The Daedalus Project

The Trouble with "Addiction"

I think the wikipedia entry on "game addiction" is very telling. While you would think the entry might at least cover several genres of video games, the only genre it names specifically is MMOs. More interesting is that for over a year the neutrality and factual accuracy of the entry have been debated on the discussion page, but very little has changed. Comments such as the following are typical of the background discussion.

> I've added {{disputed}} and {{POV}} tags to the article. Honestly, I don't think it can be salvaged at all, although that doesn't mean we should VfD it, as there ought to be an article on this subject. However, this article is a great example of exactly how not to write a good Wiki article. Junjk 19:37, 31 July 2005 (UTC)

What the wikipedia entry shows is that it's not easy to talk about "online gaming addiction". This is partly because "addiction" is a very loaded term. And it bears emphasizing that "addiction" is a very complicated concept. Some things, like coffee, cause physical addiction, and most people who drink coffee are technically addicted to coffee, but few people think of that addiction as a bad thing. On the other hand, marijuana is not physically addictive, but people can become psychologically addicted to it, and that can become a bad thing. Some people say they are addicted to knitting or the TV show "Lost", but most of them are neither physically or psychologically addicted. They just use that word to imply how much fun they have with their hobby. But just because some people can become psychologically addicted to shopping or golf (or other idiosyncratic and bizarre activities) doesn't mean that these activities are addictive for everyone. Finally, falling in love is also a kind of addiction that can both enable some people while completely disabling others. In other words, the same addiction can be good for some people while being bad for others. And just as an illustration of how casually we employ the metaphors of addiction in our news media, a recent report of a scientific study found that "the simple act of talking triggers a flood of brain chemicals which give women a rush similar to that

felt by heroin addicts when they get a high"
(http://www.dailymail.co.uk/pages/live/femail/article.html?in_article_id=419040&in_page_id=1879
). In short, women are addicted to talking.

To say this issue is complicated would be an understatement. But I want to say the complications
are conceptual rather than factual. Here's what I mean. If I said "the President of the United
States has one leg", that statement would actually be factually accurate. It also turns out the
president has half a brain. While these statements are semantically misleading, they are both
logically true. And I think the same thing is going on with the discussion about "online gaming
addiction". What's clear is that there is a real problem. There's a great deal of evidence that some
MMO players spend so much time playing MMOs that other parts of their lives (work, academics,
relationships) are severely impacted, and that they have trouble accepting they have a problem
and controlling their play patterns. On the other hand, the simplistic framings and perspectives
that dominate the media on this issue are somewhat misleading. And much of this is due to how
loaded the term "addiction" is how it shapes discourse around online games. When shallow
comparisons between online games and cocaine are made, what's left out is the other leg. And I
would argue that if we really want to understand the nature of the problem (and actually help
these people), we have to understand the bigger picture.

For more on the differences between physical and psychological addiction, see Lance Dode's "The Heart of Addiction".
For a fascinating perspective on love, see Deborah Tennov's "Love and Limerence". For an interesting take on the
difference between "being addicted to something" vs. "something being addictive", see Neils Clark's Gamasutra article
(http://gamasutra.com/features/20060822/clark_01.shtml).

Cherry-Picking Addictions

As big as the stereotypical jock vs. nerd divide is in high schools, there are a great deal of
similarities between football and MMOs. They are both social activities that take place in a
cordoned-off portion of the real world. In these virtual worlds, different rules come into play.
Players take on fantasy roles that only have functional meaning in the fantasy world. They are
awarded points for arbitrarily-defined tasks. Cooperation and competition play large roles for
players in both worlds. And it isn't uncommon for players in both worlds to develop significant
relationships with others they have played with.

On the other hand, there is a tremendous difference in how people interpret tragedies that occur
in these two worlds. High school and college students on football teams regularly die during
practice (XXXX), but their deaths are dealt with by the media with a very holistic perspective. The
media questions whether the coach set an unreasonably exhausting regimen. The media

questions whether the parents saw warning signs. They ask whether the school reviewed the coach's history thoroughly when the hiring was made. They wonder why the school mandates year-round practice that necessitates training in the hot summers. They ask whether the team physicians condoned the exhausting practices despite the individual's particular health idiosyncrasies. And in no time during all this does anyone suggest that football is addictive and caused the deaths. This is because that statement would be naïve and simplistic.

http://sports.espn.go.com/sports/news/story?id=2605814
http://www.philly.com/mld/inquirer/sports/15345148.htm
http://archives.cnn.com/2001/US/08/18/football.deaths/index.html
http://www.georgiaeagle.org/?where=articles&ID=474

When people die during or after playing an MMO however, it is typically "caused by an online gaming addiction". The wikipedia entry on "game addiction" lists several of these "notable cases". Even in cases where the person suffered from depression and other mood disorders, an "addiction" to the game itself is primarily blamed for the deaths. As another example, Kimberley Young's discussion of Internet Addiction Disorder implies that martial affairs that occur online are primarily the fault of the Internet, rather than having to do with personal choices (http://www.nickyee.com/daedalus/archives/001494.php?page=3). Why is it that explanations are complicated and holistic when it comes to football, and so simplistic when we talk about online games? Part of the reason is that football is too mainstream and too low-tech to be a tool for the media to instill paranoia with. No one is afraid of a leather ball.

We pick and choose what we label "addictions" in other ways too. For example, pedophilia is a kind of "child addiction", but no one blames children for causing the addiction. We don't argue that children are accessible, controllable, and cause excitement and thus cause "child addiction" (analogous to Kimberley Young's ACE model of Internet addiction). We don't argue that molesting a child causes dopamine increases and is physiologically reinforcing over time. We don't blame the child fashion industry for deliberately designing cute clothing that attracts pedophiles. We also don't blame shopping malls for kleptomania. I would argue that the level of social acceptance for technologies, objects, and people influences how likely we blame them in analogous scenarios, and how likely we take on holistic as opposed to narrow perspectives in trying to explain the problem.

To argue that the application of "clinical addiction" on to different behaviors is somehow an objective scientific process is to ignore the fact that all social institutions are embedded into cultural and financial frameworks that shape their beliefs and actions. Many embarrassing

"mental disorders" have been included in the DSM in the past - being gay used to be pathological behavior. Whether a novel behavior tied to a novel technology qualifies as an "addiction" is anything but a simple matter.

It also bears pointing out that chronic pain and debilitating injuries have become routine for professional and college football players. Massive doses of anti-inflammatory drugs, along with knee and hip replacements, prolong a player's career temporarily while increasing the chances of a debilitating injury in their weakened state. It is ironic that this spectacle occurs in the same society that instead complains about virtual violence. How is it that we can complain about virtual violence while cheering and encouraging debilitating violence on TV and in stadiums? [see Edward Tenner's "Why Things Bite Back" for the risks of intensification in sports]

Are MMOs an ingested substance?

When people use the term "online gaming addiction", they are encouraging others to think of online games as a kind of physical substance. This is a rhetorical move that asks the audience to ignore everything about MMOs except that they are like alcohol or cocaine. The problem is that online games aren't simply liquids or powders that are ingested. Online games are also not simple behaviors like gambling.

Online games are social worlds with their own geography, culture, dialect, and social rules. They are places where protests and vigils are held. They are places where slang and etiquette rules emerge. They are places where people meet and then get married face-to-face. And to the extent that they are social places, asking whether someone can be addicted to an MMO is like asking whether someone can be addicted to the United States. To see how analogies with cocaine and alcohol fail with social places, we can paraphrase a survey item for diagnosing Internet Addiction Disorder: "Would you become irritated and frustrated if you were unable to live in the US?"

