A Study of the Relationship Between Player Responses and Character Level in World of Warcraft

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Abstract

In this study, we delved deep into the *World of Warcraft* (*WoW)* subculture and examined the personality traits of gamers and their correlation to the gamer's in-game play style. This study tested various different in-game situations, and data was gathered using in-game participant observations, through both qualitative and quantitative methods; data coded based on the different responses given by players to the different presented situations. Research findings indicate that low-level players respond very differently than high-level players, to certain in-game stimuli. It has been found that low-level players are more likely to respond to such stimuli, while high-level players are less likely to tolerate poor play, in PvE and PvP game modes.

Introduction

On November 23, 2004, the wildly popular MMORG, *World of Warcraft,* was released to gamers in North America, Australia, and New Zealand (2014, April 3). Now, Nearly 10 years after its initial release, the game has climbed to an astounding 7.8 million player subscriptions (2014, April 3). *World of Warcraft,* continues to grow and improve still today in 2014, therefore one can only assume that *World of Warcraft* will continue to hold the honor of being the best MMORG on the market (Crowell, 2014).

Academic research of video games, such as MMORGs like *World of Warcraft*, have been conducted and centered on the different social aspects that arise from the games. Studies have been conducted that are concentrated on the importance of a player's performance, and its consequences on self-esteem, as a factor in the entertainment experience of playing a video game. It was found that there is a clear correlation between a participant's game enjoyment,

and the achievement that they were able to make in said games, but the a player's perceived success can be altered based on whether the player is a novice gamer or an expert gamer (Klimmt et al., 2008). Other such projects have been conducted that aim to understand, and categorize, the relationships formation, role exploration, skill transfer, and the problematic usage or MMORGs. From the findings of the research, the researchers were able to conclude that MMORG environments have the ability to facilitate the formation of relationships in-game, and can also be a catalysts to existing relationships both, in-game and in reality (Yee, 2006). Research has even been conducted on games outside of the MMORG category, and into other types of video games, such as FPSs, that still is focused on the different social aspects that arise from video games. Such research includes the exploration of the possibilities of FPSs having a great effect on the participants everyday rules of social interaction, and the possibility that such games can even generate interesting and creative innovations in verbal dialogue and non-verbal expressions (Talmadge et al., 2002). It has been found that real-world social dialogue actually mirrors the complexity of many online multiplayer FPSs, and that the participants are able to creatively form their own social rules and meanings through entering the games so-called "youth subculture" (Talmadge et al. 2002). All of these studies have found various different evidence that suggests that video games, such as MMORGs, give rise to various different social aspects, both in-game and in-reality. Due to the vast amount of possible social aspects of MMORGs, more research is needed on in-game behaviors, in response to various different in-game stimuli. *World of Warcraft* gives its players the opportunity to interact with various different players from around the world in different in-game social gatherings, such as in the PvP and PvE game modes. In these game modes, the players have to either work

together, or against each other, to achieve a common goal; within these games is where the highly social aspects of *World or Warcraft* emerge.

Previous studies have focused on the phenomenon of cyber-bulling, or "trolling," in video games. One such study explored various different cases of cyber-bullying and trolling in *World of Warcraft*, and the reactions, or feelings, that arose due to said cyber-bulling. It was found players react to cyber-bullying in various different ways, and their reactions were based on their situation, how other players reacted, and many other undetermined factors (Bendor-Samuel et al., 15). A similar study regarding trolling in *World of Warcraft*, explored the effectiveness of the different types of trolling. It was found that trolling based on internal factors was a more effective strategy to get a response from players, than trolling based on external factors (Dreiling, 11). Though both studies were able to thoroughly examine cyber-bullying and trolling in *World of Warcraft*, a gap was left regarding the recipient's reaction to such cyber-bullying and trolling. In both studies the research was limited to the exploration of just trolling. This study goes on to also examine player reactions to different stimuli at different game types, and different levels, as well as provides a cross examination of player reactions to non-trolling stimuli.

