

# GENDER BIAS IN A VIRTUAL WORLD

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## ABSTRACT

*The purpose of my research is to examine gender bias behaviors in the online game EverQuest. Prior studies have found gender bias in chat room forums and differences in the sale price of male and female characters on E-bay. It is thought that peoples' perceptions in the real world are brought into the game which influences the way characters are chosen for group participation, depending on their gender and/or perceived power level within the game. This study uses field observations to detail actual player behavior in deciding who would be able join their group.*

## INTRODUCTION

My research study involved the online virtual reality game EverQuest. Studies have shown that in both questionnaires and in economic behavior, there is a gender bias in game play within EverQuest, which is reflective of the real world. For example, Edward Castronova (2003) found that the price paid for a male character (avatar) equated to a difference of 1.5 levels higher, out of 65 total levels, than what was paid for a female character. An avatar is the online persona or virtual character of the player. In *The Norrathian Scrolls: A Study of EverQuest*, Nicholas Yee (2001) found respondents to his questionnaire who commented about how differently male and female characters are treated within the game. Yee (2001) points out that the majority of players are male and 15.7% of them play female characters. This study examined gender preference for roles within EverQuest and compared the results with data from research done by Yee.

Discrimination may occur because of perceived abilities, given that the gender of the character is purely aesthetic and has no bearing on abilities. As designed in EverQuest, a character gains abilities as they gain levels, with the higher the level the character the more powerful he or she is. In this study I looked for how level affects acceptance in groups, depending on gender. In addition, I examined if the gender of the character is a factor for acceptance into groups who would be hunting monsters within EverQuest. Hunting monsters within EverQuest is a way of gaining levels (ability).

If males are preferred over females for certain roles in EverQuest, when abilities are equal, this may give some insight into gender bias in the real world. While our society has rules that are set up to protect us from gender bias, that bias occurs. This so called glass ceiling can be seen all around us. Women seem to lack the same opportunities as men and have unequal economic lives (Larwood & Trentham, 1998). This study examined if this same bias is reflected within game play. Yee's (2001) data collections come from within chat rooms of players and are based on players' perceptions of game play. This study seeks to validate Yee's work by demonstrating whether there is gender bias in actual game behavior.

The online player community serves the function of interaction and socialization for many players. The world of EverQuest is rich in scenery with players interacting with other characters through text-based chat. Conversation is text-based and visual cues during the conversation take place through text emotes with some emotes able to be gestured by the character visibly. Social events within EverQuest not only include the occasional dragon slaying but also online marriage events or parties. A wedding can be quite a social gathering as the zone is populated with all the associated guests and those players/avatar's who just happen to be in the zone at the time. Events and their location provide the player with a social context; the player's provide the conversations and socialization. The personification of gender bias and its associated discrimination in the real world may be reflected in the virtual world of EverQuest. The difference though, is that a player's virtual gender is not always his or her own gender, and yet discrimination has still been reported. It is not their skills as a player but their gender, which might influence the assignment of various roles within a group. This personification of gender bias on the perceived gender of the individual has no basis on the abilities of the character, but the perceived abilities of the player behind the character.

## **EVERQUEST**

EverQuest started in March of 1999. EverQuest is an online role playing game in which players choose from various characters and/or races and classes (roles). There consist 15 racial types and 15 classes within the game, with level 65 being the highest level attainable and sometimes taking years to achieve. Examples of the races include ogre, gnome, Elf, human. Though there are 15 classes available, races are restricted to certain classes which include, Warrior, Cleric, Magician, etc.

EverQuest has a very large subscriber base, of almost half a million subscribers worldwide. At any one time though, about 100,000 players are online at the same time with the average time spent per week being 15-20 hours. Many players may have accumulated months of time online. EverQuest itself is made up of 49 servers or worlds. All 49 are almost exactly the same in their geographical make-up but the player community itself is unique to each one. Each of these worlds has a community of anywhere from 2,000-3,500 players. Players in the game communicate to each other through chat messaging and in some cases by voice.