Up till now, the label "addiction" has never been applied to a social place. It has been applied to substances and simple behaviors such as gambling. When the media and others use the term "online gaming addiction", they are asking us to ignore all the ways in which an online game is different from an ingested substance. It is this confusion that leads to the generation of simplistic and double-loaded questions that further muddles the issue:

- Are online games detrimental, addiction-feeding?
- What do you believe is the leading cause for internet addiction?
- What percentage of MMO players is addicted?

Rational vs. Pathological

Another assumption in the "addiction" rhetoric is that the real world is wholesome and fulfilling while the virtual world is impoverished and limited. There are several problems with this assumption. First of all, there are many sociological texts that describe how the real world can be limiting for many people. For example, consider "Nickel and Dimed" by Barbara Ehrenreich or "Teenage Wasteland" by Donna Gaines. Gaines' book is particularly insightful in pointing out why suicide can become a rational and attractive decision for suburban teenagers who feel trapped in social structures of unsatisfying options they can't escape. While it would be nice to think that the real world is perfect for everyone, this is simply not the case. There are many people who, for a variety of reasons and circumstances beyond their control, have very limited options in life. Some of these people may find leadership and affiliation opportunities in virtual worlds that they don't have in the real world. Please note that I'm not arguing that this makes online worlds "good" or "wholesome" or that this means people in these cases are living in a healthy and fulfilling manner, but I am trying to point out how complicated these comparisons are. Specifically, the question we need to ask ourselves is this. Until the world is a perfect place for everyone, is it actually pathological for some people to prefer being in a place where they have social status and respect?

Ted Castronova has also made the same point in his book "Synthetic Worlds":

> For some people, Earth is where they really ought to spend their time. For others, perhaps the fantasy world is the only decent place available. Unfortunately, we have no studies that go into any detail about the daily lives of synthetic world users, so we cannot really tell whether they are addicted, or just making an understandable choice (pg. 65).

The broader social issues become clearer. When the virtual world becomes the only decent place to live for some people, is it their fault for making a rational choice or is it our collective fault for perpetuating social structures that produce unsatisfying living conditions? Is the online game simply an "addiction" for these people?

Getting Past "Either-Or"

Another complication with MMOs is that they can be therapeutic and destructive at the same time. While the media likes to describe the issue is terms of polarized pro-game and anti-game opinions, it's not clear why online games can't be both enabling and disabling at the same time. For example, some people have access to social opportunities in virtual worlds that they do not have in the real world. And no, I don't mean resurrecting the dead. Teenagers who are sufficiently mature can become guild leaders and take on a leadership and management role in a group of a dozen or more adults. It bears emphasizing that this kind of social opportunity does not exist in

the real world for teenagers because of how our society is structured. In the real world, teenagers aren't allowed to lead a large group of adults, set their play schedules, draft rules and guidelines, and resolve their personality conflicts. It's not hard to see why these opportunities can be seductive for all the right and wrong reasons.

A more complicated example comes from a recent article from the American Journal of Psychiatry (Allison, Wahlde, Shockley, & Gabbard, 2006). In this case study, an 18-year old patient (referred to as Mr. A) with online gaming problems received diagnoses and recommended treatment from a panel of four clinical practitioners. The case presentation was clear in describing the contextual factors of Mr. A's life history that may have played a role in the development of the problem. For example, one therapist noted that:

> Mr. A had a lifelong history of school refusal and anxiety about new social situations, in part related to the fact that his family had relocated 14 times in his 18 years of life; the last move was in 2000 just before his eighth-grade year. His anxiety led to home schooling off and on throughout his school years.

The authors also struggled with whether "online gaming addiction" was a meaningful diagnostic category.

> Whether or not these behaviors represent true addictions is controversial. A modest body of literature has developed on this subject. Part of the controversy centers on how the authors define an addiction. Physiological signs, such as withdrawal-related symptoms and increasing tolerance, are problematic as defining features because Internet use, like other so-called behavioral addictions, are without these elements …

> On the other hand, some investigators have emphasized the positive aspects of role-playing Internet games. One survey of MMORPG users found that they do not fit the profile of addicts. The investigators concluded that these game-players simply have a different perspective on social life. They seek social experiences that may not otherwise be available to them for a variety of reasons.

> It is probably an oversimplification to approach the addiction issue as an either-or choice. In the case of Mr. A, a both-and conceptual model was more useful.

The recommended treatment plan emphasized how complicated the case was in that the online game provided both therapeutic and destructive roles in Mr. A's case. The authors presented an incredibly nuanced view of how the online game can both help and hurt the situation.

> The evaluation team recognized that there are both positive and negative aspects to role-playing games on the Internet. The authors made the point to the family that total abstention from games would rob Mr. A of his most meaningful form of peer group interaction as well as the opportunity to develop a more consolidated sense of who he is. At the same time, excessive gaming interfered with face-to-face interactions that teach social skills and time needed to study and work. The authors also had to emphasize that "obsession" with role-playing fantasy games did not mean that it stemmed from clinical OCD nor did it fit a simple addiction model. These games allow for a playful expansion of the self.

> The evaluation team stressed to the family that pursuing relationships online was both adaptive and maladaptive. The games were adaptive in the sense that they provided an arena within Mr. A's comfort zone to engage in the developmentally appropriate task of group formation outside of the nuclear family … On the other hand, spending 12–16 hours a day on the Internet served as a way of avoiding intimacy with peers and the expansion of his identity in the outside world. He was allowed contact and a sense of community without the expectation of genuine intimacy within these relationships.

> In summary, then, role-playing games may offer beneficial outlets to adolescents and young adults but also present substantial risks.

As with other activities in life, it starts to become clear that moderation is key. Online games can be therapeutic and enabling when engaged with in moderation, but can become disabling when someone plays too much. While seemingly obvious once laid out, this sensibility is oftentimes missing when the issue is presented by the media or anti-game proponents. A complicated "both-and" issue becomes mangled into a far more simplistic "either-or" / "good vs. evil" issue.

The full article reference is: Allison, A., Wahlde, L., Shockley, T., & Gabbard, G. (2006). The Development of the Self in the Era of the Internet and Role-Playing Fantasy Games. American Journal of Psychiatry, 163, 381 - 385. This is an important article not only for its complex and nuanced perspective on online games, but it shows that there are clinical psychiatrists who also feel that "online gaming addiction" is an overly simplistic diagnostic label.

Technologies as Reflections of the Human Condition

I think technologies such as the Internet and online games are also far more than just tools that people use and "become addicted to". To some degree, they also reflect the human condition. Sherry Turkle, who is well-known as the author of "Second Self" and "Life on the Screen", recently gave a talk at Stanford about her more recent work with how people perceive and relate to robots. An interesting finding was that people readily express feelings of love and affection for robots, especially if the robot needed to be taken care of (google "Paro" or "My Real Baby"). In the Q&A section, someone asked about whether under-privileged children reacted to robots in significantly different ways than normal/over-privileged children (i.e., because of their different levels of exposure to technology in general). Turkle responded that there were no significant differences, except that when asked whether they would want to take Kismet (http://www.ai.mit.edu/projects/humanoid-robotics-group/kismet/) home with them, under-privileged children often mentioned they wanted to take Kismet home because Kismet wouldn't hit them or hurt them.

As Turkle mentioned elsewhere in her talk, technologies can be reflections of the human condition. In this case, the technology had evoked a response that revealed something very important (and troubling) about these children's lives. Now, we could very well argue that these children have developed a psychological disorder, an aberrant expression of affection and irrational attitudes towards inanimate objects. And it wouldn't be hard to do that, if you heard the kinds of things they say and do for the robot. But I think that would be missing the more important point, that talking about "irrational attitudes" would be a way of *not* talking about and dealing with prevalent child abuse.

