Personality and Character Selection in World of Warcraft

Ian D. Mosley: McNair Scholar

Dr. Steven Patrick: Mentor

Sociology

Abstract

The present study examined the relationship between players' personality characteristics and their online behaviors, including character faction, class selection, and game play in the massively multiplayer online role playing game the World of Warcraft (WoW). Data were collected from 205 WoW players who participated in an online survey that included the Big 5 Personality Inventory (Extroversion, Agreeableness, Conscientiousness, Emotional Stability and Openness to Experience) and portions of the California Personality Index, as well as original questions pertaining to WoW (Goldberg, et al. 2006). Statistical analysis showed that although there was not a significant relationship between player personality traits and their class or faction selection, there were significant relationships between personality traits and engagement in player versus player game play.

Introduction

Game developers go to great lengths to ensure that game worlds are realistic to players. This is perhaps most present in World of Warcraft (WoW). Although the overarching theme of the game may be fantasy, there are several elements to the game that parallel our own world and history (Krzywinslca, 2006). These parallels further the attachment players develop to the characters they portray, and the transference players experience from their game world interaction into their out of game lives. WoW and other games are now so well constructed that it has even been suggested that they could be "…windows into and catalysts in existing relationships in the material world" (Yee, 2006, p. 312).

In WoW and all other massively multi-player online role playing games (MMORPG's) players self select into specific racial and cultural stereotypes. These characters are designed by the game developers and are the only options available to players. But although the character norms are governed by the game, in-game social interactions are governed by the same social norms as those in the physical world (Yee, Bailenson, UrBanek, Chang & Merget 2007). This begs the question: do in-game differences influence character choice, or do player choices lead to game-world partitions (Chen, Sun & Hsieh, 2008)? In order to answer this, and other questions about the criteria that influence character selection, researchers have to learn more about the players themselves (Chen, et al.).

Contrary to popular belief, research has shown that not all MMORPG players are sexually withdrawn young males (Griffiths, Davis & Chappell 2003). Yee (2006), found that the demographics of MMORPG players are as diverse as the populations they come from; likewise both Griffiths, et al., (2003) and Yee reported that video game and MMORPG play does not lead to violent or deviant behavior. Although research shows that game play is representative of the population and that it does not in itself lead to violent behavior, because both character selection and world development are influenced by player personality, we must ask how much of the game really is *just a game*.

Bessier, Seay, and Kiesler (2007), noted that most players feel a psychological connection to their characters. In their recent work Bessier, et al., found that players believe their characters are more like their ideal selves than their actual selves and that they use the game to "enact aspects of their ideal selves" (p. 531). With this being the case it is plausible to "…derive revealing personality information from a user's behavior in a virtual environment" (Yee, 2006, p. 325).

World of Warcraft

For this study I chose WoW as the environment and WoW players as the population. Using WoW has several benefits. With 11.5 million players worldwide, WoW is the most widely played MMORPG in the world

(Blizzard 2008). Beyond this both the structure of the game and the prior research supported the use of WoW. Griffiths et al. (2003) reported that over two thirds of WoW players have only one avatar, or character, in the game. In addition the structure of the game itself leads to more meaningful and dramatic inferences about its players. When a player sits down to create a character, their options are limited to several pre-determined factors. They are forced to select what server type, faction, race and class they will portray in the game. Each of these factors is pre-determined by the game. All Horde represent the same political beliefs, all warriors have the same access to talents and skill sets and responsibilities within the game. These pre-determined categories provide a reliable control for conducting this research.

WoW is divided into three styles of game play: player versus player (PvP), player versus environment (PvE) and role playing (RP). Players select which style to play by selecting a game server that only permits the selected style. For the purpose of this study I will focus on only PvP and PvE.

PvP: Player verses player, where the primary theme of game play is competition between and against other players. Players fight in arenas, battlegrounds and anywhere else in the game world where they encounter players of the opposing faction.

PvE: Player verses environment, where the primary theme of game play is cooperation with other players to accomplish difficult tasks controlled by the computer. While the option for PvP is still present, it is not forced on PvE servers.

