The Daedalus Project

Characters and "Main Character"

Asking gamers about many aspects of their gaming highlights the problem of multiple characters. For example, if we asked players about guild affiliation, we would like a yes/no answer from each participant, but what about players who have multiple characters, some of which are in guilds and others not? This is typically dealt with by asking players about their main character. This solution allows each player to provide a yes/no answer, but then the problem is what players mean by a "main character". If a player has one level 70 character and another has 5 level 30 characters and they both say they have a main character, do they actually mean the same thing? Researchers may then want to define "main character" more strictly by time played this month, highest level character, and so forth. In this article, we'll take a look at different aspects of player's characters, whether they can easily identify a main character, and what rules they use to do so.
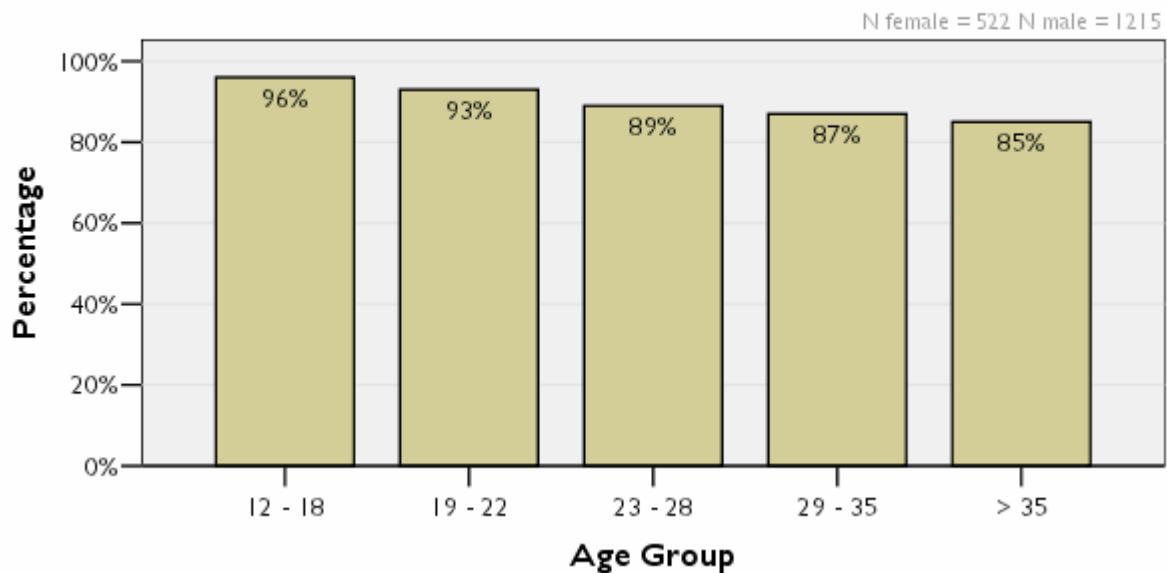
On average, players have 8.7 characters on their accounts. As the graph below shows, female players tend to have more characters on their accounts than male players (9.7 vs. 8.3). There does not appear to be a stable age trend.

Number of Characters on Account

Number of Characters (y-axis: 0 to 12)

Gender
- female (blue)
- male (green)

| Age Group	female	male
12-18	11.0	10.3
19-22	9.6	8.5
23-28	11.1	8.7
29-35	10.1	9.5
> 35	11.4	9.7
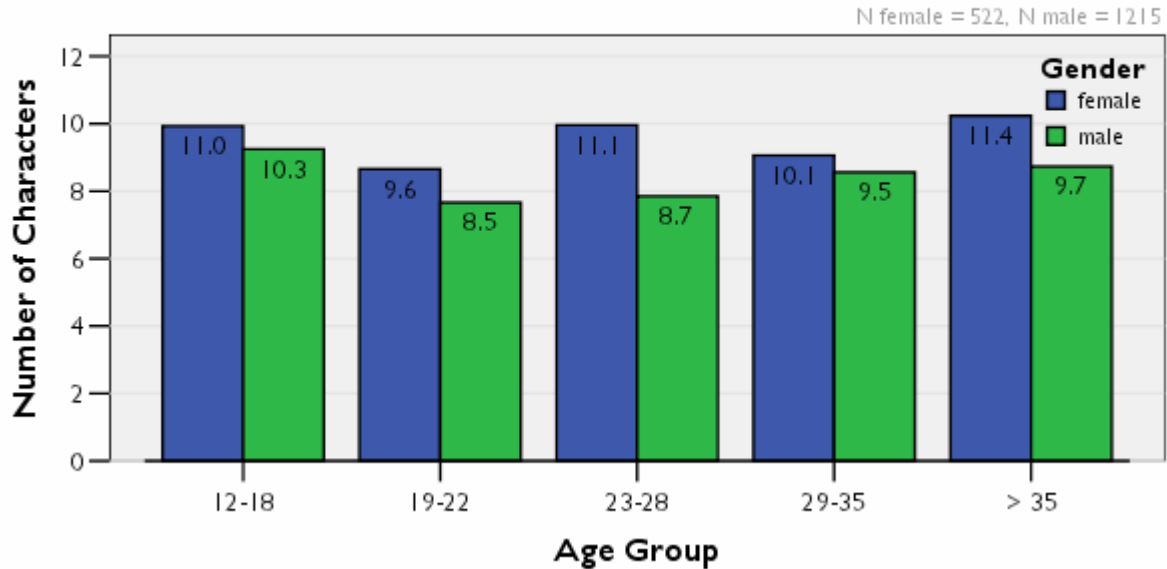
While this number of characters may suggest that it would be hard for players to have to pick a main character, most players have no problem doing so. Overall, 89% of respondents said that they could readily identify a main character. There was no gender difference, but younger players found this easier to do than older players (96% vs. 85%). This may be linked to a higher achievement motivation among younger players that makes it easier for them to focus on a few characters. We'll see more data later on that supports this.

Able to Identify a Main Character

N female = 522 N male = 1215

Percentage (y-axis: 0% to 100%)

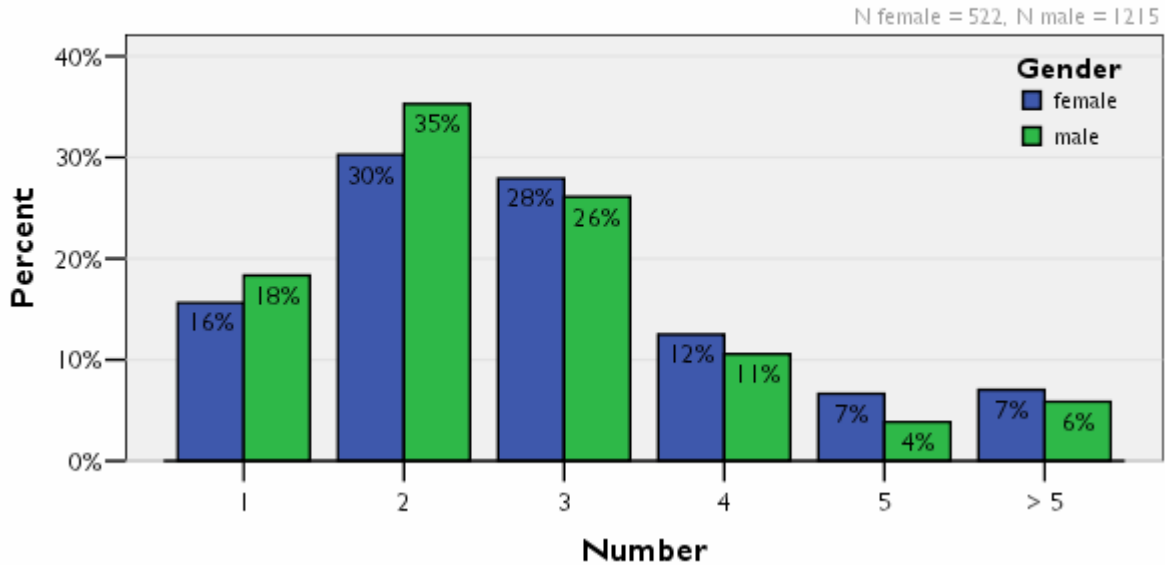| Age Group	Percentage
12 - 18	96%
19 - 22	93%
23 - 28	89%
29 - 35	87%
> 35	85%

In terms of level spread, the majority of respondents (70%) said that they had one character that was significantly higher in level than their other characters. There were no age or gender differences in this response. And overall, 68% of respondents had at least one max level character. There was a mild age trend where players in the 23-28 age group were most likely to have a max level character and those at the two ends were less likely to do so. Surprisingly, female players were also more likely then male players to have at least one max level character across all age groups. We'll also see data later on that might help explain this counterintuitive trend.