This is also what's partly frustrating with the emphasis on "online gaming addiction". To ask whether teenagers are getting "addicted" to online games is a way of not asking why our schools are failing to engage our children. To ask why some people get "addicted" to their fantasy personas is a way of not asking how we expect people to derive life satisfaction from working at Wal-Mart. MMOs are seductive because they empower some people in ways that the real world does not. The people who we let fall through the holes of our social fabric are caught by an alternate reality where they feel a sense of satisfaction and purpose.

Creating labels such as "online gaming addiction" gives us the illusion that we've identified a new problem in our society instead of talking about the real and chronic problems in the world we live in. Instead of talking about why our education system is failing us, or why a tedious 9-5 existence is inevitable for so many, we have created a way of not talking about those problems. People who find empowerment in an unsatisfying world are labeled as "addicts". We brush aside the larger social problems by labeling their victims as deviants. And along with that, all the nuances,

complexities, and multiple factors in behavioral and psychological problems are ignored in favor of a simplistic single factor model.

Ending Thoughts

The word "addiction" is loaded. It would be naïve to say otherwise. While there are more nuanced ways to use that word, such as differentiating between "being addicted to X" versus "X being addictive" for example, this is seldom the case when online games are dealt with. And people who use that term are deliberately setting themselves up for resistance. If they really wanted to help people understand how complicated the problem is, if they really wanted to reach out to the people who are having these problems and actually help them, there are other more neutral ways of saying the same thing. People will resist the label "online gaming addiction", but no one would argue that some players spend too much time in an MMO, that sometimes players develop dependencies to an MMO and the dependency can cause a severe impact on their work and relationships. And most importantly, that these people need help.

It would also help to acknowledge that oftentimes, other factors such as depression, low self-esteem, mood disorders, high stress, or traumatic events such as unemployment or marital crises can make a person more susceptible to developing a dependency on a variety of potentially destructive behaviors, including playing online games. It would help to mention that behavioral dependencies in general share many common features and predisposing factors, and that creating loaded terms for specific technologies can make it harder for people to understand and help resolve the problem when the rhetoric focuses so singularly on the technology. And finally, it would help to mention that behavioral problems seldom have simple and single causes, but rather are typically produced from and sustained by a variety of inter-related factors. It doesn't really help anyone when the entire issue often boils down to simplistic "yes/no", "good/evil" stances in media reports.

I would argue that with our current social paranoia, using the term "online gaming addiction" is a rhetorical strategy for implying a lot of conceptually misleading things. It is a strategy that asks the audience to take on a simplistic view of what online games are, a strategy that plays to the fear-mongering of the news media and parental concern with video games and the internet. And ultimately, it is a strategy that in fact makes it harder for everyone involved to understand and help people with very real problems (particularly parents and therapists who know very little about online games). The label "online gaming addiction" encourages people to associate the underlying problem with the technology rather than (and in addition to) the person or his circumstances. It encourages people to ignore the therapeutic and enabling potentials of MMOs.

It asks people to assume that MMO experiences are always limiting and unsatisfying. But the fact of the matter is that it's much more complicated than that. And as I mentioned at the beginning of the article, there is a huge difference between stating what is logically true and what is conceptually meaningful. And I would argue that you can't understand and help people with two legs if you only think they have one.

Understanding and Dealing with Gaming Problems: A Q&A with a Therapist

Shavaun Scott has an incredibly unique perspective on online games. She is a licensed Marriage and Family Therapist, has been working in addiction treatment since the late 80s, and has been a therapist for individuals, couples, and families since 1991. Moreover, as an MMO gamer herself, and a mother with two boys who sometimes spend too much time playing MMOs, the issue of "online gaming addiction" is something she takes very seriously and has thought a great deal about.

In the media, discussion of online games oftentimes degrades into sensationalist sound bytes, and it is incredibly difficult to find sensible strategies to many common problems. For example, what is the best way for a concerned parent or friend to approach someone they feel has a gaming problem? What are things they should and shouldn't do in these situations? These were also questions that I wasn't trained to address (as an experimental psychologist).

So when Shavaun agreed to be interviewed for an article on understanding and how to deal with the common problems, I was very excited. I also want to take a moment here to say how much I appreciate her for taking the time to provide such thoughtful and insightful responses to some very difficult questions.

The word "addiction" has lost some of its clinical meaning in popular culture. Many people claim they're addicted to coffee or golf. What do you think are common misconceptions that people usually have about the causes and nature of clinical addiction or behavioral dependencies in general? Or put another way - If there's one thing that people need to know about clinical addiction, what do you think it should be?

There's tremendous confusion about the issue of "online gaming addiction." The media seem focused on "pro-gaming" and "anti-gaming" voices which have become increasingly hostile and polarized. It's natural to want to simplify, label, and categorize human behavior, but when we do that we risk missing the important nuances of what's really happening in specific cases. Where there are problems there are likely a variety of causes, and myriad possible solutions. It's complicated.

If there's one thing I'd like to communicate to people about the topic of "addiction", I'd have to say "it's about functioning." When clinical therapists are assessing whether or not someone is

experiencing a problematic compulsive behavior they generally start by looking at how well the individual is functioning in life across a variety of domains. In order to live effectively in the world we need to maintain our physical health (nutrition, hygiene, exercise), establish and maintain a home environment (okay, how clean it has to be is somewhat flexible), and if we're adults, support ourselves economically and pay our bills on time. As young people we are expected to prepare to support ourselves eventually by becoming educated. If we're engaged in any behaviors that prevent us from functioning in those areas, it's clear that there is a problem to be further assessed.

What about relationships, and in particular, the complications that arise from comparing the value in face-to-face and online relationships?

It gets more complicated when we consider the issue of interpersonal relationships and what would often be termed "personal growth." Therapists tend to have a bias toward building positive and supportive intimate relationships in real life. In order to develop and maintain such relationships, quality time needs to be spent interacting in positive ways with loved ones and peers. Any activity that prevents or significantly interferes with that kind of quality time should be evaluated if one deems real life relationships to be important. People differ in potential and desire for intimate real life relationships however, and for some online friends may meet their needs. In many situations individuals may experience more intimacy with online friends than they do with those they know in real life.

Why do some people develop compulsive behavioral problems?

Unfortunately many people, particularly those prone to compulsive behaviors, are not highly self-aware and have a hard time reflecting upon and regulating their own behavior. Children are not able to do this, which is why they have parents who regulate them. Adolescents do it sketchily. Adults vary according to many complex factors. Family and loved ones of an individual are apt to be the first to notice problems in functioning. But rather than filling out a questionnaire that asks things like "how many hours a week do you play online games?" in order to assess if someone has a problem, it might be more helpful to discuss the issues of "how well are you functioning in life overall?" and "are you living the kind of life you really want to be living?"

Any behavior that interferes with life functioning should be an area for further examination be it computer gaming or anything else. If you stop and think about it, these are questions we all should reflect upon frequently and with honesty. I must pause and ask myself "when I'm at the end of my life will I look back and feel good about the way I chose to spend my time?"

You mentioned that children are special cases because their ability to self-monitor and self-regulate aren't fully-developed. Can you elaborate more on that?

If you've spent any time around children, you realize they are not miniature adults. Their thought processes and perceptions are entirely different from mature adults. They lack the ability to delay gratification and need immediate rewards. They've not yet developed the capacity to appreciate ambivalence; issues appear to be black and white, good or bad. Young people struggle with impulse control, have limited ability to understand and regulate their emotions, and are easily overwhelmed by conflict. Most are unable to take the perspective of another.