The goal of this study is to examine the following questions through qualitative and quantitative methods: What are the varying types of social interactions between the different play-mode (PvP and PvE) and the significance behind them (if any)? Furthermore, are these qualities adequately representative of the entire population of PvP and PvE players? In other words, if we presented players with certain situations would their responses be relatively the same as others in the play-mode?

Method

Our study includes a mixed method of in-game qualitative and quantitative research in order to fully take advantage of all possible methods of research to ensure validity within our study. The research method used to collect data was participant observation, this method allowed us to collect data from the viewpoint of an insider, and be aware of every detail and spontaneous reaction. Text responses and actions were generalized (such as "negative responses", and "was kicked out of group"), and recorded into the table that corresponded to the stimuli being tested. Along with in-game observations, various articles were gathered from the Internet that concentrated on participant responses to cyber-bullying in various types of videos games.

In *WoW*, there are 3 different types of gameplay you can select from: player vs. player (PvP), player vs. environment (PvE) and role-playing. For the purposes of our study, we will be using Ian D. Mosley's study as a prototype by excluding RP players due to their relative insignificance while using their operational definition for the 2 main gameplay types (PvP and PvE):

> "PvP: Player versus 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 versus 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." (Mosley, 58).

We used a specific approach when conducting our observation. The method of observation we

will implore is covert observation through researcher participation. Each of us participated in

the PvP and PvE game modes, in order to manipulate the game modes at both low and high

level *World of Warcraft* characters. Each of us then recorded the various responses given to the

situational stimuli. Such situations tested were:

- 1. Being friendly in instance chat (i.e. being apologetic, humble, helpful, etc...)

- 2. Being rude in instance chat (i.e. boasting, blaming others, insulting others, etc…)

- 3. Saying nothing in chat.

In this study, situational stimuli refers to a combination of one of the three situations being

tested, along with one of the two different game-play capacities, which are playing well and

playing poorly. For example, one of the situational stimuli tested in this study was situation #1

while playing poorly, at both low and high character levels.

Each of us will participate in at least 5 PvP events and 5 PvE events while enacting each

of the 6 research situations. John will focus on low-level PvP and PvE events while Lee will focus

on max-level PvP and PvE events. The method of data categorization will be grouping relatively

similar responses together and tallying the occurrence of each response group. For the

purposes of our experiment this is the best method of answering the research question

because it is the most accurate way to determine if there are different social interactions

between different play-modes. The method allows us to explore different aspects of the play-

modes (low and max level), it also allows us to generate different situations within those levels

and play-modes. Therefore we are able to test for correlations between different play-modes, as well as a player's social personality at different levels.

Each pie graph created (including figures 1-24) contains the data from the five separate trials conducted at each game type (PvE and PvP), while testing the responses of different players to the three different situational stimuli, at both low and high levels. Therefore, similar responses to the stimuli, within the five conducted trials, will combine to indicate a trend in the responses to that specific stimuli, game type, and character level.

Results

The data collected from the various in-game observations, that were conducted on how players responded, and the amount of responses, to various different stimuli at both high and low character levels, is categorized by generalizing the amount of responses, or actions, to each situational stimuli, and the nature of the responses given. The resulting responses from the various in-game observations were coded using a specialized coding system, which can be seen below in tables 1, 2, and 3.

Tables and Graphs

Table 1 Overall Descriptive Statistics

		Scenario	Both	PvP	PvE	Average
Max Level	**Most Seen Reaction (Positive/Negative)**	1	-0.5	0	-1	-1
		2	-2	-2	-2	
		3	-0.5	0	-1	
	Most Seen Response Amount	1	6	4	8	5.5
		2	8.5	8	9	
		3	2	1	3	
Low Level	**Most Seen Reaction (Positive/Negative)**	1	1.5	1	2	-0.1666667
		2	-2	-2	-2	
		3	0	-1	1	
	Most Seen Response Amount	1	8	9	7	7
		2	9	8	10	
		3	4	3	5	

Table 1 displays a averaged number system that describes the relative amounts of responses, from the N=120 observations conducted, to each situation stimuli, as well as the nature of each response (negative/positive) at both high and low character levels.