After considering style of play we must also consider faction and race. In WoW "…the more western, or first-world Alliance, fights the more non-western, or third-world Horde" (Schwartz, 2006, p. 319).

Alliance: The Alliance consists of 5 races: the noble humans, the adventurous dwarves, the enigmatic night elves, the ingenious gnomes, and the honorable draenei. Bound by a loathing for all things demonic, they fight to restore order in this war-torn world. (World of Warcraft, 2009).

Horde: Five races comprise the Horde: the brutal orcs, the shadowy undead, the spiritual tauren, the quick-witted trolls, and the driven blood elves. Beset by enemies on all sides, the outcasts have forged a union they hope will ensure their mutual survival. (World of Warcraft, 2009).

With this understanding and in this context it makes sense that 48% of Horde players play on PvP servers (Chen et al., 2008). A players' choice of race is also strongly associated with what type of server they choose to play on (Chen et al.).

Present study

To investigate whether character, faction, or server relates to players' personality, I administered a variation of the International Personality Item Pool (IPIP) (Goldberg et al., 2006) containing questions from the Big 5 Personality Inventory. This instrument has proven to be useful in online research in the past (Bessier, et al., 2007; Cole & Griffiths, 2007). Based on the game descriptions of not only the factions themselves, but also the races that make up the factions, I expected to find that individuals with more aggressive, antisocial personalities would play Horde than Alliance characters, and that Alliance players would report more conservative and careful personality traits. In an effort to determine if the first-world versus third world comparison of the factions was reflected in players choices of what to play, I also examined whether player demographic information such as sexual orientation and economic status was consistent within factions. Finally I compared in-game behaviors to each other, such as class and faction selection, to see if there were any variables within the game that might be connected to players' personality scores. I expected there to be a significant relationship between faction and time spent in PvP, as well as relationships between class and faction selection.

Method

Participants

Participants self-selected into taking the survey by visiting the survey website. Overall there were 205 participants (152 male, 52 female, 1 unspecified). Participant ages ranged from 18 to 64 ($M = 23.57$, $SD = 8.03$). Of the 136 respondents that provided their server information, 55 reporting playing on only PvP servers, 60 on PvE servers, and 21 on other server options. Because World of Warcraft attracts players of every age the first survey item was a screening question. Data from participants under 18 years old were not used in the final analysis.

Materials

Participants answered a 172 item survey online hosted by the university's Qualtrics survey software. Thirty two items on the survey were created by myself and were specific to World of Warcraft. The remaining 140 questions were taken from the International Personality Item Pool (IPIP) (Goldberg, et al. 2006). The specific subset of questions from the IPIP measured the Big 5 personality characteristics, as well as a subset of behavioral facets. Refer to Appendix 1 for specific survey items.

Procedure

Survey participants were recruited via postings on popular internet message boards that are specific to World of Warcraft. Participants were asked to visit the URL for the online survey and complete the survey in their own time. Participants were informed before starting the survey that all of their answers would be kept confidential and that participation was completely voluntary. They were also informed that this project about explored themes and trends in character selection and play style in World of Warcraft. As an incentive to complete the survey, participants were given the option to provide an email address where they would like to have a copy of the final project sent upon its completion.

Results

The data were examined in three categories: the relationships present between in-game variables and personality traits, the relationships between in-game variables and the relationships between player demographic information and in-game variables. Initial correlations were conducted to determine the strength of the relationships between variables followed by a regression and cross-tabulator analysis.

In-game to in-game variables

A simple comparison of means revealed that Horde players engaged in PvP an average of 2 more hours a week than Alliance players (Alliance: $M = 5.06$, $SD = 7.76$, Horde: $M = 7.44$, $SD = 2.09$). Although this is an interesting finding, it was not significant, $t(131) = -.80$. There was, however, a moderate correlation between time spend engaged in PvP playing WoW for the joy of competition, $r(132) = -.30$, $p < .05$.

Although it was not unexpected to find a relationship between character race and faction, as faction selection dictates what race a player can select, $c^2(9, N = 136) = 1.29$, $p < .05$, a weak relationship was also present between faction and server type, $c^2(3, N = 136) = 6.24$, $p < .05$. See Table 1 for cross-tablature analysis of faction and class selection.

