Behind the Avatar: The Patterns, Practices, and Functions of Role Playing in MMOs

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Abstract

A two-part quantitative and qualitative study of role players within a virtual game world examined their prevalence, practices, and identity formation. Drawing on unobtrusive behavioral data captured by the game, combined with a large survey and traditional ethnographic methods, the study found that role players both negotiate identity and use their time online as a moratorium for their offline lives.

Descriptive results showed that role players are a relatively small, but psychologically burdened subgroup. When examined from the theoretical perspectives of Goffman's Self-Presentation theory, Huizenga's Magic Circle, and Turkle's early work on online identity formation, these players were seen as largely using virtual spaces as creative outlets and for socialization. The worlds also functioned as coping mechanisms for players frequently unable to gain acceptance, social connectivity or social support offline due to their personal situation, psychological profile, or their minority status.

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There has been considerable attention given to the increasing popularity of massively multiplayer online role-playing games (MMOs) in the media and in academic research. With 47 million active subscriptions (White, 2008), MMO play is rapidly entering the mainstream. Previous research concerning MMOs has examined the social interactions between players (Cole & Griffiths, 2007; Ducheneaut & Moore, 2004; Ducheneaut, Moore, & Nickell, 2007), the affordances of avatar-mediated interaction (Moore, Ducheneaut, & Nickell, 2007; Moore, Gathman, Ducheneaut, & Nickell, 2007), and the social processes that take place between individuals, avatars, and the communities they play in (Taylor, 2006; Williams et al., 2006; Yee, 2006a). However, there is scant investigation of the titular practice of role playing itself. Role playing (RP) online is related to earlier face-to-face practices and can be defined as the practice of pretending to be someone else within a fictional space (Turkle, 1995). It can be undertaken to add color to an experience, as an exercise in personal growth, for coping, creativity, or for learning-centric goals. Theoretically, RP is best investigated through the lens of Goffman's self-presentation theory (Goffman, 1959) and Erikson's stages of human development (Erikson, 1959) and by considering Huizenga's "magic circle" (Huizenga, 1949).

Using these theoretical approaches, this article presents the results of an investigation on RP using a novel suite of quantitative and qualitative methodologies. The story unfolds in two sequential steps, each addressing a larger question. The first question is largely descriptive, asking simply "Who engages in this practice?" The second question is then a deeper follow-up: Why do they role play?

The article proceeds by first laying out the theoretical frames used, plus a background on what exactly is meant by "role playing" in the traditional sense, and then in this new electronic context. Older theories and older descriptions of RP are adapted to build a bridge from the past to the modern social virtual spaces of MMOs. Next, the results of the quantitative analysis are presented to show a broad picture and demonstrate that online role players are in fact quite different from their fellows. The results suggest that their reasons for play involve both their personality types and their off-line situations. Then, with a baseline of who the role players are and some insight into why they play, the second half of the article presents the results of an ethnographic follow-up study. In this second step, the focus shifts from who they are to why they play and what meanings they make of the experience. This deep analysis suggests that role players play primarily to escape and cope with off-line stressors and as a vital creative outlet.

The Practice of RP, Historic and Modern

Research on RP has generally been conducted in either education or psychology (Corsini, 1960), documenting the practice at least as far back as ancient Greece (Corsini, Shaw, & Blake, 1961). Aside from RP in business training, the better known variant in the late 20th century involved face-to-face RP within fictional boundaries. The rise of tabletop fantasy role-playing games (RPGs) such as

Dungeons and Dragons and renaissance fairs generated a mini boom in face-to-face RP in the 1970s and 1980s (Barton, 2008). In tabletop RP and its live-action version ("LARP" for live action RP), participants are given a set of rules for what their character can do and how they might behave within a fictionalized space. Borrowing from Goffman's frame analysis concept (Goffman, 1959), Fine (1983) maintains that players have a frame for their primary place (I am John Doe in Baltimore), their gaming world (I am a player in a fictional world), and sometimes also for a fantasy embodiment (I am a purple wizard in the Forgotten Realms). Players break between frames when one intrudes on another, as when the phone rings and the wizard must stop being a wizard to answer it.