## **LITERATURE REVIEW**

The assignment of gender to a persona is required for many MUDs (Multi-User Domains or Dungeons). According to Elizabeth Reid, playing a gender that is opposite of the players is possible though it may be difficult socially. It is also a sensitive subject for many players (Reid, 1994). According to Reid (1994), female-presenting personas are treated differently than male-presenting ones. These female personas are often subjected to harassment and unsolicited chivalry, sometimes in the form of monetary or material offerings. These offering can carry costs. Those players offering items or money generally want friendship or more in return (Reid, 1994). Since these MUDs offer a way to socialize, and there is a population of mainly young males in the MUD system, it might be expected that some would look for relationships with those of the opposite gender. What Reid indicates is that sexual harassment of female characters is not uncommon (Reid, 1994). Here we have an indication that players do have a bias or discriminatory toward female-presented personas, at least in this study.

Frank Schaap's (2002), "The Words that Take Us There," explores the performance of gender and how the social interactions in a virtual world are formed by culture and our social structure (Schaap, 2002:3). Schaap (2002) uses participant observation, questionnaires, interviews, and examinations of websites to do the research into how players present themselves as gendered bodies (Schaap, 2002:30-31). Like worlds such as EverQuest, MUD's offer a certain

amount of anonymity to the player or user. Not everyone knows the person behind the character being played. Unlike EverQuest, though, there are no visuals, except in the reader's imagination. The virtual world then offers a chance to explore how gender is constructed. Constructs such as the name of a character or its character description can offer clues to its gender or the gender of the player and sometimes mislead others on both accounts (Schaap, 2002:44). Schaap (2002) notes that players will often emphasize or polarize the characteristics that they associate with different genders. They have quite definite ideas on what is appropriate and necessary in playing a believable male or female character (Schaap, 2002:59). Without visual cues, such as in a text-based MUD, people approach the realness or failure of a properly played gendered character by evaluating how the character is role-played, its name and description given, and by actions which the player might attribute to a gender such as aggressiveness or niceness. Players who are curious might also ask the characters player about their gender. This may happen because the gender indicated by the character doesn't seem to match that of the player and the act of role-playing convincingly is important in creating the virtual reality in player's imaginations and allowing them to create images out of the text on screen.

This suspension of disbelief allows the players interacting to follow along as if each character is really who they say they are (Schaap, 2002:61-62). These interactions are real, though the world is imaginary. The importance of these interactions is underlined by the trust placed in these characters and players towards each other by the idea that the character and player are one and the same. Therefore, knowing the player, and possibly their gender, is important (Schaap, 2002:64). This is true also because of the stigma or perceived wrongness of a player gender-bending (Schaap, 2002:63). Perceptions of how a character should act are subscribed by those conventions that describe how a character should act in a convincingly gendered way (Schaap, 2002:72). Players recognize or behind questioning whether a character is being gender-bended often when the character does not act as expected as well as when the player makes remarks that might be attributed to a certain gender (Schaap, 2002:90). Schaap (2002) indicates that players try to establish the actual gender of players behind the characters and in order to present themselves in a gendered way, while gender-bending, the players may resort to stereotypical male or female acts. The difficulty for the players is the fact that the actual gender of the players behind the characters are not present, adding an element of uncertainty (Schaap, 2002:99)

According to Jakobsson and Taylor (2003), players of EverQuest who have a good initial experience playing together have a better chance of playing again at another time. Thus, socialization is a good tool for getting ahead in the game since you will get more benefits in terms of how many players you know in the game. As stated by Jakobsson and Taylor, "If two players who got along especially well in a group would like to maintain more regular contact with each other they can use the */friend* command to add each other to their respective 'friends list'" (Jakobsson and Taylor, 2003:85). Jakobsson and Taylor illustrate the importance of interaction in developing social networks within the game. Their findings point out that in order to be a successful character in the online game of EverQuest, role playing and group cooperation are two essential tools. The advantage of gaining levels comes when players form hunting groups with other players in order to obtain "group" experience by killing various creatures/monsters and thus promoting group interaction and cooperation (Jakobsson and Taylor, 2003:83). Moreover, Jakobsson and Taylor (2003) indicate that having "connections" such as forming groups and acquaintances is a great way to improve your chances of moving on within the game. For instance, some of the advantages include "twinking" or helping increase the level a new character or a "newbie" by another higher level player by providing money and/or valuable items that will enhance a character's abilities and power to fight against monsters and expedite experience. Moreover, the authors emphasize that people who begin playing this online game must learn how the game is played.