Reaction Coding System	
Very Negative.	-2
Negative.	-1
Even Mix	0
Positive	1
Very Positive.	2

Response Amount Coding System	
None.	0
None - Low.	1
Low - None.	2
Low.	3
Low - Medium.	4
Medium - Low.	5
Medium.	6
Medium - High.	7
High - Medium.	8
High.	9
High - All.	10
All.	11

Table 2 and table 3 provide a detailed explanation of the numbering system used in table 1.

Table 2 provides the coding system for the most seen reactions (negative/positive) to each different stimulus, at low and high levels. Table 3 describes the amount of responses received to each different situation stimuli, at low and high levels.

PvE Low Level at Each Situational Stimuli While Playing Poorly

PvE - Low Level Playing Relatively Bad; Situation #1

- 40% — Some responded. All reactions were negative and was kicked out of group after individually dying once.
- 20% — Some responded. All reactions were positive and/or encouraging.
- 20% — Only a few responded. Those who did were positive.
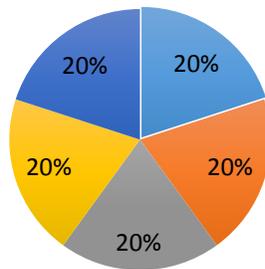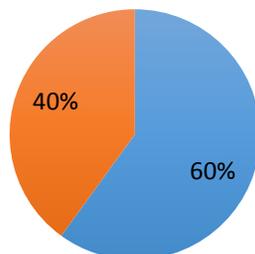- 20% — No responses.

PvE - Low Level Playing Relatively Bad; Situation #2

- Most responded. All reactions were negative and was kicked out.
- Only a few responded. Those who did were negative and/or laughing at me.
- All responded. All reactions were negative and was kicked out.

Figure 2 PvE-Low Level Playing Relatively Bad; Situation #2

PvE - Low Level Playing Relatively Bad; Situation #3

- Some responded. All reactions were negative and was kicked out of group after individually dying once.
- Some responded. All reactions were positive criticism.
- Some responded. All reactions were positive criticism but was kicked out of group after individually dying once.
- Most responded. Majority of responses were negative.
- Most responded. All reactions were negative and/or aggressive.

Figure 3 PvE-Low Level Playing Relatively Bad; Situation #3

PvE Low Level at Each Situational Stimuli While Playing Well

PvE - Low Level Playing Relatively Well; Situation #1

- Most responded. All reactions were positive and/or helpful.
- Some responded. All reactions were positive and/or encouraging.

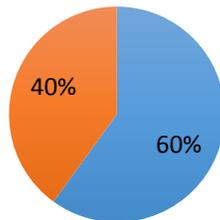**Figure 4 PvE-Low Level Playing Relatively Well; Situation #1**

PvE - Low Level Playing Relatively Well; Situation #2
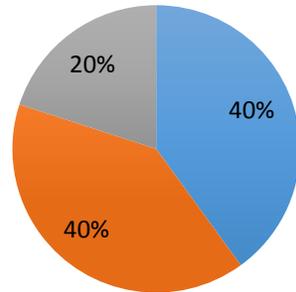
- **Most responded. All reactions were negative and/or apologetic.** (40%)
- **Most responded. All reactions were negative and/or aggressive.** (40%)
- **Some responded. All reactions were negative and/or laughing at me.** (20%)

Figure 5 PvE-Low Level Playing Relatively Well; Situation #2

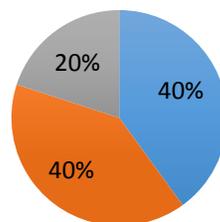# PvE - Low Level Playing Relatively Well; Situation #3

- **Some responded. All reactions were positive and/or encouraging.** (60%)
- **No responses.** (40%)