This is why kids have parents. If left to their own devices they fail to bathe, eat properly, learn to get along with others, or develop a clear understanding of who they are. Most would certainly not go to school because the rewards for doing so don't come until far into the future, something they can't yet envision.

If we understand that kids are special cases, it's common sense that they need structure, support, guidance, and a variety of activities in which to develop competencies and feelings of success. Video games can bring opportunities for growth and success to kids; particularly when parents participate in the experience to some degree. Without balance or parental involvement however, problems can easily develop.

What are practical measures that parents should take to help their children regulate their game-play?

I suppose at this point I should confess it's not something I was able to pull off in raising my own kids, though I really tried to. I was functionally a single parent of three, working full time, and in their early years attending graduate school at nights. My kids were alone with television and their computers far too much. One of the difficulties in present day society is that parents are often exhausted and depleted. I think anxiety and depression in children are increasing. Kids are frequently left alone and under stimulated.

It's easy for depressed and anxious children to withdraw, escape, to become sedentary. They become developmentally stuck. This can happen from too much television viewing as well as excessive video gaming. This needs to be kept in mind when we look at the issue of young people and use of the media, whether we're talking about television, video gaming, or other use

of the internet. It's easy to say "parents need to monitor kids and their computer use" but we don't live in an ideal world where this is realistically possible for many families.

I wouldn't presume to set predetermined specific rules about what is appropriate for a given family or individual. This is something that should be evaluated within the context of each individual family. However parents who are invested in doing a good job raising their kids will spend time evaluating when, where, and how much use of various media is good for their kids and what other activities need to be integrated into their lives. If this is monitored from the beginning it's easier to keep things from getting out-of-control as kids get older.

I have noticed that parents who enjoy their children and find activities they can participate in together report more academic success and fewer problems with compulsive behavior of all sorts, but this needs to start in their early years. And I'll repeat myself: parents can play games with their kids in a constructive and positive manner.

It's in the nature of the adolescent to rebel and reject most everything their parents say. If kids have been allowed unlimited access to the media when pre-adolescent, it's very difficult for parents to set limits when they become older. At this point professional help may be the best way to assess ways to turn a negative situation into a more positive one.

You mentioned elsewhere that you've been seeing more and more people who come in because their partner has a gaming problem. Tell me what those scenarios usually look like.

There's not much that's more complicated than making a loving relationship work over the long haul. People enter into relationships for intimacy, closeness, and with the expectations of meeting one another's needs. Any behavior that shuts one partner out and disrupts the primary bond is a problem. If computer gaming becomes habitual and uncontrollable it is apt to cause severe impairment in primary relationships.

Now I have seen relationships break up over compulsive surfing (the kind in the ocean – not just the internet), compulsive spending, and certainly compulsive gambling. Computer gaming can be especially problematic because the virtual world is accessible 24/7; game play can continue endlessly, day or night, and because there are so many reinforcers structured into many games there's tremendous incentive to keep playing. You can't put the game on "pause" to go share dinner with the family, or to put the kids to bed.

I hear a lot of common complaints. "She plays the game every night after work; we don't have dinner together anymore and her game friends mean more to her than I do." "He stays up all night and plays all weekend long; we don't talk, have sex, and he ignores the kids." It's not uncommon to hear of people who stop bathing on a daily basis.

Of course a partner is going to become upset. Initially there's a feeling of loss which quickly moves to frustration, then anger. Positive communication ceases and the overall tone of the relationship becomes negative. The partner who is gaming compulsively tends to become defensive and angry, in fact identifying the negativity in the relationship as just another reason to escape into the fantasy realm of the game where she/he can experience the sense of respect, control, and the associated dopamine rush of satisfaction that takes place in the game. Denial becomes entrenched. "Problem? I don't have a problem …"

The partner becomes increasingly isolated, hurt, and angry thus establishing the proverbial vicious circle.

I've always felt that the people who realize they have problems and are willing to see therapists are the easy cases. I think the hard cases are people who deny having a problem, and become violent/antagonistic when someone implies they have a problem. In the case of a partner with a gaming problem, how should someone approach the issue or convince them they have a problem?

The first thing I'd suggest to the partner of a compulsive gamer is to find a supportive environment to sort out your own feelings. The pain can become absolutely overwhelming and contribute to a growing sense of depression, hopelessness, and loss of joy in life. A good counselor can help you sort out what you are feeling, and then examine what options there are. If therapy is not a possibility for you, there are online support groups which can be helpful.

If I had to simplify the best approach to take in this type of situation I'm reminded of the classic term in addiction treatment called "hitting bottom." When a person is engaged in a compulsion that has taken over their lives they are not looking at life realistically; they are not considering the consequences of their actions. It takes a severe, abrupt, life changing loss to bring them back to reality. When you hit bottom, you come back to reality – hopefully.

You can compare this to a person who begins a pattern of abusing alcohol. Initially they may have two or three drinks, get in their car to drive home, and they get there safely. There are no consequences. They may do this a dozen times, and eventually progress to four or five drinks, as

if they are unaware that they are impaired and taking life threatening chances. Often it takes only one car accident, or a DUI arrest for them to wake up and admit "I've got a problem and I've got to stop." Nothing like a night in a drunk tank laying on a cold concrete floor to give someone a message about natural consequences. It's a harsh and necessary wake up call, and a logical consequence of their actions.

So the best treatment for someone with a habitual and destructive compulsive behavior is a hitting bottom experience. It's not quite as dramatic as a DUI arrest when we're talking about computer gaming, however when you stop preparing your partner food, buying his/her groceries, doing all the laundry, and waiting around the house hoping he/she will share some free time with you it starts to "bring the bottom up" so to speak. There is no need to beg, nag, cry, or allow yourself to become depressed over the situation. Let the consequences be natural. If your partner is not taking care of business, let the consequences pile up and overwhelm them. Don't enable. NEVER make the dinner and deliver it to the computer. Do your own laundry and let his/hers pile up into a huge smelly pile until there are no clean clothes.

Get out of the house, make other friends, and get your own needs for a social life met in other places. Leave the gamer to his/her game. Do your own thing. Detach. You may find that your partner notices the change and responds by taking a more realistic look at the situation....or maybe not. But at least he/she won't blame you for acting like a miserable nag.

Sadly in some cases the message isn't heard until you've gotten fed up and decide to leave the relationship. I still recommend professional help in sorting this out, as there is no easy and clear path. Empty threats are not productive and still come off as nagging, so there has to be a realistic action plan and it should be communicated that you are serious. At this point the compulsive gamer may be more motivated to consult a professional with you. If not, I like the advice the old sage Ann Landers used to give: "are you better with him/her or without?"

It's a time for lots of reflection, and feedback from wise friends you trust. Ultimately if someone chooses a relationship with a game over intimacy with you, it's time to decide if this is how you want to live your life.

Hard stuff indeed.

And finally, I also asked Shavaun for some do's and don'ts for people who are concerned about someone they know who might have a problem. This set of points also helps summarize many of the important things Shavaun brought up throughout the interview.

Things to do:

With a child:
- Set clear limits regarding computer use and enforce them. Internet use is a privilege not a right.
- Be a good role model in living an active and balanced lifestyle.
- Build a positive and loving relationship enjoying a variety of activities together, as much as it's in your power to do so.

With an adult:
- Communicate in a caring and constructive way about your concerns and sense of loss or disappointment. Do this as long as the individual is willing to interact with you in a positive manner.
- Make specific requests ("It would make me very happy if we could spend three evenings together and at least one day on the weekend").
- Allow natural and logical consequences to occur for irresponsible behavior.
- Take care of your own needs for social and emotional support; find recreational activities that make you happy.
- Encourage consultation with a professional therapist.
- Realize that ultimately you cannot control another person and in the process of detachment a sense of loss occurs. Find support for yourself.