Multi-User Dungeons (MUD) and MUD-object-oriented (MOO) took these practices into text-only online spaces (Turkle, 1995) and were then largely supplanted by MMOs (Barton, 2008), 90% of which are of "role-playing game" (or RPG) genre (White, 2008).[1] Today the term role playing has two distinct meanings in the context of these games. A RPG is one in which players must interact with the world from the perspective of a "character," which they control and which has certain numerical attributes and functional abilities. As the player achieves goals in the game, their character accumulates experience points, or "xp." This type of character/xp game mechanic is what distinguishes RPGs from other video game genres (Barton, 2008).

The second meaning of RP in MMOs is a player practice regarding how players talk, act, and engage with one another. In addition to controlling a character as all players must, a minority of players further talk and act "in character" or in a way that their characters might. For example, such role playing, or "RP" as players typically refer to the practice, involves limiting one's talk to entities and events of the fictitious game world and avoiding references to the physical world or their offline identities. As one game designer puts it, "No one wants to think that that beautiful wood elf maiden is some hairy guy from New Jersey" (Liatowitsch, 2002). RP in this second sense is thus a style of playing MMOs, which does not affect one's score but can make the play experience richer. Game developers tend to support RP by designating certain games servers ("RP" servers), so that players who wish to role play can select those servers. However, RP is in no way required on these servers except to the extent that players might try to enforce "in-character" talk. "RP" in this second sense of the term is thus a concept that players and game developers alike recognize as a particular style of game play.

Prior research on RPGs, both tabletop and online, has found that RP, as a style of game play, is actually somewhat rare. Taylor (2006) suggests that true RP in Fine's (1983) sense—in which the player attempts to act and speak in character—is a rare form of play, despite the growing popularity of RPGs. Taylor's suggestion has received support from studies of two virtual worlds. Park and Henley (2007–2008) found that although players of EverQuest II are offered a wide variety of character types and roles to play, most players gravitate toward roles that fit their preexisting personality types. Similarly, Martey and Stromer-Galley (2007–2008) found that players of The Sims Online tended not to role play extensively. Because

there has been no systematic analysis, it is unclear how common or intense the practice actually is. For those who do engage in it, there are a series of normative rules and structures placed on the practice, including staying in character, developing a back story for that character, and remaining segregated from the nonrole players (Moore & Gathman, 2007). Others have noted that there may even be segregation or tension between a dedicated role-playing community and the mainstream nonrole players (Burn & Carr, 2003). For those engaging in the practice, there are two potential, not mutually exclusive explanations. One is that the players are RP to fulfill some need they have prior to play, such as a creative outlet or escape from boredom or circumstance. The other is a converse possibility of RP: some people may be playing a role in their off-line lives and online RP lets them be more of who they truly "are." Both possibilities are addressed with theoretical frameworks.

Theoretical Frameworks

The online world cannot be assumed to work the same way that face-to-face RP does, so there is a need to incorporate theories of computer-mediated communication. The most basic starting point, however, is to consider theories of play. "Play" is an important human social function, both for learning how to do things and for learning ways of being (Mead, 1934). Many theorists and social scientists have tackled the concept of play as derived from evolutionary biology (Miller, 1973; Steen & Owens, 2001; Sutton-Smith, 1998) or as similar to social learning theory (Bandura, 1994). To provide a theoretical framework for the study of human behaviors and attitudes within these play spaces, we focus on the "magic circle" (Huizenga, 1949), followed by theories of identity and self-presentation, and then computer-mediated communication (CMC).

Huizenga's "magic circle" is a socially constructed barrier that exists around games (Huizenga, 1949). Inside the circle, there is a set of rules and norms that makes the game spaces different from everyday life. These rules often include different sanctions on behaviors and a removal of hierarchies. For example, one person hitting another person inside a boxing ring is celebrated, while outside it might be grounds for arrest; a boss and an employee may leave their status behind during a game of chess. The strength of the magic circle can then be seen as a reliable indicator of the true separation between game space and regular space. If the barrier is weak, that same boss and employee may not compete as true equals.