Have At Least One Max Level Character?

N female = 522, N male = 1215
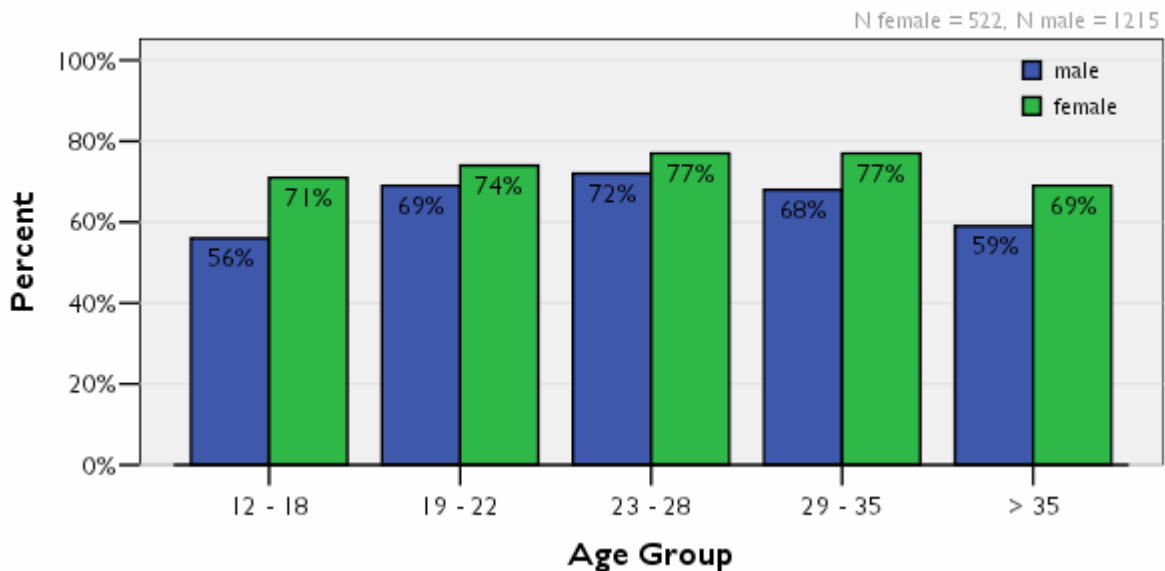
In terms of time distribution among characters, most players played more than one character in the past month. Only 17% of players had only one active character in the past month. On the other hand, 76% of respondents noted that they have a character that they devoted over 75% of their playing time toward in the past month.

of Active Characters in Past Month

Gender
- female
- male

[Bar chart showing Percent on the y-axis (0% to 40%) versus Number on the x-axis (1, 2, 3, 4, 5, > 5), with female (blue) and male (green) bars.]

| Number	Female	Male
1	16%	18%
2	30%	35%
3	28%	26%
4	12%	11%
5	7%	4%
> 5	7%	6%

When asked more directly whether they tend to devote their playing time to one character or split it among many, only a handful of players (12%) said that this was their primary play pattern. The greater part of respondents noted that they were somewhere in between. About 40% of respondents noted that they tend to devote their playing time towards only one character. Female players were more likely than male players to devote their time to one character. Perhaps this helps explain the earlier surprising finding that female players were also more likely than male players to have at least one max level character.

Character Play Pattern

N female = 522, N male = 1215
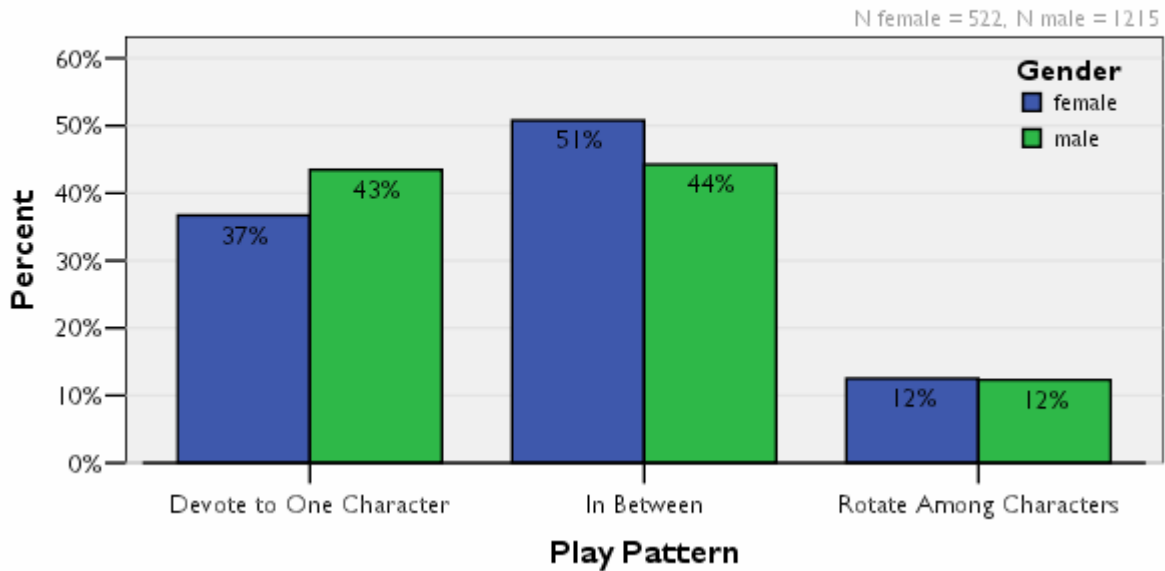
If we slice this data by age, we also see that it is younger players who tend to devote their playing time towards one character. This may be due to their tendency to find achievement motivations appealing (thus having a stronger drive to focus their energy in one character to level them up high) and this helps explain the earlier finding where we saw that younger players also found it easier to identify a main character.

Play Pattern by Age

N female = 522, N male = 1215
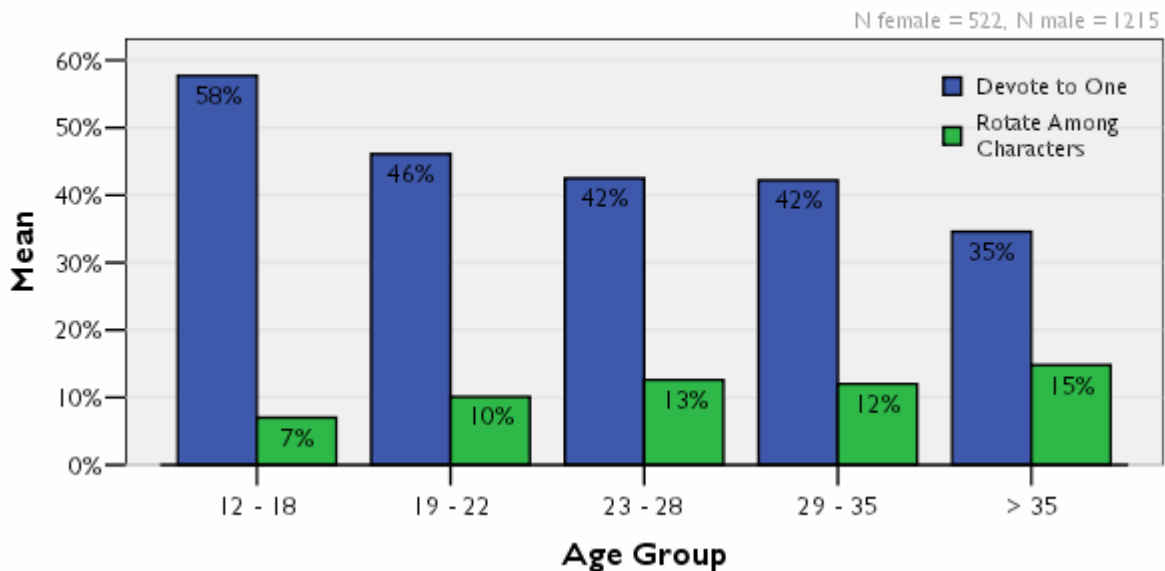
To identify which of these factors players used to identify their main character, I used a classification tree analysis (a standard machine learning technique). The analysis showed that the logic sequence is best capture by the following branching:

- Is there a character that you spend 75% or more of your playing time towards?

- If yes, then that character is the main character.
- If no, then is one of your characters significantly higher level than all other characters?

- If yes, then that character is the main character.
- If no, then the player can't identify a main character.