Things not to do:

- Don't be a broken record – venting anger and nagging doesn't help. You can state your feelings without communicating in a rageful way.
- Don't pay for a problem gamer's broadband connection (or other bills) yourself.
- Don't pay monthly game subscription fees for a problem gamer.
- Don't do anything that makes it easier for her/him to maintain an irresponsible lifestyle.
- Don't threaten to leave unless you are serious. Be very clear about what your needs are.

Does Horde PWN Alliance in PVP? A Baker's Dozen of Possible Reasons

One issue that is often discussed and debated on the WoW forums is why Horde seems to outperform Alliance in BGs. In a recent open-ended survey, I asked players whether they observed this pattern on their servers, and why they thought this might be the case. While I was expecting players to offer a variety of reasons for this pattern, I did not expect the large number of explanations offered. What was interesting about these explanations was that they highlighted the different game layers (factors from inside and outside that game) that come into play in observed behavioral patterns in MMOs.

Consistent with the forum posts, many players felt that Horde outperformed Alliance in BGs on the server they play on. From the open-ended responses of 140 players, 16% either skipped the question or did not give a clear answer. Of the remaining responses, 66% of players felt that Horde outperformed Alliance on their server, 31% felt that it was about equal or the other way around. And about 3% indicated that it depended on the BG (i.e., Horde consistently won WSG and AB, but Alliance consistently won AV).

Of course, one could argue that this is a matter of perception rather than fact. And some respondents did in fact raise this concern.

> I don't think this is true, personally. I suspect it's an opinion that's gained momentum as a perceived fact, regardless of any truth behind it. [WoW, M, 39]

> I really don't think this is true although people think it's true or at the very least isn't true to the extent that people think it is. [WoW, M, 32]

On the other hand, the fact that so many players believe it to be true suggests that there's something interesting going on, and that in either case, this is an issue that's worth exploring.

Overall, explanations for this perceived behavior typically fell into one of four categories: 1) entry factors, 2) population imbalance factors, 3) game mechanic factors, and 4) psychological factors. What's useful about these categories is that they provide a framework with which to think about in-game patterns in general - that for any given pattern, it is worth considering explanations in these four categories. And I think what's most interesting about the explanations offered isn't about the issue of BG performance, but that these explanations highlight the many different

layers which social behaviors in MMOs can be produced and explored (for both game designers and game researchers).

Entry Factors

Entry factors are about how different people choose to belong to different groups or factions in a game where this choice is offered. In WoW, one primary decision is in choosing between Alliance and Horde. The significance of entry factors is that they may create sustained personality or behavioral differences between the two groups. The most popular explanations for superior Horde performance in BGs fell into this category.

Alliance Attracts Noobs

Many respondents argued that players new to MMOs were more likely to choose Alliance because the character models more readily resonate with the "good guys" as portrayed in movies such as Lord of the Rings (i.e., human knights in armor and elven archers). And because new MMO players have less experience in raiding and coordination, the Alliance suffers from this in BGs.

> WoW brought a LOT of new players to MMORPGs and many just went straight to Alliance because most people do not want naturally to be a bad guy. Experienced MMORPGers (who know that game/class/combat mechanics must be mastered, browse forums for tactics/add-ons, use TeamSpeak, etc.) are past that stage of 'I'll be a good guy and defend the Alliance against the Empire/Horde). Most, if not all, Horde I know come from that pool of vets. [WoW, M, 38]

> Those who are new to the game will most likely roll a race that they can identify with, that would pretty much exclude any Horde class. Horde will tend to be veteran players. [WoW, M, 37]

The notion that more experienced players leave the Alliance for the Horde was expressed by several players.

> Horde players are generally more experienced in the game than Alliance in every way. Most people start with alliance then switch to horde afterwards. The Horde players know the game better than the alliance. [EO, M, 29]

Alternatively, it is possible that most people start on Alliance side. At some point they want to change, and start Horde characters, and at this time they are much more experienced. So Horde guys have lower numbers but higher skills. [WoW, M, 38]

Alliance Attracts Younger / Immature Players

A related explanation was that Alliance attracts disproportionately younger or more immature players. Many of the arguments for why new players would be attracted to Alliance were repeated here.

The cause is generally younger players attracted to the 'pretty' characters. [WoW, M, 26]

It was presumed that the younger players had more interest in playing the 'pretty good guys' (they have the misconception that the horde side should be considered evil.) [WoW, M, 22]

It is this difference in maturity that some players attribute to the poor Alliance performance in BGs.

The Alliance tends to fall under the 'pretty' category, so we tend to get a bunch of people who care more for their appearance than for following orders and working as a team. They split up, disobey direct orders, refuse to join the raid, refuse to act as a team, and are, in general, self-centered. It has been observed even when they are in a raid group that they appear to have raid chat turned off and go their own way. They lack focus and discipline. Good groups are sharp, obedient, and have good leaders. [WoW, F, 24]

Younger people are not as mature and less likely to work together. On the other hand, Horde players tend to be older and more mature (and more likely to work together). Since teamwork is key in the BGs, the Horde is predisposed towards winning over the Alliance. [WoW, M, 33]

Horde Attracts Hard-Core / Competitive Players

Others point out the flip-side of the equation - that players who choose Horde are likely to be more competitive and PvP-minded. Some respondents also argued that Horde players tend to be more serious while Alliance players tend to be more casual, and that these differences lead to differing BG performance.

Horde are the fighters, the 'hard' side, the underdogs, the tough ones. Alliance are the Elves, the 'pretty' ones, the side that most female players head towards. This leads to a more hardcore mentality on the Horde side and thus better BG play styles. [EO, M, 36]

My coworkers and I discussed it over the water cooler and developed a theory for a Horde personality that leads certain types of gamers to play Horde... and those gamers just happen to be better at and more inclined towards pvp. [WoW, F, 23]

The alliance portion of the game is admittedly easier to play by consensus of both players and designers. As such the alliance tends to draw a more casual gamer crowd who don't immerse themselves into the finer points of play as much as a 'hardcore' gamer. Thus when taking on more intensive tasks (especially bg's) horde players bring more developed skill sets to the table such as the ability to follow orders and how to most effectively play their class. [WoW, M, 26]

Related to this, some players argued that the Horde character models play to and attract a more competitive mentality.

Alliance is pretty. Horde is fierce. Players with that type of 'fierce' mindset are more prone to wanting to dominate other players, rather than just some computer-controlled mobs. [M, 17]

People choose horde are typically more aggressive players and the horde models match the appearance of aggression better then alliance does. [WoW, M, 23]

Population Imbalance Factors

On most WoW servers, the Alliance outnumbers the Horde around 2:1 and sometimes as much as 3:1. As opposed to the entry factors that focus on how people choose to belong to different factions, the following imbalance factors describe more organizational reasons for why the faction with fewer numbers might be at an advantage. In other words, the following explanations are not tied to Horde or Alliance character models or appeal, but simply the effects of population imbalance in general.

Practice Makes Perfect

The crucial factor for the explanations that fall in this section derive from the shorter BG queues for the side that has fewer players. The higher the population imbalance, the higher the difference

in BG queue times for the two different factions. Because being good at PvP is partly due to practice, the side that gets to practice more is likely to perform better.