New players usually expect to play following the rules as stated in the game manual but what really matters is the support and alliance they have from their guilds, friends and/or group

members. This can be achieved by demonstrating good socialization skills and politeness with other players, which in turn can bring numerous benefits when interacting and sharing items. Finally, the authors indicate that within the game, there are multiple ways of interactions as players' accounts have eight characters per server (Jakobsson and Taylor, 2003:83). Most players have different characters that they play for different purposes. For example, logging in as a cleric (healing spells) when someone in the group needs to be resurrected after dying is useful since dying reduces experience loss and time spent traveling to recover the body.

Manninen (2003), in the article *Interaction Forms and Communicative Actions in Multiplayer Games*, show that multiplayer games such as EverQuest serve as a way to communicate and interact with other players and convey social cohesion. The influence of role playing and interactions between characters assist players to immerse themselves in the game. Manninen used communicative action theory in order to understand how computer games affect, limit and support communication between players (Manninen, 2003). In addition, he created twelve categories which included, for example, avatar (character) appearance, facial expressions and language based communication. The six main types of social actions are: instrumental, strategic, normatively regulated, dramaturgical, communicative and discursive action (Manninen, 2003).

As far as the instrumental type of social action is concerned, Manninen discussed how individuals show off their achievements by the items they collect and their avatar appearance by using those items. Their avatar is a reflection of their achievement (Manninen, 2003). In strategic actions, two or more individuals are involved. Game communities may wear distinctive clothing to signify their group affiliation. Having one individual open a lock door for the group is another example (Manninen, 2003). Normatively regulated actions occur because people expect that others will act in a particular way. There is a sense of acting within the common values of the group and a sense of group norms. Equipment, such as the robe of a magic user or the bow of a ranger can indicate what role the avatar has within the virtual game world. Role players expect other role players to follow the rules of role playing in order to suspend their disbelief (Manninen, 2003). Dramaturgical action is how an avatar's appearance show the game world the strength, power, playing style of the player. The name of an avatar can itself be a representation of the playing style or attitude of the player (Manninen, 2003). In addition, communicative actions, talks about how players arrive at consensus such as negotiating the share of treasure. Discursive actions, "... entail the explanation, discussion and sometimes even, criticism of the validity norms that govern communicative action." (Manninen, 2003). An example of this type of action is the separation of virtual worlds into "player killing" and "non-player killing" worlds.

Yee's (2001) study used both qualitative and quantitative analysis for his research on EverQuest. His data was collected by recruiting people to participate in his study, through internet message boards and forums visited by EverQuest players. Using the questionnaires, free-response forms, multiple choice forms and flash-implemented experimental designs, Yee, compiled his data. Those who participated were also asked to spread the word of the study to other people they knew who played EverQuest. This project was conducted between September 5<sup>th</sup>, 2000 and May 5<sup>th</sup>, 2001, with approximately 4,000 individuals participating in the study (Yee, 2001).

Interestingly, Yee described EverQuest and some basic mechanics of the game. He gave a brief overview of character creation, describing a few of the available classes and races and their options. It is important to note here that gender is described here as having no bearing on the internal game mechanics, but as being an aesthetic choice. He also described the world of EverQuest, its zones and continents, and how the virtual world is laid out. In the zones, characters hunt monsters, which spawn in specific locations. This hunting for experience gets increasingly difficult as levels and abilities increase. In order to gain a level and a corresponding increase in ability, the character/player must successfully kill increasing stronger monsters. This can be done within groups or solo. Communication within the game is by text-based chat. This is done in a window at the bottom of the screen. In order to communicate, different modes are used by the players, with each mode having its own color. These codes may or may not be able to be seen by

all players within a zone, depending on the mode. Players can also use the chat to communicate within their guild and group, which can be done across zones. Players can create or join Guilds, which are social networks or clubs of fellow EverQuest players. To exit the game the character must sit and make camp, which takes about 30 seconds (Yee, 2001:9).