Figure 6 PvE-Low Level Playing Relatively Well; Situation #3

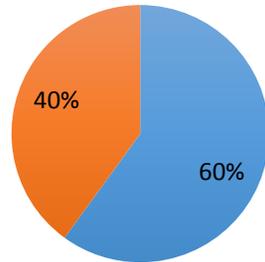*PvP Low Level at Each Situational Stimuli While Playing Poorly*

PvP - Low Level Playing Relatively Bad; Situation #1

- **Most responded. Majority of responses were positive.** (40%)
- **Only a few responded. Those who did were positive.** (40%)
- **Most responded. All reactions were positive.** (20%)

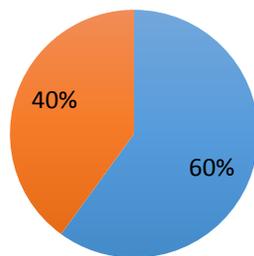Figure 7 PvP-Low Level Playing Relatively Bad; Situation #1

PvP - Low Level Playing Relatively Bad; Situation #2

- Most responded. All reactions were negative and/or aggressive.
- Some responded. All reactions were negative and/or laughing at me.

Figure 8 PvP-Low Level Playing Relatively Bad; Situation #2

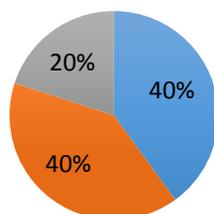# PvP - Low Level Playing Relatively Bad; Situation #3

- Only a few responded. Those who did were negative and/or laughing at me.
- No responses.

Figure 9 PvP-Low Level Playing Relatively Bad; Situation #3

PvP Low Level at Each Situational Stimuli While Playing Well
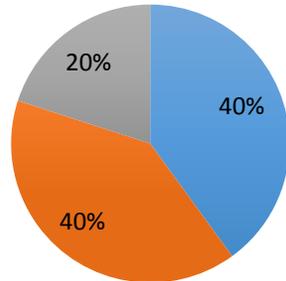
PvP - Low Level Playing Relatively Well; Situation #1

- Most responded. All reactions were positive and/or encouraging.
- Some responded. All reactions were positive and/or encouraging.
- Most responded. Majority of responses were positive.

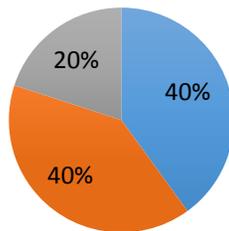Figure 10 PvP-Low Level Playing Relatively Well; Situation #1

PvP - Low Level Playing Relatively Well; Situation #2

- ■ Most responded. All reactions were negative and/or aggressive.
- ■ Some responded. All reactions were negative and/or laughing at me.
- ■ Only a few responded. Those who did were negative and/or aggressive.

Figure 11 PvP-Low Level Playing Relatively Well; Situation #2

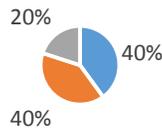## PvP - Low Level Playing Relatively Well; Situation #3

- ■ Some responded. All reactions were positive.
- ■ No responses.
- ■ Some responded. All reactions were negative and/or trolling.

Figure 12 PvP-Low Level Playing Relatively Well; Situation #3

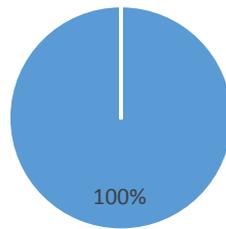### *PvE Max Level at Each Situational Stimulus While Playing Poorly*

PvE - Max Level Playing Relatively Bad; Situation #1

- ■ Most responded. All reactions were negative, was kicked out of group after second wipe.
- ■ Most responded. All reactions were negative, was kicked out of group after first wipe.
- ■ Most responded. Majority of reactions were negative. Kicked after second wipe but was given kind constructive criticism.