> The big number of Alliance players makes it difficult for them to get practice, while the fewer horde players get into a lot of battles and can hone their skills. The more balanced the horde/alliance population is, the less of a gap in skill there is, I think. [WoW, M, 27]

> On our server, the Alliance outnumber the Horde at a factor of like four to one. In order to even get in to a BG, an Alliance player can expect to wait in the queue for up to an hour and a half, while the Horde queue's instantly all day. This means a few things. One, it just means practice. It stands to reason that people that get to PvP all day every day are better PvPers than those who get to do it five to ten times a week. [WoW, M, 37]

Familiar Faces

But beyond the practice factor, the faction with fewer members also has a higher chance of the same members bumping into each other over and over again. This makes it easy to know who the good players are.

> The reason Horde in general do so well as there are fewer of us so many of us have battled together before. We know who is good, how we play and can synchronize our fights. [WoW, F, 43]

> Inside the Battlegrounds, you often get grouped with the same people or same groups of people as Horde, allowing you to learn each other's tactics better and know who to listen to, etc. On the Alliance, since there are so many people, I think that's harder. [WoW, M, 19]

This is particularly important for the emergence of known leaders in a situation where there is a very limited amount of organizational time.

> This also means that the good leaders become *known*. When you only have a couple of hundred people who regularly play in the BG's on the Horde side you quickly learn who the good players are, who the good leaders are and so they get listened to. [EO, M, 36]

Facilitates Sustained Groups

One related point that should be highlighted is that the shorter BG queues also make it easier for PUGs to become sustained groups for the side which has shorter BG queues. On the Alliance side, queuing up as a group increases wait times, whereas this is not the case for the Horde. Thus, from an organizational standpoint, it makes more sense for a Horde PUG to stay grouped than it is for an Alliance PUG.

> Because of insta-queue times, PuGs become 'groups' within a match or two. You leave and queue up again together. The mere fact that you don't have to waste the first 55 seconds of the raid trying to figure out who is going to start the group, how you are going to get invited, who's leader, etc. makes a huge difference. More than once I've just barely gotten in to the raid group and the horde are halfway across the field. However, on the Horde side, this isn't an issue. Moreover, once you are in a group for a few matches, someone can begin to emerge as a leader who can be trusted. Someone can emerge as a flag carrier. Someone emerges as a trustworthy healer. Working together eventually leads to you working together, if that makes any sense. [WoW, M, 27]

Game Mechanic Factors

While population imbalance factors are not intrinsically tied to either the Horde/Alliance split, game mechanic factors hinge on specific aspects of being Horde or Alliance. But unlike entry factors which emphasize player personality differences, game mechanic factors emphasize advantages or disadvantages the two factions might have due to mechanic differences.

PvP Racials

Many players pointed out that Horde racials are better suited to PvP while Alliance racials are better suited for PvE. Thus, Horde characters might have an edge in PvP scenarios due to those racials.

> First of all horde racial abilities COMPLETELY own alliance ones, you cant compare undead priests Will of the Damned racial (which will break any kind of stun/charm/fear) and Devouring Plague racial (another powerful damage over time spell) while at the same time alliance night elven priests get a most magnificent +1% dodge AND starshards which are simply UTTERLY useless. Orcs are semi-resistant to fear, humans have increased stealth perception. Tauren have warstomp (5s area of effect stun) dwarves have useless stone form. Anyhow, it all boils down to 'fear whoring', horde will always use several warlocks to area of effect fear alliance team, and while the entire alliance team have no control over their characters (which is game breaking in itself) they

kill one by one by concentrating fire. Alliance has no means to counter this (you can use anti fear trinket only once in 5 min) and can't do the same on the horde (horde have been made as fear resistant as possible). [WoW, M, 27]

Horde tend to get better PvP racials and Alliance tend to get better PvE racials. Fear Ward, for example, is a huge bonus to Alliance guilds attempting Onyxia, Nefarian, or Magmadar (raid bosses), while War Stomp is a very good PvP skill. [M, 17]

But Alliance is Better Geared From PvE

Among the players who disagreed with the Horde outperforming Alliance trend, many noted that on their servers this was due to the Alliance being better geared from PvE instances.

PvP rewards are harder to attain and take longer to get than PvE rewards from raiding instances, making it so that, generally, Alliance is better geared than Horde, since Alliance seems to be better for PvE content. [WoW, M, 20]

On my server it's pretty even, but only because the alliance is miles ahead of the horde in terms of PvE progress and gear. If 2 evenly geared and skilled teams faced each other I'd say horde would win as we have better PvP racials. [WoW, M, 18]

In other words, these players would argue that Horde racials may be more suited for PvP, but the Alliance ends up having more of an edge from their PvE racials because of gear access.

Shamans vs. Paladins

Another thorny subject was the comparison of Shamans and Paladins (Horde have exclusive access to the former, while Alliance have exclusive access to the latter, but the expansion will change this). People who brought the two classes up tended to agree that Shamans are better suited for PvP encounters because of their burst damage and totem abilities, while the defensive abilities of the Paladin are less suited (except perhaps in WSG).

The other primary difference in PvP play is that offensive capability matters more than defense. The unique Horde class, the shaman, is far more offensively focused than the unique Alliance class, the paladin. The key to tactical PvP is to impair as many of the enemy as possible, and AoE effects like the Earthbind Totem are big guns. [WoW, F, 26]

Paladins are tank/heal hybrids which cant dish out damage on regular basis, can't tank because in pvp there are no collision zones and paladins don't have taunt abilities, and even if they did, these don't work on player characters. Paladins regularly refuse to heal but instead completely specialize on damage. On the other hand shamans are designed as dps/heal hybrids which can dish out TREMENDOUS damage on 3 targets (chain lightning) , drop area of effect movement speed reducing totems and heal their team members while at the same time hitting with their axes for quite high damage. [WoW, M, 27]

Some players, however, did point out that they felt the Shaman/Paladin issue was overstated. Yet even in these cases, they agreed that Shamans tend to be more effective in PvP due to other related factors.

To a much much lesser, but still probably noticeable extent, shamans are more pvp-friendly than paladin. While the skilled shaman and the skilled paladin are probably equally good in pvp, the key word is skilled. The unskilled shaman is many times more effective in pvp than the unskilled paladin. [WoW, F, 23]

So many people cry about Shamans, but we on Horde side thought the Paladin a much greater support and group class then the Shaman. And to this day, I still agree this, having played both factions and currently playing the alliance faction, I still think that Paladins are greater then Shamans when they do their job in an organized group. [WoW, M, 19]

Location. Location. Location.

And finally, some players brought up location or geographical explanations for the Horde/Alliance differences in PvP. Most of these centered on the layout of AV. The interesting thing was that there was very little consensus as to which side actually has an advantage.

AV, 3 different servers now, alliance almost always wins, regardless of organization. I believe the biggest reason for this is the differences in the sides of the map. The biggest one being the bridge choke point the horde has to deal with when attacking the alliance base. [WoW, M, 25]

The alliance are at a distinct disadvantage in AV. Not only can Horde get to Snowfall and cap there before the alliance can, it is also easier for them to get to the wolves for the wolf rider quests than it is for alliance to get to the rams. [WoW, M, 30]

In Alterac Valley, this might be due to the geographical advantage the Horde has at defending [offensive graveyards], there is no backdoor into most Alliance graveyards (SH can be taken from south and west, SP can be jumped from the back and assaulted from the south) (IB can only be taken from the east, FW is in an open field and hard to defend if you don't have people respawning next to it). [WoW, M, 17]

This makes me agree with what some posts on the WoW forums point out - that these geographical differences end up being fairly balanced all things considered. But there was one unique explanation that one player brought up about starting locations that was fairly interesting. Instead of focusing on the BG geography, he focused on the starting geography of the two factions.