Yee's (2001) focused on the broad characteristics of the EverQuest player and concluded that EverQuest was a virtual skinner's box. The players being operant conditioned to want to play more (Yee, 2001:72). His questions focused on different aspects of the game and on the players themselves. Through forums and message boards and later e-mails, Yee recruited participants who themselves were asked if they knew others interested in partaking of the study. Some areas of particular interest were the choice of race and choice of class, which Yee concluded showed some significant differences in their choices. He also explored biases in the amount of assistance given to female characters by male characters through a flash experimental design test (Yee, 2001:6). It appears that players would offer more assistance to female characters than they would males and with race showing a possible trend in interactive effect. This was backed up with responses from male players who decided to play a female character in order to receive a greater amount of assistance, which was found to be a reason slightly different from the female response (Yee, 2003:40). It is interesting to note as well that some responders also commented on how much respect they received and how seriously they were received based on their gender.

While the fact that gender has no bearing on the abilities of the character itself, it would appear from the above study that men and women are treated differently. This study focused on participants answering various questionnaires outside of the game. I was curious though, how much of what is said is actually done. What disparity is there between what a player says he would do or did and what he or she actually does in the game?

In an article in WomenGamers.com, Kathryn Wright (2004) described an informal investigation she performed on males who play as females. Through surveys on this topic, she asked for male participants to answer some questions. She received 33 completed surveys for this informal study. She found that most of those surveyed indicated some game play advantage when playing as a female. They would use the assumptions that they were females to gain some tactical advantage, such as making mistakes about the perceived ability of the player as a female. Of those males who played female avatars, 42% (14 subjects out of 33 respondents) role-played themselves as females. As far as being treated differently as a female character, 45% of respondents indicated that female characters are treated better than male characters. Interestingly, 55% believe there are drawbacks to playing a female, for three main reasons. Problems such as sexual harassment, insults, and propositions were indicated by 45% of respondents. One respondent complained about requests for cybersex. 12% felt they were treated as dumb or helpless as a female character (Wright, 2004).

While this was an informal study that Wright conducted, the small sample size of 33 participants may not be representative of male EverQuest players as a whole. This did agree with some of Yee's (2001) study, especially the fact that the majority of male players who played female characters role-played themselves as females.

The idea of players incorporating their attitudes, beliefs and perceptions about other players regarding their characters' gender matching their own in the virtual game may indicate a reflection of their real life gender bias. For instance, male players who also play male characters may assume that female players playing female characters are less able to be competent in the game. The virtual game of EverQuest offers an immersive world where players of all ages can interact and have an opportunity to role-play, bring their life experiences and build friendships. Conversely, players are aware that their real-life identities are not the same as their characters even though they may find a connection with their characters that creates a sense of familiarity and a bond. Mackay (2001) suggests that players are involved in a performance act where "The artistry of the role-playing game is evidenced in the doing, in the sense of engrossment and ability to play at being another" (Mackay, 2001:80). Furthermore, he notes that "The multileveled

experience of the role-playing game performance is drawn from all spheres of action: drama, script, theater, performance, social and ritual (Mackay, 2001:134). In order to make sense of the role-playing activities, players attempt to establish an intelligible foundation that imitates the structure of reality (Mackay, 2001:67). The role-playing game encourages the players' to bring in their values, beliefs and emotions from the popular culture into the game and form or create the gaming environment in which their characters reside (Mackay, 2001:82). The player, though he/she does not inhabit the body of the character, creates their character's actions in their own mind. The character's gender, form or shape does not need to conform to the player and all actions made by the character take shape within the player's imagination and subsequent performance.