The data show that asking players to identify a main character is something almost all players can do, but that players may use different rules to pick their main character. At the same time, the data show that asking players to pick their highest level character or the character they spend the most time on specifically may result in cases where the character isn't the one that the player would have identified as the main. In a world where every player has multiple identities, the concept of "you" can get very tricky.

The Demographics of Guilds

In this article, we'll take a look at different demographic aspects of being in a guild. What percentage of players have a strong affiliation with a guild? How did players come to join their guild? Did the guild migrate from a previous game? And much more.

Let's start with the basics. 89% of respondents said that at least one of their characters belonged to a guild. There were no age or gender differences in this percentage. 25% of these players belonged to more than one guild. Female players were more likely than male players to belong to more than one guild (32% vs. 22%). There was no age difference in this percentage. So the majority of players who belong to a guild only belong to one guild.

Thus, it's not surprising that the majority of respondents (87%) were able to identify one guild that they had a strong affiliation with. For the remaining data, respondents who could identify a

strongly affiliated guild were asked to use that guild as the reference. For the respondents who could not, they were asked to use the most recent guild they joined as the reference.

Players were most likely (23%) to be in guilds that they themselves created (either alone or together with other players). Here are brief explanations of the different categories:

RL Friend: Someone the player knew in RL invited the player into their guild.
Asked to Join: The player saw an ad in general chat or an online forum and asked to join the guild.
**Online Friend:** Someone the player knew from online invited the player into their guild.
Invited after Interaction: The player was invited to join after grouping with, chatting with, or interacting with a member of the guild.
Random Invite: The player was asked to join the guild with no previous interactions with members of the guild.
**Split / Merger:** The player was in a previous guild that splintered into this current guild or was in an old guild that merged with another guild to create the current guild.

How did you join this guild?

N female = 522, N male = 1215
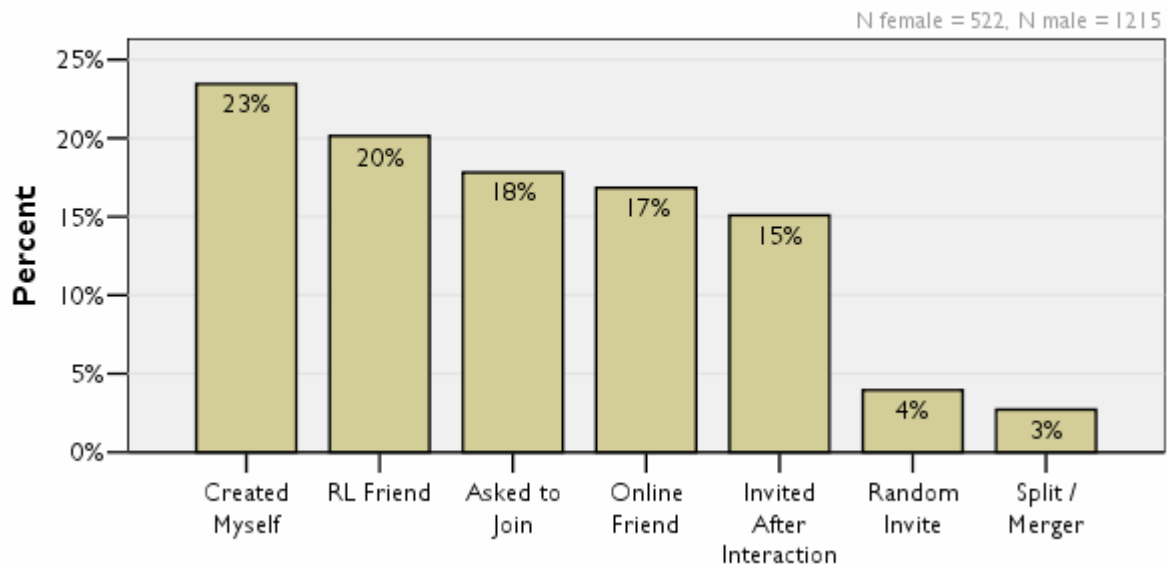
In terms of guild migration across games, 26% said that their guild existed (or currently exists) in a different game. Of these respondents, 56% had been part of the guild in a different game and migrated over, while the remaining 44% had joined only in the current game. The overall remaining players (74%) noted that their guild did not exist previously in any other game.

Most players have been in their guilds for 1 year or less (64%), although about a quarter of respondents have been in their guilds for more than 2 years.

## How long have you been in this guild?

N female = 522, N male = 1215
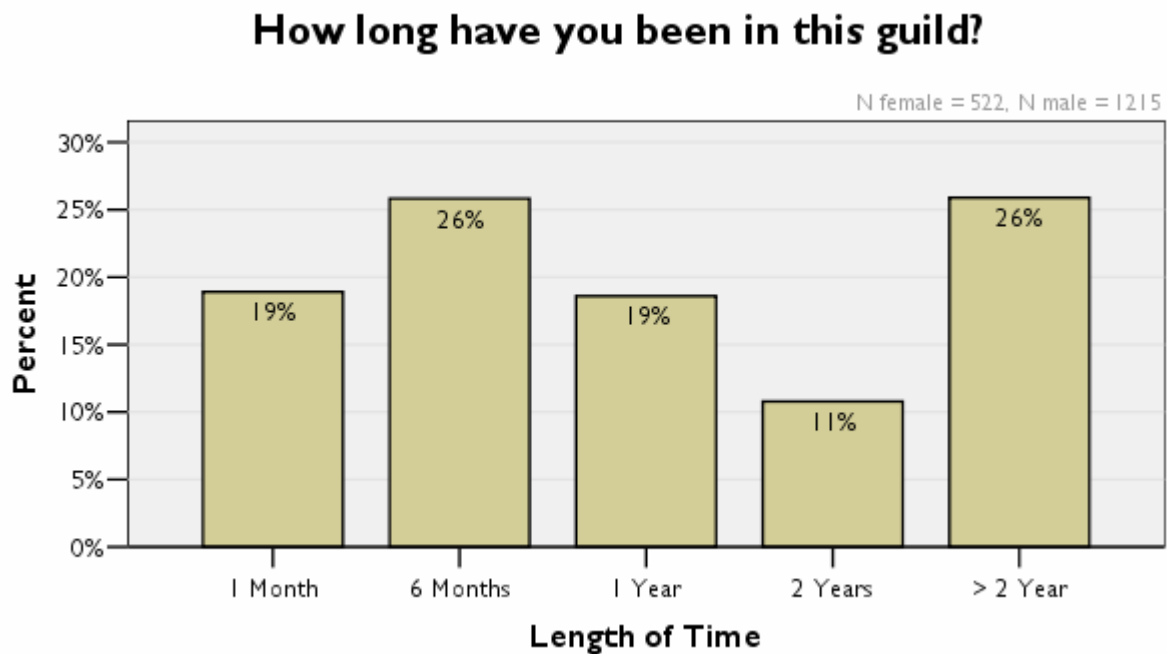
When asked to estimate the number of active players in their guilds (excluding known alts), the average guild size was estimated to be 38.9. The median was 30. And about a quarter of players had 10 or fewer players in their guilds. This is significantly higher than the number we've seen in the PARC PlayOn data (http://blogs.parc.com/playon/archives/2005/07/guild_size.html). It's not clear though how much this is due to selection bias and how much it is due to shifting guild composition.

