in real life. They may have problems with platonic or romantic relationships or both. An MMORPG effectively simplifies the channel of communication, and relieves the pressure of having to deal with real-time face-to-face conversation. Some individuals who are shy or have low self-esteem may be able to form relationships in the virtual world which they aren't able to in the real world.

And finally, many people accumulate a lot of stress and frustration in their daily lives. Or perhaps, certain people are dealing with a sudden landslide of stressful events in their real lives. The fantasy world of an MMORPG provides the perfect escape from these problems. An individual who is finding it difficult to cope with his problems can avoid them by immersing himself in a make-believe world.

I am addicted to EQ and I hate it and myself for it. When I play I sit down and play for a minimum of 12 hours at a time, and I inevitably feel guilty about it, thinking there a large number of things I should be doing instead, like reading or furthering my education or pursuing my career. But I can't seem to help myself, it draws me in every time. I have been out of work now for over a month and now find myself in a stressful, depressed state that it only quelled when I am playing EQ, because it's easy to forget about real world troubles and problems, but the problem is when you get back to the real world, problems and troubles have become bigger, and it's a bad, bad cycle. [m, 26]

I continued to play because I was unhappy with the circumstances in my real life and needed to "forget" about it for as long as I could. I was having financial troubles and marital problems as well. I could ignore my real life and escape into EQ. This wasn't for the fun, it was a "need" that I felt to not deal with my life responsibly and EQ was my chosen method of "drugging" myself into blissful ignorance. [m, 33]

Survey data provides support that the amount of stress in a player's life is correlated with whether they are addicted to the game.



Here is a summary of the Motivation factors a player may be facing in real life that an MMORPG can provide an outlet for. The associated Attraction factors are also provided.

Motivational Factor	MMORPG Outlet	Attraction Factor
Low Self-Esteem	Being Competent and Powerful	Achievement
Poor Self-Image	Being Beautiful and Attractive	Immersion
Lack of control over their own lives	Being In Control	Achievement
Trapped by Circumstances	Making a Difference	Relationship + Achievement
Undervalued	Valued and Needed	Relationship
Making and Sustaining Relationships	Simplifies Communication	Relationship
Stress and RL Problems	Evasion and Avoidance	Immersion

Conclusion

Attraction factors on their own are probably compelling enough for certain individuals to become addicted to MMORPGs. An individual may become caught up in the rewards cycle without any Motivation factor pushing him. This might be termed "Attraction Addiction". On the other hand, a player might be drawn to the rewards cycle because the sense of being competent is empowering and allows him to overcome self-esteem issues in real life. In this case, it is the combination of an external factor as well as an internal element that is causing the addiction. This might be termed "Motivation Attraction". A Motivation factor must match an appropriate Attraction factor for an outlet; otherwise this particular object or activity isn't the right fit for the Motivation factor. On the other hand, Attraction Addiction can exist without a Motivation factor.

Because the mindset and motivation of Attraction Addiction and Motivation Addiction are different, the Attraction factors create similar superficial behaviors that have different underlying causes. Two players may be caught up in the rewards cycle. One of them may have Attraction Addiction – straight-forward desire to achieve in-game goals, while the other may have Motivation Addiction – desire to level fast and become powerful with respect to peers. A summary of this difference is summarized below.

Attraction Factor	Attraction Addiction	Motivation Addiction
Achievement	<ul style="list-style-type: none"> - Achievement - Goal Driven 	<ul style="list-style-type: none"> - Becoming powerful - Compensating self-esteem
Relationship	<ul style="list-style-type: none"> - Supportive Friends - Camaraderie 	<ul style="list-style-type: none"> - Proxies for RL relationships
Immersion	<ul style="list-style-type: none"> - Self Exploration - Fantasy 	<ul style="list-style-type: none"> - Evasion of RL Problem - Compensating self-image

The difference between Attraction Addiction and Motivation Addiction parallels the difference Dodes makes about physical and psychological addiction – whether a real life pressure exists that pushes the individual into this particular outlet. In both contexts, because the psychological pressure or problem is far less visible than the physical drug or the game, the main cause of the addiction might be blamed entirely on the tangible aspects – the drug or the game, even though it is only a part of the problem. Because Motivation Addiction can masquerade as Attraction Addiction, it gives observers the illusion that taking away the game will resolve the addiction. But because it is not the game that is causing the Motivation factors in the first place, taking the game away forcefully oftentimes compounds the problem because now the individual has no outlet and feels even more vulnerable and helpless.

The issue of MMORPG addiction is complex because different players are attracted to different aspects of the game, to different degrees, and may or may not be motivated by external factors that are using the game as an outlet. Sometimes the game is pulling the player in; sometimes a real life problem is pushing the player in. Oftentimes, it is a combination of both. There is no one way to treat MMORPG addiction because there are many reasons why people become obsessed with or addicted to MMORPGs.

If you consider yourself addicted to MMORPGs and your playing habits are causing you real life problems, or if someone close to you has playing habits which are obsessive and unhealthy, consider seeking the help of a professional counselor or therapist who is trained in addiction problems. Therapists who are familiar with non-physical addictions (gambling, shopping etc) are

probably better positioned to help with MMORPG addictions because they realize that there is a psychological aspect to addiction. Some counselors for alcohol and drug addiction use the 12 step program which disregards any possible underlying personal problems, lays entire blame on the physical aspect (dependence and withdrawal) of the addiction, and may not be helpful in the MMORPG context because neither the game nor the psychological problems are physical entities. Moreover, high rates of relapse for alcohol addiction show that the physical aspect of the addiction cannot be the only cause of the addiction; otherwise the addiction would go away once detoxification is achieved. Because MMORPG addiction is entirely psychological, getting help from counselors who disregard the psychological aspects of addiction might not be helpful.

Video game addiction, also known as gaming disorder or internet gaming disorder, is generally defined as the problematic, compulsive use of video games that results in significant impairment to an individual's ability to function in various life domains over a prolonged period of time. This and associated concepts have been the subject of considerable research, debate, and discussion among experts in several disciplines and has generated controversy within the medical, scientific, and gaming communities. The representing seven DSM-based criteria for game addiction aim of the study was to measure MMORPG addiction that had been identified in earlier research using a sample of MMORPG players. It was hypothesized (e.g. Griffiths & Hunt, 1998). Lemmens et al. (2009) "Understanding and assisting much, and why? Debunking the stereotypical gamer profile. excessive players of video games: A community psychology perspective." *Journal of Computer-Mediated Communication*, 13, perspective. Australian Community Psychologist, 21, 62-74. The purpose of this study is to understand MMORPG addiction from a user experience design approach. We first developed a complete model that includes eleven factors (challenge, fantasy, curiosity, control, reward, cooperation, competition, recognition, belonging, obligation and role-playing) to represent users' experience in MMORPGs. Exploring user experiences as predictors of MMORPG addiction. @article{Hsu2009ExploringUE, title={Exploring user experiences as predictors of Becker J. S., Murphy K. M. A theory of rational addiction. *Journal of Political Economy*. 1988. Vol. 96. no. 4. pp. 675-700. Yee N. Understanding MMORPG addiction. 2002. Available at: <http://www.nickyee.com/hub/addiction/addiction.pdf>.