Table 1: *Cross-tablature of Variables: Faction and Character Class*

	Alliance	Horde
Death Knight	3	5
Druid	3	11
Hunter	3	6
Mage	4	9
Paladin	8	4
Priest	2	11
Rogue	11	9
Shaman	8	7
Warlock	6	9
Warrior	6	11
	N =54	N =82

In-game variables to demographics

There was a weak relationship between a players age and what type of server they select to play on, $F(3, 131) = 5.32$, $p < .05$. There were moderate differences present between players ages and their preferred game play style, $F(1, 131) = 20.20$, $p < .05$, their gender, $F(1, 190) = 15.30$, $p < .05$, and their marital status, $F(4, 105) = 22.75$, $p < .05$. There were weak relationships present between gender and players preferred game play style, $c^2(1, N = 134) = 4.40$, $p < .05$, and marital status $c^2(4, N = 201) = 10.13$, $p < .05$. There was also a weak relationship between players sexual orientation and their gender, $c^2(2, N = 202) = 19.64$, $p < .05$.

There was a strong relationship between players gender and their selection of their character's gender, $c^2(1, N = 135) = 58.83$, $p < .05$. A cross tabulation and logistical regression analysis showed that although both men and women engage in cross-gender play, men more likely to engage in cross-gender play than are women, $\beta = 4.14$, $SE = .77$, $F(1) = 102.75$, $R^2 = .44$, $p < .05$. There was also a moderate correlation between players age and their time spent in PvP, $r(132) = -.32$, $p < .05$.

In-game to personality characteristics

See Table 2 for a comprehensive list of correlations. Respondents who reported primarily playing WoW for the joy of completing cooperative objectives also scored high on extroversion, agreeableness, intellect, and dominance. Whereas these correlations are weak at best, this does draw a distinction between those who play for the joy of competition and those that play to cooperate with others. In the case of those who reported playing more for the joy of competition, the correlations were present in the dominance, tolerance, leadership, masculinity, femininity, and narcissism scales.

Table 2: *Correlation Coefficients Among Variables*

	Group Objectives	Joy of Competition	Hours PvP	Hours of PvE
Agreeableness	.21*	-.09	.05	.05
Dominance	.26*	.23*	-.01	.11
Emotional Stability	.11	.12	.07	.06
Extroversion	.18*	.10	.00	.01
Femininity	-.08	-.33*	.22*	-.17
Intellect	.19*	.15	.10	.13
Introversion	.20*	-.12	-.03	-.06
Leadership	.11	.20*	-.03	.13
Masculinity	.18*	.23*	.14	.08
Narcissism	.02	.33*	.22*	.09
Sociability	.17	.36	.05	-.03
Tolerance	.07	-.24*	.19*	-.02

Note. *$p < .05$

Correlations were also present between tolerance, $r(125) = .19$, femininity, $r(120) = .22$, and narcissism, $r(119) = -.22$, scales (all $p < .05$), and the amount of time players spent engaged in PvP. The only personality trait that correlated with a players choice of faction was the femininity scale, $r(120) = .18$, $p < .05$. A linear regression analysis revealed that femininity scores were also a highly significant predictor of a player's hours engaged in PvP, $\beta = .22$, $t(118) = 2.46$, $p < .05$). Femininity scores also explained a significant proportion of variance in the amount of time spent in PvP, $R^2 = .05$, $F(1, 118) = 6.07$, $p < .05$.

Discussion

The purpose of the present study was three-fold. First, we examined the relationships between in-game variables (e.g., class and faction selection). It was hypothesized that there would be a significant relationship between faction and time spent in PvP, as well as relationships between class and faction selection. Second, we investigated the relationships among demographic variables and in-game behaviors. We also examined whether player demographic information such as sexual orientation and economic status was consistent within factions. Finally, we examined the relationships between personality characteristics and in-game behaviors. It was expected that individuals with more aggressive, antisocial personalities would choose Horde, whereas Alliance players would be more conservative and careful. The results are presented in the paragraphs below.