Estimation of Active Players
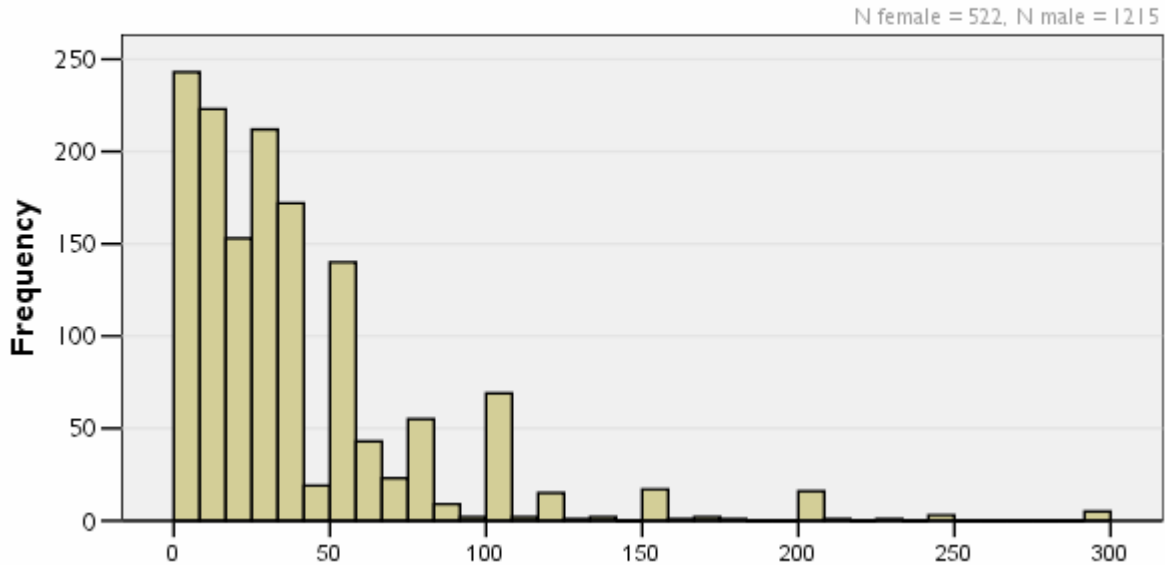
The majority of players have someone in their guild that they know in RL, whether this is a friend, a colleague, a family member, or a romantic partner. The most common categories were friends (59%) and romantic partners (35%).
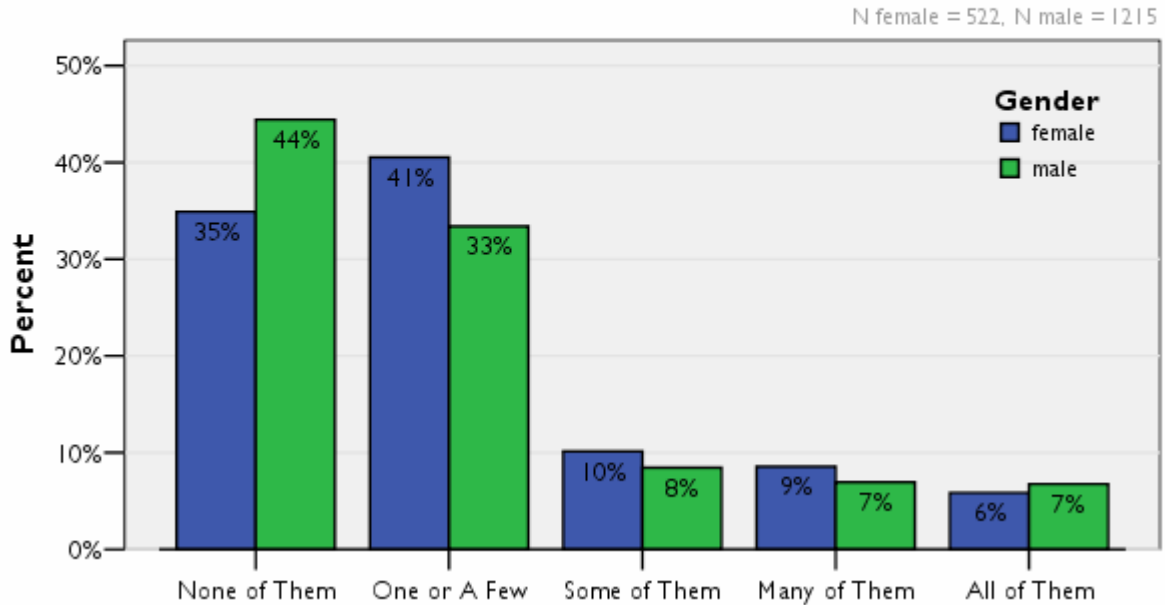
Any of the following people in your guild?
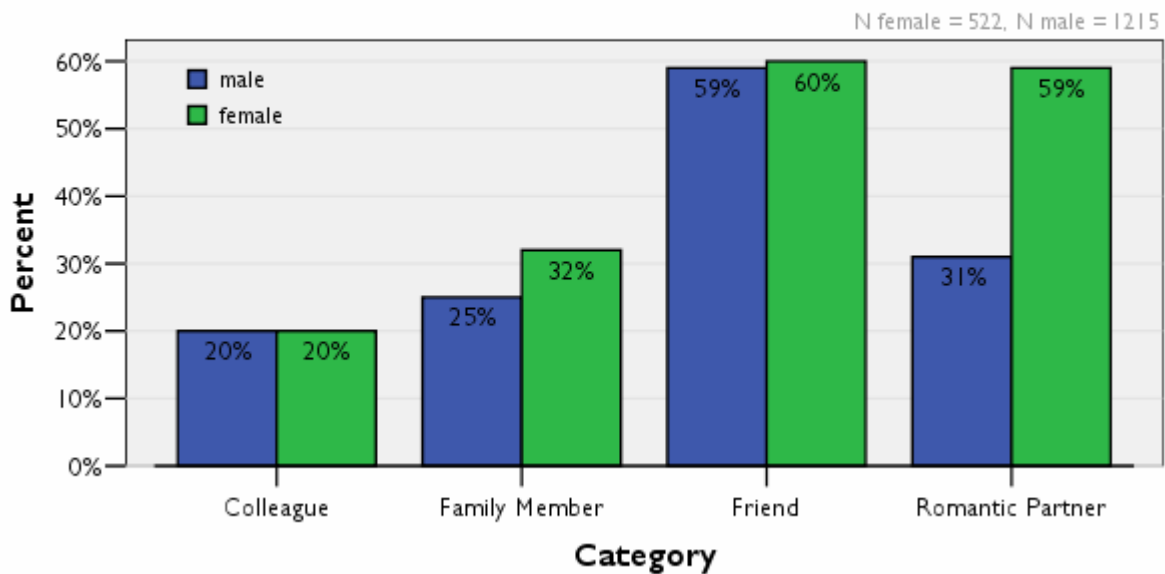
In fact, the majority of players (59%) joined guilds where there was someone they knew in RL (i.e., before they joined the guild). This also lends support to data we've seen elsewhere that MMOs

play a role in maintaining RL social connections
(http://www.nickyee.com/daedalus/archives/001468.php).

How many of your guild's members are people you knew in RL before joining the guild?

N female = 522, N male = 1215

Gender
- female
- male

| Category	female	male
None of Them	35%	44%
One or A Few	41%	33%
Some of Them	10%	8%
Many of Them	9%	7%
All of Them	6%	7%

In terms of the general tone of their guilds, players tended to describe them as being more on the casual side. Overall 52% rated their guild as being casual, 6% as being serious, and 42% as being somewhere in-between. There was no gender difference, but older players were a little more likely to describe their guilds as being casual.

General Tone/Vibe of Guild
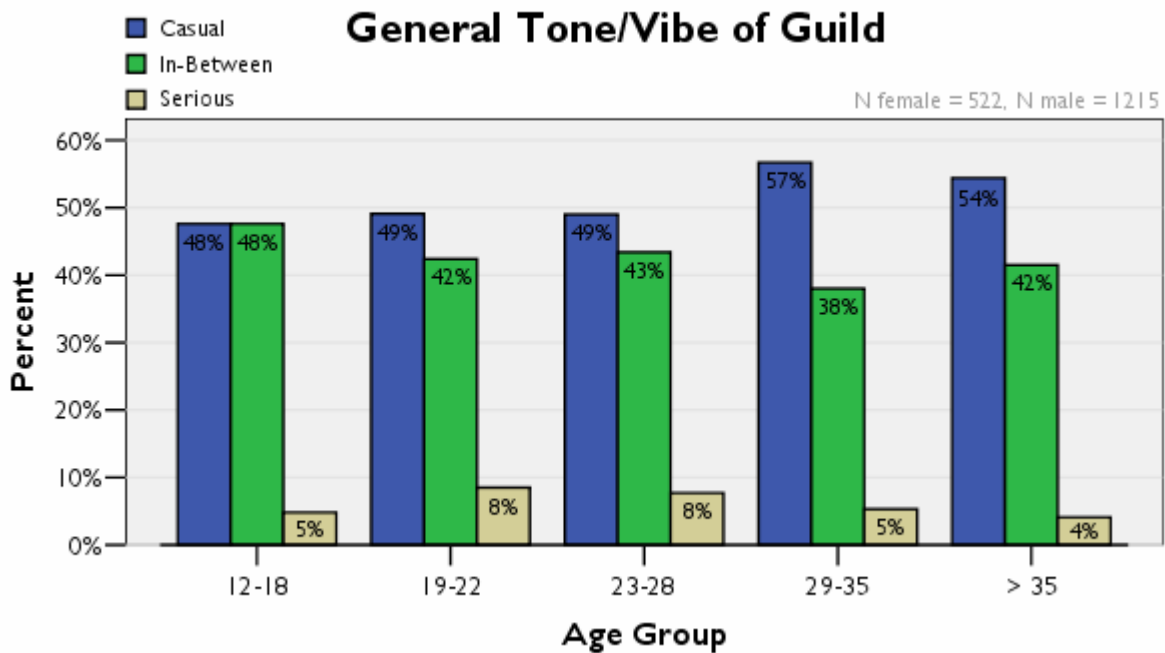
To get a sense of how raid-oriented their guilds were, I asked respondents to categorize their guilds in one of four tiers. About half of respondents were in guilds that are too casual to raid or just started to learn how to raid. The other half considered themselves to belong to mid-tier or high-end raiding guilds. There were no age or gender differences in this distribution.