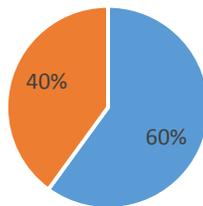**Figure 13 PvE-Max Level Playing Relatively Bad; Situation #1**

PvE - Max Level Playing Relatively Bad; Situation #2

100%

■ Most responded. All reactions were negative, was kicked out of group after first wipe.

Figure 14 PvE-Max Level Playing Relatively Bad; Situation #2

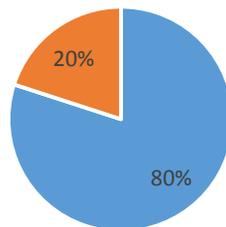**PvE Max Level Playing Relatively Bad; Situation #3**

40%   60%

■ Most responded. All reactions were negative, was kicked out of group after first wipe.

■ Most responded. All reactions were negative, was kicked out of group after second wipe.

Figure 15 PvE-Max Level Playing Relatively Bad; Situation #3

PvE Max Level at Each Situational Stimulus While Playing Well
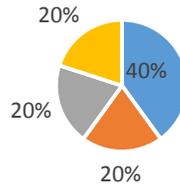

PvE - Max Level Playing Relatively Well; Situation #1

20%

80%

■ Most responded. Majority of reactions were positive.   ■ Only a few responded. Those who did were positive.

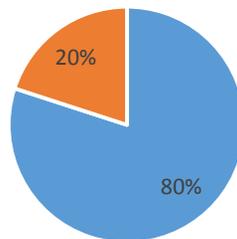Figure 16 PvE-Max Level Playing Relatively Well; Situation #1

PvE - Max Level Playing Relatively Well; Situation #2

- 20%
- 40%
- 20%
- 20%

- Most responded. Even mix between positive reactions.
- Only a few responded. Those who did were negative.
- Most responded. Majority of reactions were negative.
- No responses.

Figure 17 PvE-Max Level Playing Relatively Well; Situation #2

PvE - Max Level Playing Relatively Well; Situation #3

- 20%
- 80%

- No responses.
- Only a few responded. Those who did were positive.

Figure 18 PvE-Max Level Playing Relatively Well; Situation #3

PvP Max Level at Each Situational Stimulus While Playing Poorly

PvP - Max Level Playing Relatively Bad; Situation #1

- 40%
- 60%

- Most responded. Mix between positive and negative reactions.
- Only a few responded. Those who did were negative.

Figure 19 PvP-Max Level Playing Relatively Bad; Situation #1

PvP - Max Level Playing Relatively Bad; Situation #2

- Most responded. Mix between humorous and negative reactions.
- Only a few responded. Those who did were negative.
- Most responded. Majority of reactions were negative.

Figure 20 PvP-Max Level Playing Relatively Bad; Situation #2

PvP - Max Level Playing Relatively Bad; Situation #3
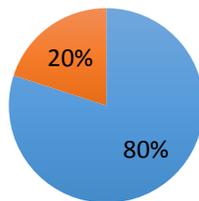
- No responses.

- Only a few responded. Those who did were players who called me out for playing so poorly.

Figure 21 PvP-Max Level Playing Relatively Bad; Situation #3

PvP Max Level at Each Situational Stimulus While Playing Well

PvP - Max Level Playing Relatively Well; Situation #1
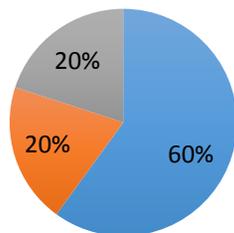
- Most responded. Majority of reactions were positive, saying good job.
- Only a few responded. Those who did were positive.
- No responses.