EverQuest was a ground-breaking multiplayer online role-playing game when it was introduced because of the detailed 3-D graphics. Tews (2001) writes about the idea that increases in realism within video games has a greater effect on the behavior and emotional response of the player. She notes that research suggests that while individuals play at different intensity levels, 11-25% of players have a more powerful and more competitive behavior when playing (Tews, 2001). The game environment can act as a virtual Skinner box reinforcing player behavior and in the case of violent games, creating player responses that are aggressive. Play behavior as articulated in social learning theory is developed through observation and imitation of others. This can help us understand how children mimic the behaviors of their parents and/or others as well.

Tews (2001) finds fascinating that the act of playing these games can have an effect on our interpersonal relationships. The game may teach responses to problems that are correct for the virtual world but in the real world these responses are ineffective. Finally, these games created by humans must contain the symbols and nuances underlying the cultures of the creators.

Thus, it is thought that aggressive games are usually preferred more by male players on average than female players. Taking into consideration the structure of EverQuest, a slightly violent (but not graphically so) role-playing game, with social outlets, both males and female characters are able to play on equal terms and function with the same caliber because of the nature of its programming. This virtual equality can be true regardless of the assumptions or stereotypes that could be brought from the real world, but because players bring in their biases, this equality may not always exist. The fact that female characters do not differ from male characters in their competency or power within the game indicates the possible selection of female characters within a group may be connected to the perceptions that male players have in regards to the competence of those female players and their female characters. The competency of female characters is independent of the player though, because the individual playing could be male or female. The fact that the virtual characters are equal, regardless of sex, may begin to introduce a certain equality in the interactions because of the uncertainty of who is behind the computer screen.

## **HYPOTHESIS/RESEARCH QUESTION**

*Is there a gender preference when forming groups in the online game EverQuest?*

There exists a lot of group interaction in the game and I expected to find solidarity in groups that have good communication and skills with gender bias in avatar roles. For example, there may be a positive correlation between the roles of the character, i.e. warrior, healer or magic-user, and the preferred gender for those roles within the group. Is the perception that the player is female, because the avatar is female, bias the fellow players to what role or ability the player has when fulfilling group needs and whether they are accepted into these groups? I predict that gender influences the choices that players make in whether they accept players into groups.

- H:1 Male characters are accepted into groups more readily than female characters based on their role at comparable levels.
- H:2 No difference in the rate of male/female acceptance into groups based on their role at comparable levels.

## METHODS

One of the fascinating aspects of forming an online persona in EverQuest is the ability to be male or female at the click of a mouse. This allows the researcher an amount of freedom not found in the real world. Since EverQuest (EQ) is an interactive game, I looked for patterns of preference when forming hunting groups. In order to observe what difference there might be in how readily females versus males were accepted into groups, I looked for patterns of female/male acceptance rates into those hunting groups. I recorded the gender, race, and level for characters who attempted to get into the groups and whether they were successful in gaining acceptance into groups.

These observations were made through participant observation over a three month period of time, from May through July of 2004. The log-in times were made during random days and times, in different servers and in different zones within the servers. The interactions of 271 individuals were recorded during this time. Specifically, the individual character's gender and level and whether they were allowed into groups or not.

Characters identified as actively soliciting to be in groups, or had LFG tags next to their name, were noted on a log sheet with the time they began soliciting for groups. An individual was considered successful in getting into a group if it was seen that another character invited the LFG individual into a group. The LFG characters name, gender, race, and level were recorded and if successful in getting into a group, the time they were invited was recorded. An individual was not recorded being successful if they were not seen getting into a group, either by logging off or if they moved to a different zone. Game mechanics made it difficult and risky to follow characters across zones, and following individual characters across zones would have meant losing sight of multiple observations.

## FINDINGS

An independent sample t-test with a sample size of 271, including 64 females and 207 males, was used to assess my hypotheses. Given the results in Table 1, it was determined that there was no significant difference in group acceptance for gender within comparable levels. A slightly higher percentage of male characters were accepted but this was not considered significant. Figure 1 shows the acceptance rates by gender.