In terms of raiding, your guild is …
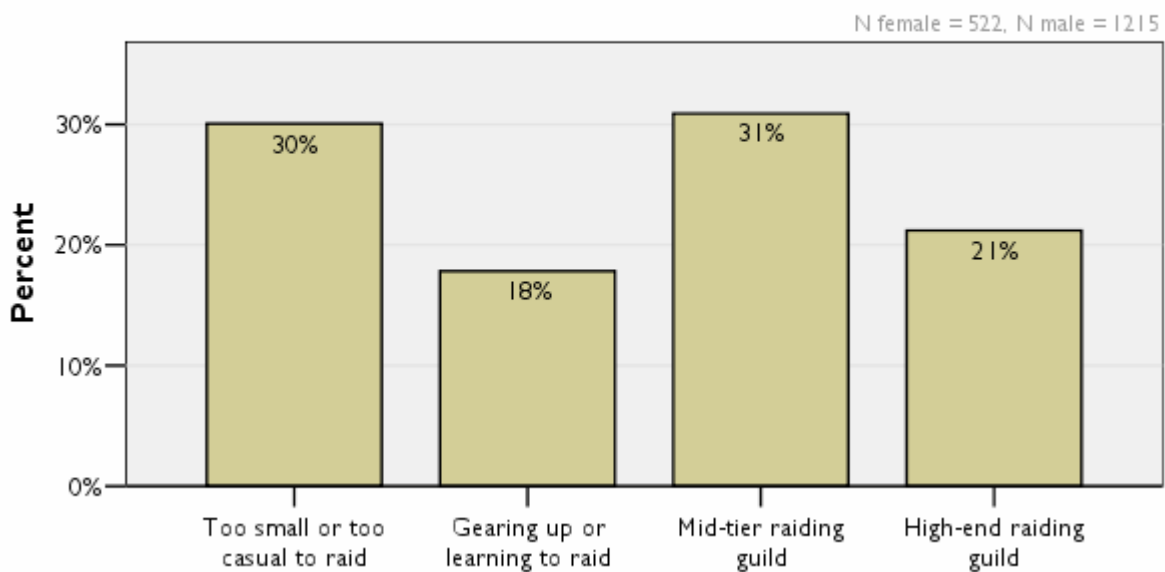
And finally, I asked respondents how happy they were with their guilds. Unsurprisingly, most players were very happy or extremely happy with their guilds (which they had previously noted

they had a strong affiliation with). Female players were much more likely to be extremely happy with their guild than male players. This is consistent with trends we've seen elsewhere where female players tend to be happier with the game in general and less likely to quit in the near term (http://www.nickyee.com/daedalus/archives/001557.php).

How happy are you with this guild?

N female = 522, N male = 1215
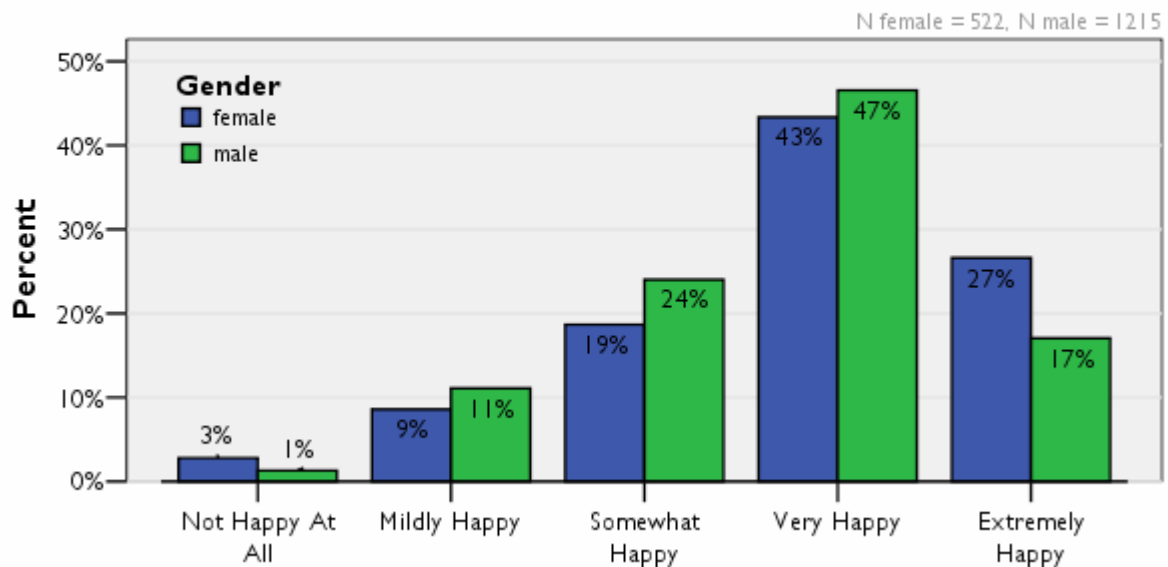
The Character Creation Process

I would like to thank Sam Natale for helping with the coding of this data set.

How do people decide what character to create? Do they always pick certain character classes? Do they carefully read through class descriptions before deciding? Do they go by their gut reaction? To get players to talk about the process they use, I asked respondents to imagine that they had just joined a new MMO and were about to start a new character. I asked them to describe the process they used to create their first character and in particular what factors were most important to them in this process. We then took the open-ended responses and came up with a set of codes and then coded through 500 responses. Below is the distribution of codes, in descending order, along with examples of what players said.

Class Type (20%) – Players in this category have a certain class type they prefer and will always go for that type when it is available.

It would be a druid caster, preferably of the healing specialty but magic DPS would work as well. [WoW, M, 41]

First and foremost I'd look at Ranged Damage Dealers, mostly mages. Look for the one that looks like it'll do the most base damage as well as being unique to its origins (IE the Herald of Xotli in Age of Conan). [Age of Conan, M, 21]

Class Abilities (17%) – Players in this category look for particular aspects of character classes that are often independent of class types. This may be the most overpowered class, the class that is most challenging to play, or the class with the most crowd control abilities. In a sense, these players are trying to maximize for a factor that is sometimes but not necessarily tied to particular classes.

I look for the race/class with the least magic and the most 'toys'. That usually ends up being the ranger or hunter class. [Pirates of the Burning Sea, M, 38]

I try to discover sort of character is good at both group and solo play, capable enough to solo without dying _TOO_ often and with at least one attribute that's desirable for groups. This is usually a combination of race and class. [EQ, F, 61]

Race Aesthetic (11%) – Players in this category look through the available races and pick the race that most interests them as their first decision.

I first look for the race I like the look of best (generally something pretty), then look for the healer class or a ranger/pet class. I pick one or the other depending on class abilities given by the particular game. My characters are always female (as I am in RL). [EQ, F, 50]

Game-Play Factors (10%) – Players in this category are trying to optimize for a game-play factor, whether it is soloability, utility in groups, end-game utility, etc.

Research which classes are easiest to level/most in demand in endgame, etc. Beyond that I go by aesthetics for race (I like pretty humanoid races) and class (I prefer finesse style melee to strength style melee) [WoW, M, 22]

I look for character classes that have high grouping potential. If there is a healer class, I'll look at those; i prefer healers that have a good array of buffs. I also like melee classes

that can cast spells. I'll look at the pure casters, but if they are just nukers, I won't roll a character in that class. [EQ, M, 54]

Class Research (7%) – Players in this category have no preference for class types or class abilities, but they base their character creation primarily on choosing a class. So they first read through all the class descriptions and then pick the one that most interests them.

I look through what the role of each of the classes is and then pick the class that I find most interesting. I then choose the race whose stats best fit that class. Unless I really dislike the look of a race, the appearance of the race doesn't influence my decison. [FFXI, M, 23]

General Appearance (5%) – Players in this category use character appearance as the primary decision factor in creating their character. They try to find a race/class combination that has a look that appeals to them regardless of functionality.