Theorists have long recognized the importance of play for learning and socialization, but most crucially as a place to try out new behaviors and ideas. One key social function of play is as a relatively safe space to try out new ideas or roles (Sutton-Smith, 1998). RP cannot exist without a strong magic circle. Indeed, simple play itself is by definition at least a minor form of "time out" or moratorium from the structures and strictures of modern life. It allows the expression of impulses, but by placing limits on those impulses it also shields the players from nongame repercussions. This experimentalism is not limited to trying out ideas, strategies or

moves; for many, it includes the negotiation of identity. In her work on players in text-based online MUD games, Turkle (1995) followed several therapy patients as they used online game spaces as arenas to build their identities or to avoid dealing with real-life issues. That work showed that both avenues are possible: for some, RP was a positive experiment in which the players either constructed their identities or confronted lingering personal issues. For others, RP was a meaningless escape that lead to stagnation and depression. Turkle's rich ethnographic work illustrated that each route was possible. However, a limitation of the work was that the sample was restricted to a handful of patients undergoing psychotherapy in a major Eastern city. More importantly, we do not know if research on text-only spaces will hold true now that players have almost entirely moved to graphical avatar-based virtual worlds.

Goffman's early work on self-presentation suggested that we all maintain a distance between the part of ourselves we keep sequestered and private and that part that is on display (Goffman, 1959). That concept was adapted by Meyrowitz into electronic media as a way of explaining how modern mass communication tends to blur the lines between this kind of "front-stage" and "back-stage" behaviors (Meyrowitz, 1985). The bridge to these earlier theories can be built by considering how the features of new media might change what "front-" and "back-" stage mean and how they operate. Context thus becomes paramount in studying a virtual world, the roles within it, and the application of self-presentation theories.

In virtual space, context can mean not only the social world but the things that the computer code allows or disallows, plus the fictional setting of the space. In his "code is law" hypothesis, Lessig (1999) has argued that the rules of virtual spaces are rarely obvious but are nonetheless powerful. The environment, rules, affordances, limitations, and possible roles matter in shaping, enabling, and constraining behaviors, while others may stem from group norms and behaviors, as postulated by SIDE theorists (Spears & Lea, 1992; Spears, Postmes, Lea, & Wolbert, 2002) and automaticity theory (Bargh & Chartrand, 1999). The code of MMOs restricts the obvious disclosure of identity by virtue of physically separating the players and limiting the contextual cues they can send each other. As Walther and other CMC theorists have noted, relatively "poorer" media such as text limit the initial self-disclosures and cues that typify relationship building and communication offline—at least initially (Walther, 2006). Social Identity model of Deindividuation Effects (SIDE) theory suggests that group norms will powerfully affect behavior in such an environment. In this case, playing among role players is likely to socialize and enforce the practices noted by Barton and Fine from face-to-face gaming. These issues of the magic circle and social distance are explored in Study #1, and then in more depth in Study #2.

Study #1: Establishing a baseline for the practice and profile of online role players

The article's first overarching question is simply, Who engages in this style of game play? This generates two basic research questions:

> *Research Question 1*: How common is RP in virtual worlds? and
> *Research Question 2*: What is the demographic profile of role players?

Moving past basic description, we can turn to the motivations for the role-playing style of game play. Are role players in MMOs experimenting with their identities or simply being enabled to more fully be themselves? Or is identity not the crucial component? Erikson (1959) argued long ago that the negotiation of identity is part of a predictable and consistent pattern of human socialization and aging. For the construction of identity, Erikson theorizes a stage called "identity versus role diffusion." This stage usually takes place during adolescence or early adulthood and is marked by the individual trying to decide what kind of person they are. That choice often involves trying on a range of roles or masks to see which "fits" best. This stage is typically used to explain teenage and young adult behaviors in which the person experiments with different identities until a consistent set of behaviors emerges. Research on Dutch adolescents has found that online experimentation lowers their costs and social risks (Valkenburg & Peter, 2008). Off-line, however, such experimentation can be costly to the person and those around her. Trying on different roles can create confusion and angst when the community refuses to accept the person's new or forming identity choices. If the practice of RP, as a style of game play in MMOs, is related to this issue of identity and development, we should expect to see younger players engaging in more of it than older ones:

> *Hypothesis 1*: Younger players will role play more than older ones.