Figure 22 PvP-Max Level Playing Relatively Well; Situation #1
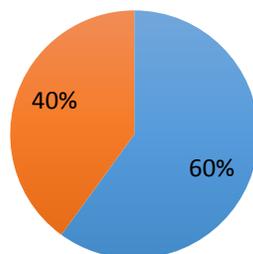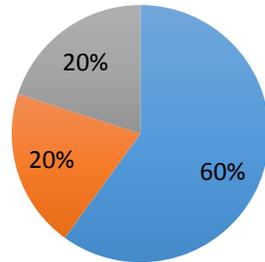
PvP - Max Level Playing Relatively Well; Situation #2

- Only a few responded. Those who did were negative.
- No responses.
- Most responded. Mix between positive and negative reactions.
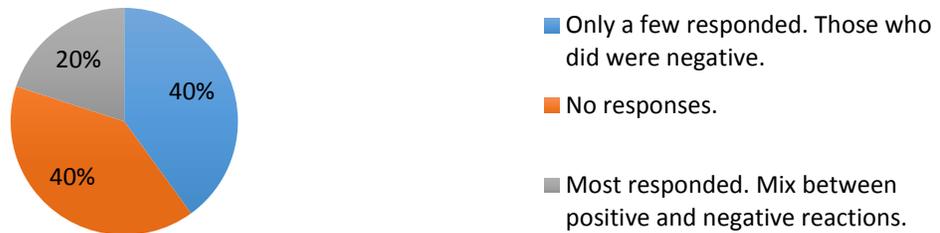
Figure 23 PvP-Max Level Playing Relatively Well; Situation #2

PvP - Max Level Playing Relatively Well; Situation #3

- No responses.
- Only a few responded. Those who did were positive.
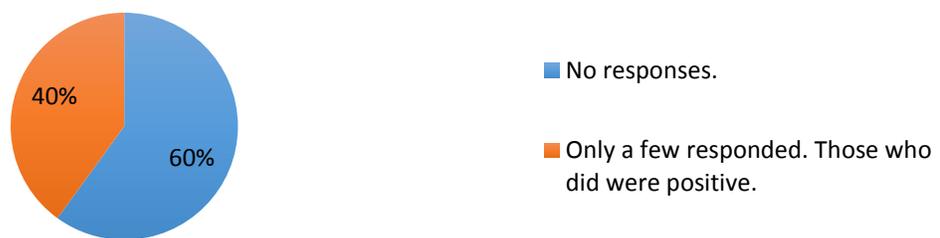
Figure 24 PvP-Max Level Playing Relatively Well; Situation #3

Summary of Responses

Various different responses were gathered from the numerous players during the in-game observations. Instead of simply responding in a positive or negative nature, many players also went on to implement a combination of other types of verbal responses, and non-verbal responses.

Verbal-Responses

A majority of responses received during the research portion of the study, were Verbal responses. These responses included writing out a response into the *World of Warcraft* in-game chat system.

Positive

One of the most common types of verbal responses given to the different situational stimuli, were positive responses. Positive verbal responses were considered those that that provided positive comments on the *World of Warcraft* in-game chat, to those who demonstrated favorable behavior; in this case the favorable behavior would be the different situational stimuli (LRBI, 2014). (i.e. encouragement, praising your gameplay, or providing assistance).

Negative

Another very common type of verbal response given to the different situational stimuli, were negative responses. Negative responses were considered those that refuted, or disagreed with, the stimuli presented, by attempting to insult, or anger, the researcher providing the stimulus. (i.e. cursing, insulting game skills, and telling researcher to silence themselves).

Mocking

The final type of verbal response received during the in-game observations while researching, was mocking. Mocking is similar to a negative response, but the player contrarily combined humor into their responses in order to insult, or anger, the

researcher. Mocking can be defined as, to laugh or criticize (someone or something) for being bad, worthless, or unimportant (Merriam-Webster, 2014).

Non-Verbal Responses

Along with verbal responses, many of the players observed during the research portion of the study found alternative strategies, besides chatting, to respond to the different situational stimuli presented; often the players would just simply ignore the stimuli of the researcher.

Non-responsive

This response, which consists of simply ignoring the presented situation stimuli, was one of the most common, if not the most common, responses received while gathering data for the study. Responding to the situational stimuli, by choosing to not respond, actually provides a significant amount of information regarding how players at different levels, and in different game modes, deal with different social interactions in *World of Warcraft*.