The Horde starter zones are arranged much better than the Alliance ones 'physically' in-game, allowing all three races to meet and fight earlier than Alliance. This is a very big deal. The Barrens is a lvl 10-30 hot spot where everyone in the Horde comes together to learn to play together. The alliance is more schizophrenic geographically and with respect to flight points and logistics. Honestly the Alliance players aren't forced to play in a really organized way until the Deadmines, around lvl 18+ (although most people go sooner). Also, and perhaps most importantly, the Horde have a lower-level instance to start in (lvl 13) and more low-level instances (Wailing Caverns and the one in Orgrimar I just mentioned, name eludes me atm). I can hardly count the Alliance's stockades in Stormwind, it is by far the worst and least enjoyable instance in the game. [WoW, M, 34]

Psychological Factors

The final class of explanations are related to some of the factors we've seen already, but their reasoning is more psychological rather than organizational or due directly to game mechanics.

Taurens Are Scarier Than Gnomes

In terms of body size, the Horde size has a much higher average due to the normal sizes of the Undead, the Trolls, in addition to the larger size of the Orcs and the much larger size of the Taurens. The Alliance are on average shorter due to the Gnomes and Dwarves. One player had

an interesting take on the psychological advantage of having a larger body size even though size in and of itself is not linked to any attribute or skill differences.

> Personally I think its because of size of player models, It sounds dumb, but human nature if only subconsciously is frightened of large people/things. Imagine your an average sized character with 3 other average sized characters. Suddenly 3 giant Tauren warriors have charged among you and your 3 friends. So its 4 of u, vs 3 of them. Someone is liable to panic and fall back, just because the 3 huge guys suddenly among them gave them a start or made them worry. Now in the reverse your 3 medium characters and 3 gnome warriors rush in among you your going to look at the tiny guys and fight them hard and its very doubtful that someone will panic since gnomes aren't exactly the most frightening of opponents. [WoW, M, 21]

The Underdog Mentality

Another interesting explanation that several players mentioned was that the Horde fights harder because they typically are the minority, the underdog. While this explanation also hinges on the population imbalance, the reasoning is psychological rather than functional (i.e., shorter queue times).

> Alliance outnumber Horde 4:1 thus Horde are used to being the underdogs and fight twice as hard. [M, 36]

> Last time I checked I believe the Alliance population was MUCH larger than Horde. I almost think that it's almost forced the Horde players to focus more on teamwork and skill if they want to win. [WoW, M, 21]

> I think the cause of this is because, population wise, Horde players tend to be outnumbered by Alliance players. So, Horde players tend to learn early on the value to assisting each other and working as a team. [WoW, M, 32]

Self-Fulfilling Prophecy

The final explanation argues that the observed pattern is merely the consequences of a widely-held myth that has come true over time due to a self-fulfilling prophecy. As we saw earlier, some players pointed out that this is a case of an assumption snowballing into a perceived fact.

I don't think this is true, personally. I suspect it's an opinion that's gained momentum as a perceived fact, regardless of any truth behind it. [WoW, M, 39]

But given that so many players believe in this stereotype, the assumption in and of itself may cause performance differences over time. If Alliance players who enjoy PvPing perceive the Horde as being better at PvP (regardless of what the underlying reason is), then they may decide to re-roll as Horde.

Now that the pattern seems to be firmly in place, many Alliance characters that are half decent get frustrated with always losing and so switch to Horde, thus reinforcing the existing imbalance. [WoW, M, 30]

Ending Thoughts

Overall, players offered more than a dozen different explanations for why Horde characters may perform better in BGs than Alliance characters. As I mentioned earlier, what's interesting here is not as much the BG performance per se, but the emergent framework that describes how behavioral patterns in MMOs may be produced from a variety of interwoven factors. While some players focus on entry factors and others focus on game mechanic factors, it seems that most of the explanations are plausible, and several probably contribute to the perceived phenomenon.

It would be nice to have the server logs and calculate whether one side has a BG advantage over the other, but it seems that this will be an issue that will be debated for a long time in that data's absence. Of course, it would also be nice if we could somehow test and tease apart the explanations described here. But the mentioned factors are all so interwoven that it would be hard to isolate many of them. And while I have some past data that supports some of the explanations (e.g., Horde attracts more competitive-minded players), the strength of other explanations are far harder to ascertain. Given that several factors proposed hinged on imbalance issues, it would also be interesting to see whether the cross-realm PvP system has helped alleviate the practice issue.

But as I mentioned at the beginning of the article, I think this particular set of explanations warns against relying too much on one specific game layer to explain in-game phenomena, especially given the plausibility of all the explanations presented here. It probably isn't just because of the game mechanics, or just because of the player personalities. Whether we're talking about BG performance, leveling rates or "dominance" of different classes, or other parallels such as City of Heroes/Villains, it's important to keep in mind the different layers of factors that may come into play to produce specific observable patterns.

Dealing with Dilemmas

Because of the sheer diversity of play motivations and the narrow communication channel, conflicts and misunderstandings happen a lot in MMOs, particularly in pick-up groups. For example, in World of Warcraft, what if the Priest wants to roll on the Warlock set piece? What if that Hunter looked like they just ninja-looted a Paladin plate piece? More often than not, there simply isn't enough time to lay out the issues and talk calmly. In a recent survey, I asked players how they would respond in these kinds of conflicts. In particular, I was interested in whether there were any age or gender differences.

I created three conflict scenarios based in World of Warcraft. I chose scenarios that were plausible and yet did not have standard resolutions. For example, the question of whether the Warrior or Rogue should tank has a standard resolution and wouldn't be an interesting conflict - it would be more of a knowledge test. Because producing such scenarios requires a sufficiently deep understanding of a particular game (and because I was most familiar with WoW at the time of the survey), I limited the scenarios to WoW and asked only WoW players to respond to the question set (1831 respondents altogether).

In the question set, players were asked to assume that the players mentioned were all players they had never played with before. The 3 scenarios were as follow:

> You are in a high-level 5-man instance. The first blue BoP item drops about 20% of the way into the instance. It's a plate item with a +healing bonus. Everyone passes except for the Paladin, who rolls need. Surprisingly, the Hunter also rolls need. The Hunter wins the roll, and then apologizes, and claims they didn't mean to ninja. If the group voted at this point, would you vote for 1) removing the Hunter immediately from the group, or 2) keeping the Hunter in the group.

> Your 5-man group is at the end of Scholomance. Darkmaster Gandling always drops a random Tier 0 class-specific head piece. In this run, the Dreadmist Mask (warlock set piece) drops - a blue BoP item. The only 2 casters in your group are a Warlock and a Priest, and neither of them has the Dreadmist Mask. The Warlock rolls need. The Priest (a shadowpriest) says that they are also building up the Dreadmist set because it has better bonuses for their build and would like to roll need as well. In your opinion, is it ok for the Priest to also roll need on the Dreadmist Mask?

You are about to start another 5-man Scholomance run. The only healer in your group is a shadowpriest and wants to stay in shadow form and heal via vampiric embrace as much as possible (switching only to normal heals when absolutely necessary). The Priest argues that this is the most efficient way to run through the first half of the instance. The Warrior argues that this is too dangerous. If your group voted at this point, would you vote for allowing the Priest to stay in shadowform, or 2) telling the Priest to switch out of shadowform.