I start a female character first. I like pretty characters, both male and female. That's why I don't like to start horde characters although they are pretty neat to play [WoW, M, 43]

In fantasy MMOs, how plate armor looks is important to me as that is what I'm more then likely to be wearing, and in sci-fi MMOs, how the ships look with guns blazing is something I pay some attention to. [WoW, M, 20]

Specific Combo (5%) – Players in this category have very specific race + gender + class combinations that they will go for first if available. Oftentimes, players in this category are role-playing and have a character concept in mind that they are trying to fill.

A female, likely human, of a warrior-like or otherwise nonmagical class. Appearance should be nice, without being overly attractive. Starting area, if not purely determined by race, should be a mildly peaceful 'normal' area. My intent is to have a character unlikely to have an unintuitive way of fighting (charge and slash at things) while still being a character I'd like to eventually have as my main. [WoW, M, 19]

I mostly have an image of the character I want to play in mind, so I compare my image to the classes and according skills/stats/powers to see what fits my idea best. Starting zones are mostly irrelevant. [City of Heroes, M, 28]

The remaining categories have fewer than 5% of codes and will be described briefly without examples.

Race Type (4%) – Players in this category always go for a particular race if it is available.

Companion Complement (4%) – Players in this category create a character that best complements a friend or romantic partner they are playing the game with.

Gut Reaction (3%) – Players in this category do what feels right and fun at the moment.

Uncommon (2%) – Players in this category research what the most uncommon character is and create that.

Alts (2%) – Players in this category will create many characters at once to try them out and then after a while pick one as their main.

Racial Abilities (1%) – Players in this category will first look at racial abilities and start there.

Starting Area (1%) – Players in this category will find the starting area that appeals to them most and go from there.

Given the large number of codes and the limited number of coded responses, I did not look into age or gender differences as the cell sizes would have been too small to be reliable.

Preferred Class Type

In part of the data from the most recent phase, we saw that 20% of players said that class type was the most important aspect of their character creation process (LINK), but it turns out that 67% (N = 1731) of respondents also said that they had a class type they preferred to play across games. This disparity is likely due to a general leaning towards a certain class type but it may fall as a secondary factor (i.e., they pick race first, but class type still matters to them). To get at what these preferences were, I asked players to describe their class preference in an open-ended format. Of course, if we only asked players about preferences in their current games, we'd be constrained by those available classes (and not to mention the complication of specs). To get around this, I asked players whether there was a class type they preferred across MMOs.

500 of these responses were then coded. The main difficulty that emerged in coding these responses was that players described their preferences at different levels of abstraction. For some players, they only cared that it was a caster class. For others, only that it was a mage class. And for others, they really only wanted high DPS glass cannons. To give the best sense of what players said, I'll show here the codes at the specific level of abstraction that players used in their responses and try to group them in as coherent a way as possible (although hybrids make this difficult).

Class Type	Brief Description	Percentage
Healer Class	Main healing class	16%
Support Class	Group support class (i.e., combination of buffs, heals, debuffs, and CC)	12%
Healer Hybrid	Healing class with either melee or DPS abilities	2%
Ranged	Does damage from range (doesn't matter whether this is physical or spell damage)	3%
Hunter Class	Ranged physical damage	12%
Caster	Open to any caster class that isn't primarily a healer	7%
DPS Caster	Caster class that has high DPS	5%
Warlock	Caster class that has necromancer/warlock abilities (i.e., life drain, curses, summoned pets)	2%
Druid	Caster class that has primarily nature spells	1%
Melee	Open to any melee character	3%
Tank	Specifically heavily-armored melee character	5%
Paladin	Defensive class that has healing abilities and light/holy spells	4%
DPS Melee	High DPS melee class	3%
Melee Hybrid	Melee class with magic abilities	3%

Light Melee	Light armor melee class with quick and agile attacks (e.g., monk)	1%
Rogue	Class with stealth and classic rogue abilities	7%
Hybrid	A jack-of-all-trades class	6%
Pet Class	Open to any class that has pets	3%
DPS	Open to any class with high DPS	3%
Other	Crafter, Merchant, or Music (i.e., bard) classes	1%

Given the large number of codes and the limited number of coded responses, I did not look into age or gender differences as the cell sizes would have been too small to be reliable.

Game Choices

MMOs often ask us to make choices when we create our characters. Are you good or evil? Do you want to be in the majority or the minority? So I came up with a bunch of forced choice questions for players to see what the distributions might be.
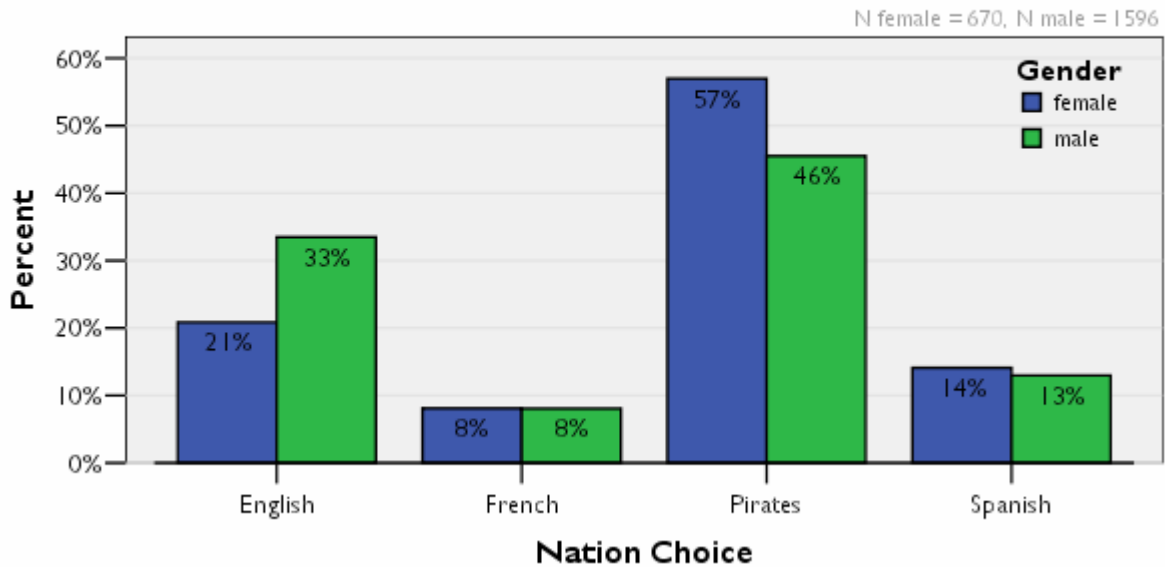
I started with a question about game genre. I asked players to rate a list of possible genres. It wasn't too surprising that the Tolkien genre came out top as most MMOs currently are in that genre. The only significant gender trend was in the futuristic spaceship genre that was preferred by men. Of course, one thing we have to keep in mind with this and other charts below is that oftentimes it may be hard for players to imagine comparable games in genres that aren't well represented.
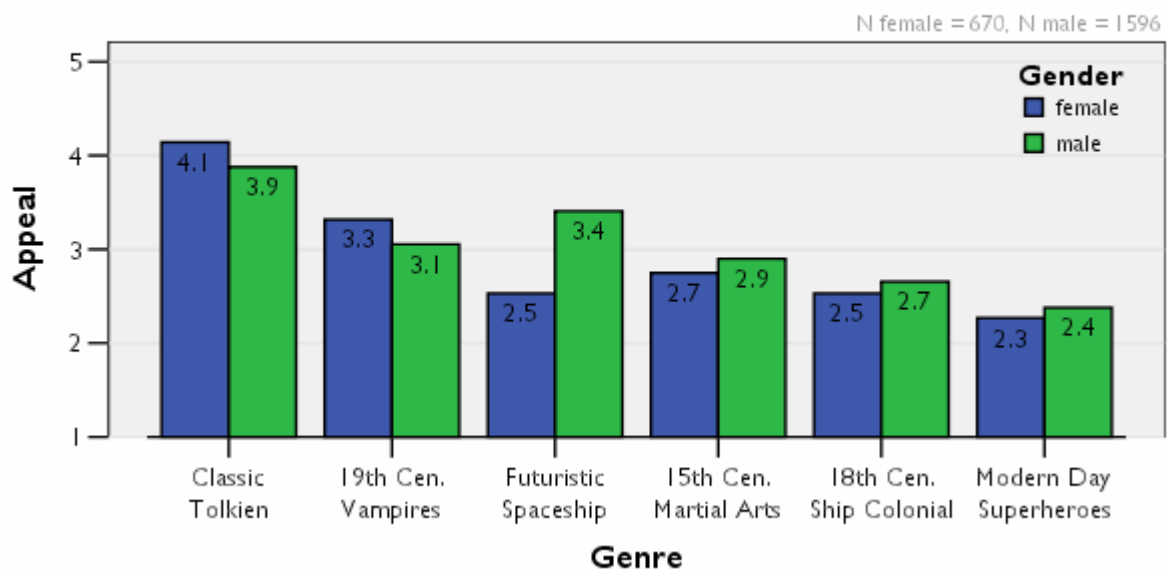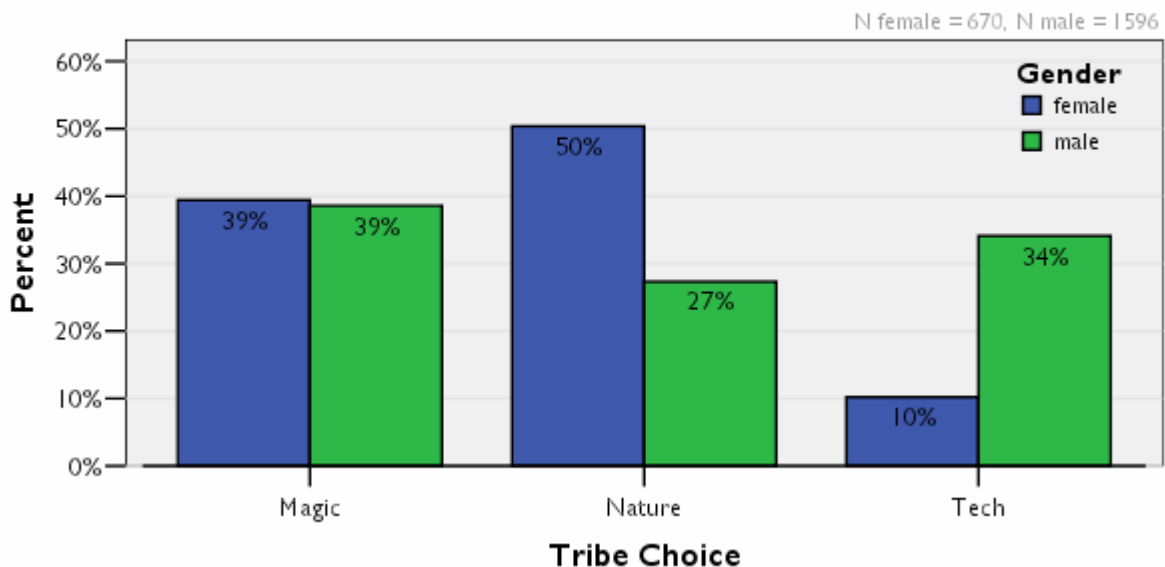