Vote-to-kick

One of the most effective, and active, forms of non-responsive responses is the utilization of the vote to-kick option in the PvE game mode. This feature allows any group to vote and remove any person, from the game for any reason. This response is the most effect amongst all the other responses received, at eliminating the unwanted situational stimuli, and expressing ones displeasure without any confrontation.

Analysis

Data Trends

Response Amount

The various tables and figures expose the existence of several different

significant trends and correlations amongst the data, based on the different types of

responses gathered. The first trend amongst the responses found was the tendency of

low-level players to verbally respond to the presented situational stimuli, more often

than the high-level players. This result suggests that the high-level players are more

used to all the different stimuli presented in the study, due their vast amount of game

experience. This therefore also suggests that low-level players are more easily provoked

due to their lack of experience with video game trolling/cyber bullying, and have not yet

realized that responding to a presented stimuli does little, to nothing, in eliminating that

stimuli.

Response Type

While low-level players are more prone to provide a verbal response of any

nature, higher-level players are more likely to provide negative responses. Due to their

immense amount of experience in *World of Worldcraft*, higher-level players thus have

higher expectations of their opponents and dungeon group members. When presented

a non-hostile stimulus, such as being apologetic or not speaking at all, low-level player

and high-level player respond very differently. Figure 1 shows that low-level players in

the PvE game mode, who were presented with an apologetic, non-hostile, stimulus, and

a group member who was playing poorly, provided responses that were 40% negative.

Similarly looking at figure 13, data is provided for high-level players in the PvE game

mode, who were presented with an apologetic, non-hostile, stimulus, but a group

member who was playing poorly, provided negative response 100% of the time.

Examining the PvP side of situation #1 in combination with poor playing, figure 7 shows

that low-level players provided positive responses 80% of the time, while high-level

players provided negative responses 70% of the time. Inspecting the PvE figures of

situation #3 in combination with poor play, figure 3 shows that low-level players

provided negative responses a little over 50% of the time, and high-level players

provided negative responses 100% of the time. Figures 9 and 21 provide a different

result than the previous situation #3 responses. In figure 9, low-level players in the PvP

game mode provided negative responses 60% of the time, and figure 21 shows that

high-level players provided negative responses only 20% of the time. This sudden

change in negative response percentage can be between the two skills level, is due to

the phenomenon found in the first trend. High-level players are less likely to respond,

especially when presented with no stimulus, therefore the low-level data for situation

#3 is more negative than the high-level data. This could also suggest that low-level

players are more likely to produce hostile environments, from non-hostile stimuli. The

trend found in figures 1, 3, 7, 9, 13, 15, 19, and 21 suggests that higher-level players are

more likely to comment on a players poor play, due to their high expectations of players

at higher-levels, and their sense of dominance over that player. Based on this data, one

could also conclude that low-level players are more likely to provide positive responses

to non-hostile stimuli, due to a common understanding amongst low-level players that they are beginners, and are still learning how to play *World of Warcraft*.

Likelihood to be Kicked in the PvE Game Mode

It was found that the vote-to-kick response was only utilized while the researchers were playing poorly, and that it was implemented during all three situations. Figure 1 and 13 provide data from responses to situation 1, while playing poorly at a low-level and a high level, respectively. While being apologetic in chat, the vote-to-kick tool was used 2 out of the 5 trials at low levels, and 5 out the 5 trials at high levels. For situation 2, figure 2 and 14 represent poor play data for low and high-levels. It was found that the low-level researcher was kicked while being rude in chat, 3 out of the 5 trials, while the high-level researcher was once again kicked 5 out the 5 trials. For the final situation (situation 3), figures 3 and 15 provide the data gathered from the research process. While playing poorly and not saying anything in chat, the low-level researcher was kicked 2 out of the 5 trials, and once more the high-level player was kicked 5 out of the 5 trials. In total out of the three different situations and 15 conducted trials, the low level player was kicked 7 times while the high level player was kicked 15 times. Therefore based on this data, it can be suggested that, in the PvE game mode, if you're playing poorly at a low-level, you will likely be kicked out of your dungeon group about 47% of the time; similarly, at high levels if you're playing poorly, you will likely be kicked 100% of the time. Once again, higher-level players are more likely to receive negative responses, and comments, if they are playing poorly in *World of Warcraft*, since more is expected of them. Also, at higher levels PvE groups would