The response pattern across all three dilemmas was similar. Older players were more lenient than younger players. In the ninja-looting dilemma, overall 55% of players voted to remove the Hunter and the remainder (45%) voted to keep the Hunter. As the chart below shows, older players were more lenient - in the teenage range, 50% of players voted to keep the Hunter, while in the over 35 age range, about 70% of players voted to keep the Hunter. But the age difference really only appears in the over 35 age group. The average "keep" rate in the below 35 age group is fairly consistent. The ninja-looting case was also the only dilemma where a gender difference appeared. Women were more lenient than men (p = .007).
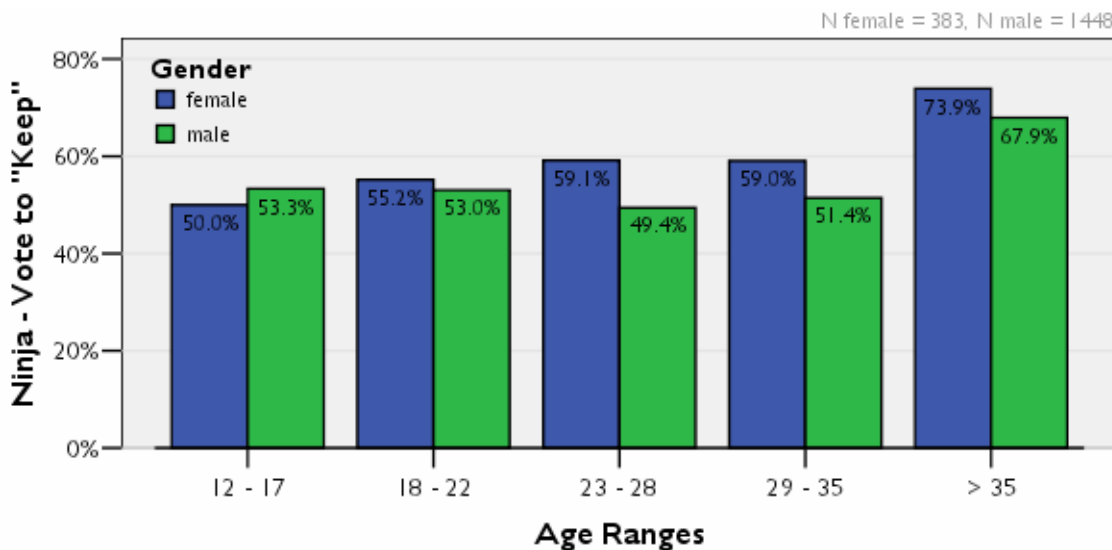
In the "set piece" conflict, overall 47% of respondents would have let the Priest roll for the Warlock set piece. Again, there was an age difference, and again, the only difference was in the over 35 age group who were more likely to allow the Priest to roll. There was no difference in gender in this scenario (p = .73).
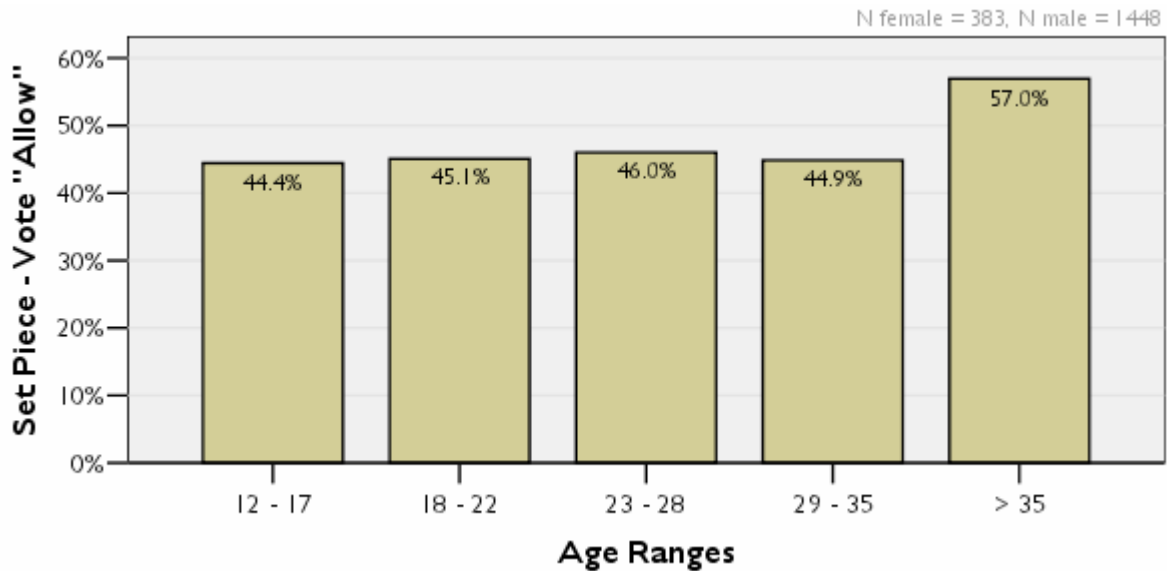
Overall, 48% of respondents would have let the Priest shadowheal. This dilemma produced the most interesting age effect. While consistent with the previous dilemmas in that older players were more lenient, there was a gradual increase in that leniency this time rather than a sudden spike in the over 35 age group. As the graph below shows, older players were more likely to allow the Priest to shadowheal. There was no gender difference in this scenario (p = .42).
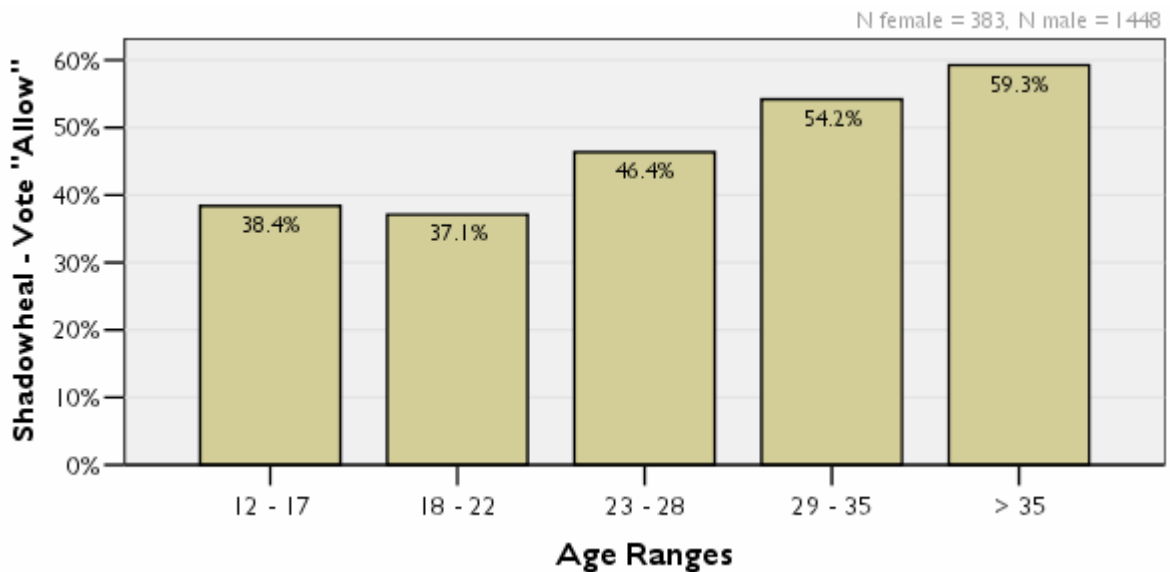
What these three sets of findings show is that older players tend to be much more lenient than younger players when dilemmas arise in the game. Part of this may be because younger players tend to be more competitive and goal-oriented (XXXX) and prefer efficient teams where strict role assignments are kept, while older players are less concerned with pure efficiency. With regard to how men and women deal with conflicts in the game, the gender difference appearing in only one

of the three scenarios is interesting. At first glance, it's not immediately clear what is different about that dilemma. One possible explanation is that it was the only dilemma where there was an overt punishment choice. Perhaps this is something that future surveys will help clear up.