In-game to in-game

The hypotheses regarding in-game variable relationships were partially supported. Finding that Horde players spend more time in PvP than Alliance players do fits with the stereotype among World of Warcraft players. Because the sample was not random and was relatively small, it is not surprising that this finding was significant. In the case of players reporting of playing WoW for the joy of competition, it makes sense they would also engage in more PvP. What makes this finding difficult to justify is that there was not a significant correlation between players playing for the joy of completing group objectives and their time spent in PvE. I again attribute this to the sample size and non-random nature of recruitment.

In examining the relationship between faction and server type selection I also found that Horde players are more likely to play on PvP servers, further strengthening the stereotype that Horde players are more aggressive and/or interested in the competition aspects of the game.

In-game to demographic

Contrary to my hypothesis, the data revealed no significant relationships between player demographic information and their selection of faction or character class. This suggests that character and faction selection may be influenced by factors not measured in this survey. Although in-game demographics were not influenced by out of game demographics, a player's age did have a moderate correlation with both the amount of time spent engaged in PvP, and the types of servers players selected to play on. The data shows that younger players (under 25 years of age) were more likely to play on PvP servers whereas older players were more likely to play on Normal or RP servers.

In analyzing the relationship between player gender and character gender, findings were consistent with existing literature in the field (Hussain, & Griffiths, 2008). Although both men and women engage in cross-gender play, men were four times more likely to play the opposite sex than women are.

In-game to personality variables

The data does not support the hypothesis that player faction and class selection are dependent on player personality traits. In fact there is no data to support this and it appears that faction and class selection is entirely random. Although players' choices of race and faction were not related to their personality traits, their behavior within game was. Players who reported playing World of Warcraft for the joy of completing group and cooperative objectives also showed high scores in extroversion, agreeableness, intellect and tolerance. These findings suggest that PvE players are generally more energetic than PvP players, more compassionate and willing to cooperate with others, more open to new ideas, possessed of a stronger sense of adventure and more likely to be trusting and forgiving of the shortcomings of others. While this does not suggest that PvP players do not also possess these traits, it does suggest that a PvE player is more likely to be possessed of these characteristics.

In contrast to this, players who reported playing World of Warcraft for the joy of competition scored high in dominance, leadership, masculinity and narcissism, and low in tolerance and femininity. Combined with the moderate correlation present between the time players spend in PvP and their reporting of playing WoW for the joy of competition, it appears that PvP players are generally more domineering and willing to take charge, more confident in their own abilities, more willing to take risks and possessed of a strong desire to control others around them. Further, PvP players are less likely to be tolerant of mistakes made by other players and more likely to take action without first considering consequences.

After multi-variant analysis, femininity is the only score that remains significant to time spent in PvP. All other scores fall away. This further supports the hypothesis that PvP players are risk takers, generally more interested in quick gratification than in carefully planned strategies. It is interesting to find that there also no connection between a player's age and their hours spent in PvP or the personality scores, leading to the conclusion that PvP players from all demographics could share these characteristics.

Limitations

Significant limitations in this research were the sample size and the non-random nature of the participant recruitment. In order for studies like this one to be generalized to the population there would need to be a random selection taken from all World of Warcraft players. Lastly, the current research lacks a qualitative element that individual interviews could account for. There are undoubtedly other circumstances affecting a player's choice of class, faction and engagement in PvP or PvE activities. It is beyond the scope of this research to account for all of these elements. Interviews of World of Warcraft players would give future researchers the chance to more fully understand the players and strengthen the inferences that could be made based on observing their behaviors in the digital world.

Conclusions

The current research shows that MMORPG's like World of Warcraft can, in fact, be used as representations of their populations. The key in using MMORPG's as research populations in the future will lie in understanding which aspects of the game are representative and which are not. This study shows that character selection choices such as class and faction are not related to the player's personality therefore would be a poor choice for future researchers to use. However the research does show that researchers can make inferences about player personality traits based on their behaviors in relation to other players in the game. This is consistent with other research into MMORPG players and playing practices.

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