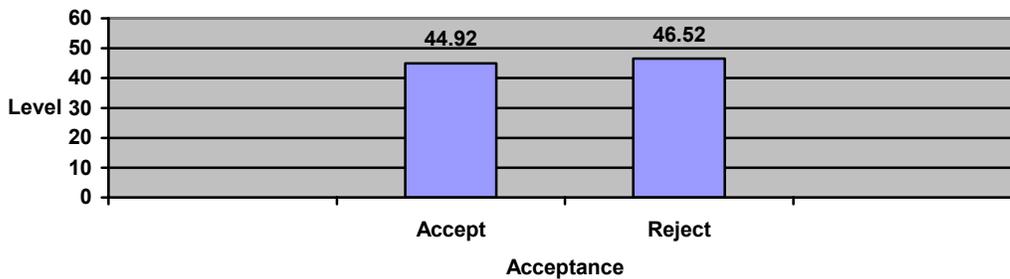
The influence in level of group acceptance is shown in Figure 2. As far as level of importance in group formation, the data do not directly reflect higher level importance since EverQuest controls for level effects in groups. What this means is that there was no correlation of level and acceptance because EverQuest players can only join groups made up of similar levels. This is not a problem since the way EverQuest is set up high level characters would only be joining high level hunting groups.

**Table 1. Correlations for Acceptance Rates by Gender**

GENDER		Level	Gender	Yes
Pearson r	.025	1	-.032	.055
Sig. (2-tailed)	.682	.	.604	.465
N	271	271	271	179



**Figure 1. Acceptance Rates by Gender**



**Figure 2. Controlling for Level in Acceptance Rates**

## CONCLUSION

Research seems to indicate that there would be or is a bias or discriminatory attitude based on the perceived gender of the individuals. Studies on text-based virtual realities in which there was not an actual visual representation of the gender describe this bias. This study looked at the actual choices that individuals made in forming hunting groups and found that there did not seem to be a bias in choosing a particular gender to include in the group. There are a few reasons for this supposed lack of bias.

There may be a dissonance in what players report in questionnaires and how they actually act while playing. In the game of EverQuest, getting a player to fill a needed niche in the group may suppress an urge to be biased about who enters the group. While individuals may report a perception of bias when not playing the game, this bias isn't manifested because of the needs of the group. If the group has a position that needs to be filled and a limited time in which to look for group members, filling the group niche probably takes precedence. Since groups require certain persona types in order to be successful in hunting monsters, group requirements are more important, and the players default to what persona is needed for group cohesion.

Another possibility is that as more online games come out and players are more exposed to a more generalized online community that is coming about with the rise of the internet and the increase in the number of households having personal computers, individuals are becoming more used to interacting with female individuals. EverQuest character's abilities do not depend on gender, and neither does the ability to use the internet. There may be a slow realization that female players are as capable as male players, when all else is equal. Players within EverQuest

may have become socialized to turn-off their bias and instead rely on the ability of the individual. It may also be that because the player behind the persona is anonymous (gender-bending), determining the actual gender of the player is difficult if not impossible. Players may then just default to observations of how the persona deals with situations in determining how useful they might be for the group in later encounters.

### LIMITATIONS AND RECOMMENDATIONS

Race may be a factor in group acceptance, as there are certain races that may seem by players to be nicer looking. Some races within the game, such as elves and wood elves, are more aesthetically pleasing while others, such as trolls and ogres are uglier “races.” Players may take aesthetics into consideration when deciding which personas to allow into groups. They may make the choice of having a nice looking female elf in their group rather than the ugly male troll.

The number of observations may also not be representative of the population of EverQuest players and might be skewed giving a false representation of the data. Future research may want to have a larger number of observations as well as including a questionnaire as much of the previous research indicates that there is a bias while this study shows no indication of bias. Finally, there is the recent opening of EverQuest2 which could be a future community to study. EverQuest 2 and its more realistic character modeling may allow a more immersive experience to players which may facilitate the player’s suspension of disbelief, and thus bring in real world biases.

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