Pirates of the Burning Sea recently came out and I was curious how players would distribute themselves among the factions. Even though about half of the respondents preferred to be pirates, it's good to know that about the same percentage of players would rather not be pirates (and thus the pirates vs. non-pirates factions would be evenly matched at least).

18th Century Ship-Based Game (Nations)

N female = 670, N male = 1596

Gender
- female
- male

|	English	French	Pirates	Spanish
female	21%	8%	57%	14%
male	33%	8%	46%	13%

Percent

Nation Choice

In a three-part division of magic, nature, and technology, it was interesting to see almost an even split among the three. Women more strongly preferred the nature tribe while men more strongly preferred the technology tribe. The magic tribe came out even by gender.

Fantasy Game (Tribes)

N female = 670, N male = 1596

Gender
- female
- male

|	Magic	Nature	Tech
female	39%	50%	10%
male	39%	27%	34%

Percent

Tribe Choice

In a hypothetical game where you could either be the vampire or the vampire hunter, the majority of players chose to be vampires, but women were more interested in being vampires while men were more interested in being the vampire hunters.

Vampire vs. Vampire Hunter

N female = 670, N male = 1596
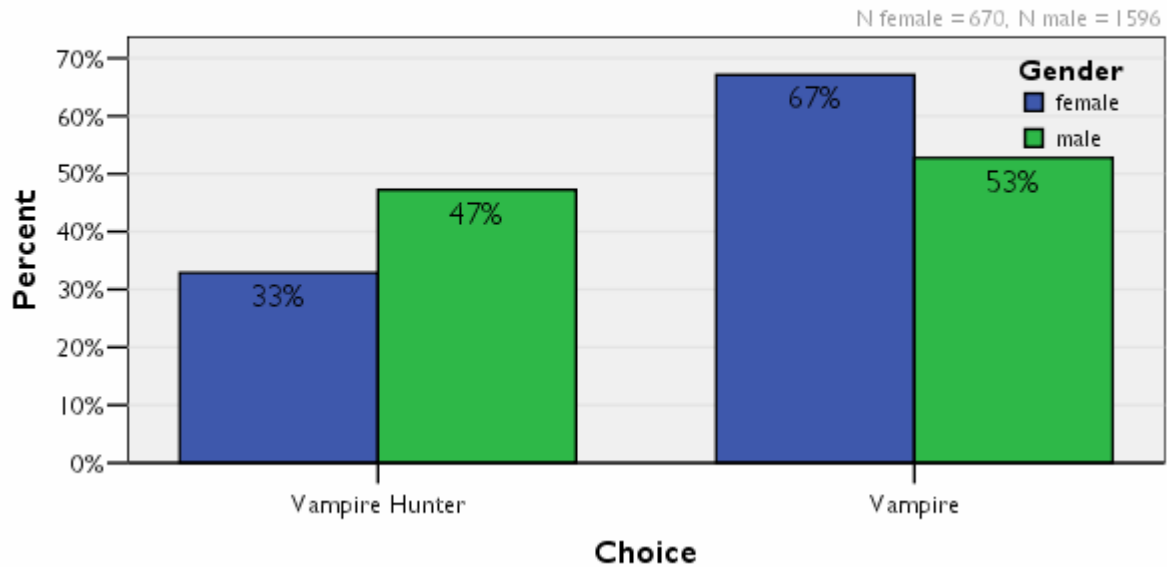
In a game that allowed a warrior role, a merchant role, and a spy role, respondents preferred to be spies, warriors, and merchants, in that order. Men were about twice as interested as being warriors while women were more interested in the non-direct combat roles.

Warring Nations (Role Choice)

N female = 670, N male = 1596
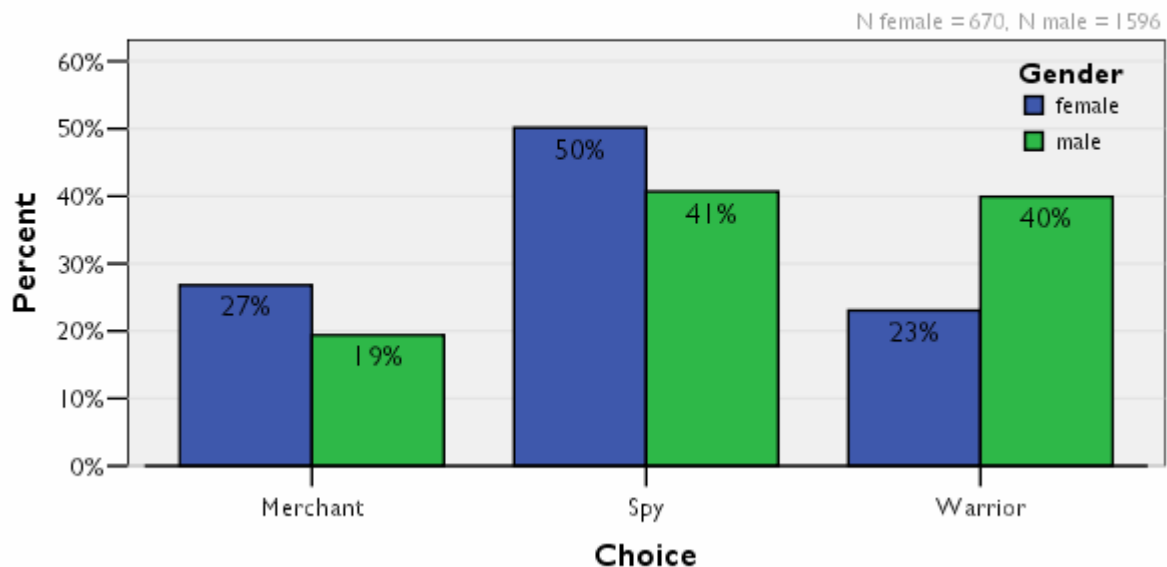
In the classic RPG class types, we see a fairly even distribution. The stereotypical gender difference is also seen. Men prefer to be warriors while women prefer to be healers. There were no gender differences in the archer or mage classes.