much rather remove the problematic stimulus and carrying on in the dungeon at a disadvantage, since they trust in their skills to allow them to be able to complete the mission. Low-level players on the other hand are a bit more hesitant to kick a player from their dungeon group, since they see that person as a vital piece to their team, who without, would make completing the mission much harder, to nearly impossible, due to their lack of game experience.

Discussion

This research project sought to analyze, and better understand, the relationship between a *World of Warcraft* player's in-game reactions to different stimuli, and varying *WoW* character levels. After an extensive analysis of player responses gathered through numerous in-game observations, the observed reactions were coded, along with the situation being tested, amount of responses gathered, skill level, and the degree of effort being exerted during the participation. The purpose of these results was to help aid other researchers understand how *WoW* players respond to certain in-game comments, actions, and stimuli, at different skill levels. The results of the research indicate that there are distinct differences in responses to in-game comments, actions, and stimuli amongst related skill levels. Using positive, negative, mocking, non-responsive, and vote-to-kick responses to code and categorize the data, numerous trends amongst low and high levels were discovered.

This research contains importance, due to the fact that there is now a detailed representation, which contains statistical probabilities of responses that both low-level and high-level *World of Warcraft* players will have to various different in-game situations. This detailed representation provides an in depth categorical analysis that can be used as a

reference to help other researchers understand how, and why *WoW* players at different skill levels will respond differently to certain stimuli. The way one chooses to react to certain in-game comments, actions, and stimuli provides a greater understanding into how player reactions, and attitudes, evolve as a player improves their character's level and become more familiar with the social aspects of *World of Warcraft.* This changing of in-game responses, and attitudes, provides a clear correlation between a person's tendency to change their personality, and their ability to gain maturity as they grow in reality, and a person's tendency to change their in-game personality and maturity level (as they learn to handle certain in-game interactions in a better manner) as they improve and grow in the game, just as they improve and grow in reality.

The limitations on of this study are pretty significant. Due to the fact that there were only two researchers working on this study, only two *WoW* characters were utilized to conducted research. One researcher had a *WoW* character at the max level possible in the game, while the other researcher's character was only at level 15. This huge difference in character levels left a huge gap of other possible character level intervals that could be researched and correlated with the data gathered from the low-level players and high-level players. It is clear that the current data only covers a tiny spectrum of character levels, and it only considers the two extremes of *WoW* levels. The current data still provides very meaningful and descriptive results that can be used to better understand the relationship between character level and reactions to certain in-game situations. Adding more character levels to investigate would simply provide a more accurate representation of how player responses evolve as a player improves their *WoW* level.

The responses of World of Warcraft players were coded based off of three simple situations. In reality, there are plenty of other social interaction and social situations that occur constantly everyday in *WoW*. Many other situations besides just being apologetic, being rude, and not talking occur in *WoW*, this therefore leaves a lot of room for a related, yet altered research question(s). One such research question includes, "How will *WoW* players respond to a fellow WoW player constantly complimenting every single thing they do in both the PvE and PvP game modes?" another question could research the question of, "Now that the general responses to trolling/cyber bullying are known for both low and high *WoW* levels, what specific trolling statement(s) produce the biggest arousal from the players being examined?" With these two research questions, more would be known about the vast amounts of different social aspects in *World of Warcraft*, which would therefore allow researchers to better understand, and map out, the whole social game dynamic in order to compare it to social dynamics of other games and to the social dynamics of real-life. This would thus allow us to recognize the evolution, and involvement, of legitimate social interactions within games and how these interactions are actually meaningful and beneficial.

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