Classic RPG (Class)

N female = 670, N male = 1596

Gender
- female
- male
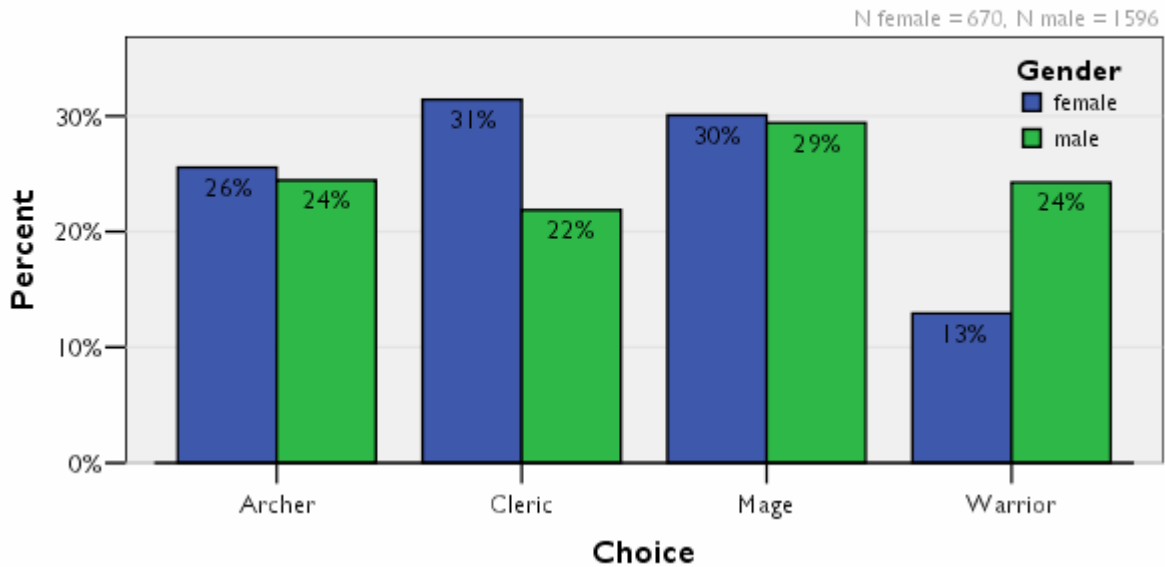
In many games where there are warring factions, disparities between the faction populations typically arise. Given the choice, it was a little surprising to see that 80% of respondents would prefer the minority.

Majority vs. Minority

N female = 670, N male = 1596
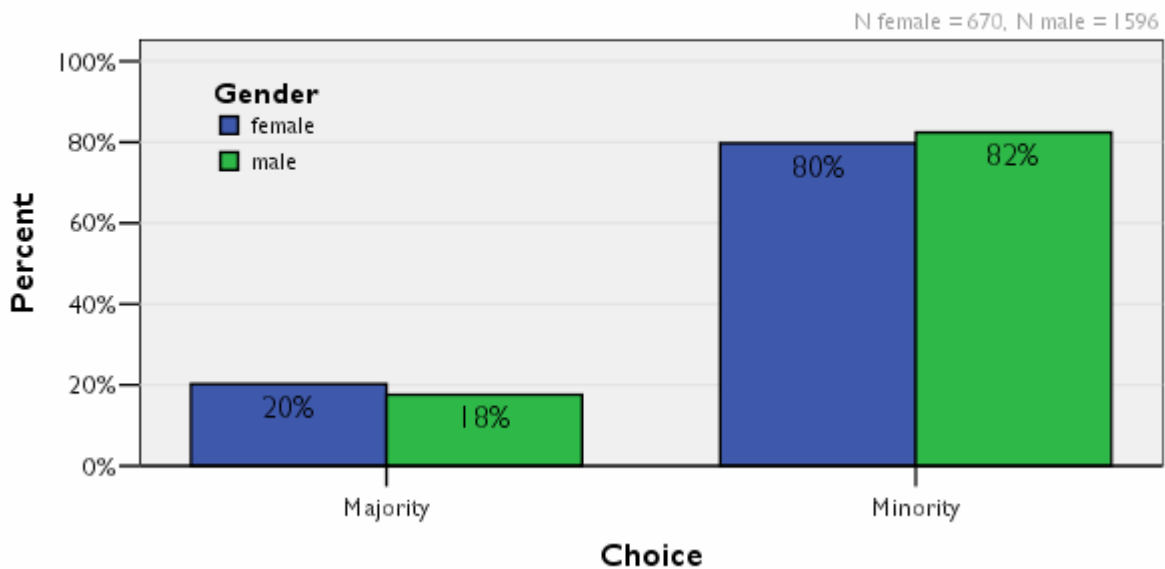
Gender
- female
- male

And finally, here's a classic trend we've seen before. When asked whether they would gender-bend, men were about 4 times as likely as women to create a character of the opposite gender.
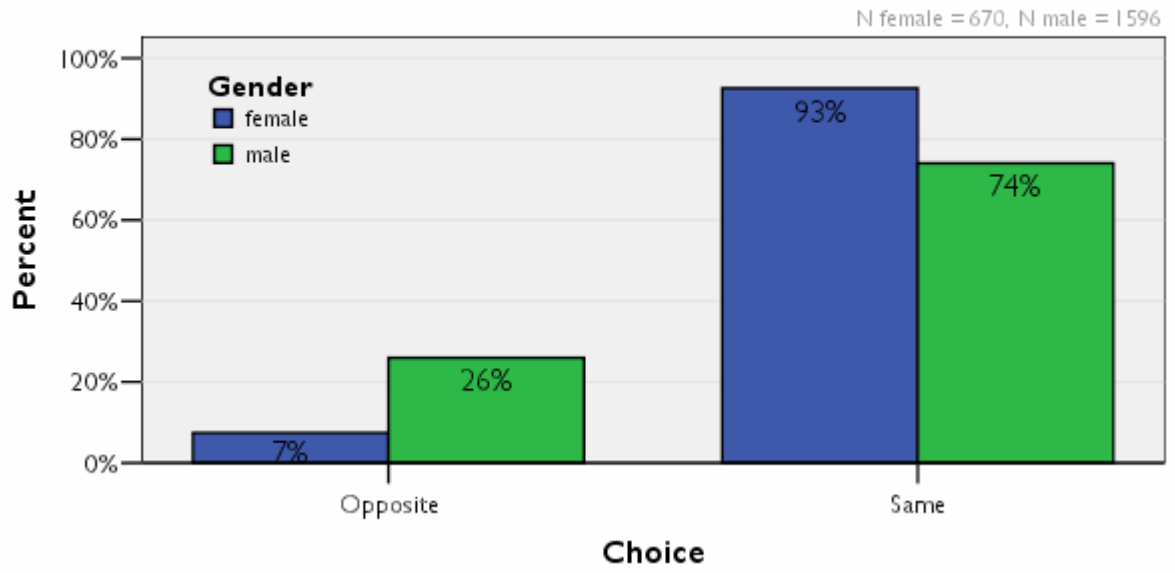
In Journals and Media

A brief rundown of recent journal articles and media sound bites.

Dmitri Williams led a project where we analyzed server-side data from EverQuest 2 in combination with a survey of randomly sampled players from the game. Our first overview paper of the findings just came out in a peer-reviewed journal and it is accessible to the public (http://www3.interscience.wiley.com/cgi-bin/fulltext/121394419/HTMLSTART). While the BMI (body mass index) finding has been making the rounds in media, that finding is just one of a large set of findings from the paper. For example, what's surprised me the most is how closely my self-selected surveys came to the findings from a randomly sampled survey in terms of average age, hours played per week, etc. So even though there clearly is bias in the self selected surveys, it appears that the findings track fairly closely to more rigorously sampled data.

In my work with the Incredible Internet, we're starting a series of three video podcasts for parents in helping them understand online games and how to set reasonable expectations for their kids. The first podcast just came out (http://vimeo.com/1769353). My main goal in helping create these videos is to strike a balanced tone—describing the main risks and suggesting sensible rules without resorting to loaded words and fear-based messages.

And a little tangential to gaming, but relevant to virtual worlds and the upcoming presidential election, the local ABC channel did a clip on our work at the Stanford VR lab highlighting the presidential face morphing studies we've done. That clip is also available online (http://www.sciencentral.com/video/2008/09/25/vote-for-you/).