However, as noted earlier, it is equally possible that RP is less related to a need for identity exploration and more for the affordance to truly be oneself in a life where those practices are not socially acceptable or comfortable. It follows that such a tension would be exacerbated if the person started in, or was joining, generally less-accepted social categories. This may be especially true later in life when there is less tolerance for role experimentation. As a member of a marginalized group, a person may therefore be more likely to seek RP in MMOs as a safe harbor; rejected for their "true" self during their off-line lives, such people should be more driven to spend time in spaces where they can either experiment with their identity or, more likely, to simply be themselves. In the more anonymous space of MMOs, the cost of taking on such roles is much lower than in real life. Therefore:

Hypothesis 2: Members of marginalized groups will be more likely to role play than others.

These two hypotheses can be seen as competing theories for why people engage in the practice: age and identity exploration versus relief from a lack of social acceptance off-line.

As the CMC theories suggested, another key variable in the practice of RP should be the richness of the medium in the game. Meyrowitz's (1985) approach to modern electronic ''back-stage'' behaviors suggests that more anonymity will allow for more separation between an off-line and an online identity. That separation supports the magic circle of gaming, but in online RP, the back stage is more removed than is typical because of the lack of interpersonal cues. One obvious predictor is the medium used by the players to interact with one another. In virtual worlds, the use of voice is possible and leads to players revealing more of their true age, gender, and personality than the relative anonymity of text chat. The richness of voice gives people more identity-based cues than text, as players adapt to its larger affordances, in accordance with Social Information Processing (SIP) theory (Walther, 2006). Such sharing in a richer environment may lead to deeper relationships (McKenna, Green, & Gleason, 2002) but that same sharing might also make RP more difficult as it clearly punctures the magic circle that had enforced both moratorium and the suspension of disbelief. There are also social costs for switching CMC modalities (Ramirez & Zhang, 2007) in that friendships may be built on the role, not the actual person. This lack of self-disclosure may hinder relationship formation (Williams et al., 2006), but among role players it is likely to be necessary to enforce the SIDE-predicted group norms of staying in character. We would therefore expect that:

Hypothesis 3: Role players will use rich media (voice) at a lower rate than other players.

Lastly, Turkle's (1995) work also highlighted the extent to which role players were an especially troubled group. On one hand, all of her patients were confronting difficult backgrounds, difficult relationships, and trying periods in their lives. On the other hand, this is hardly uncommon among psychotherapy patients. A study of MMO players found that they frequently constructed character identities to make up for their own deficiencies (Bessiere, Seay, & Kiesler, 2007), but again, the causal direction of effects unclear (we will revisit this notion in the second study, below)— were unhealthy players using MMO characters to avoid personal growth or for positive therapy? Is there a preference for immersion, and is that healthy? To set this investigation up for the second study, we ask:

Research Question 3: Will role players have a higher rate of personal problems than other players?

Method

The study focused on the MMO EverQuest II (EQII) because of its popularity, its representativeness of mainstream MMOs, and because of the unique access provided by the game operator. As the sequel to the successful game EverQuest, EQII was launched in November 2004. Despite losing its market lead to World of Warcraft, the EverQuest franchise continued to expand and still attracts several hundred thousand players (Schiesel, 2007). For the purposes of generalizability, EQII represents the dominant format of the MMO market, fantasy RPGs. Altogether, RPGs account for an astounding 94.2% of all MMO subscriptions.[2] Although there are minor variations in rules and affordances, the basic game rules and goals of EQII are nearly identical to World of Warcraft and the many other titles on the market. Because MMO operators do not release data on their players, there is no way of knowing whether the results here are or are not indicative of other game populations. Indeed, the findings released here are the first public data to be shared by a major game company. The game operator, Sony Online Entertainment, agreed to cooperate with the research team, and to provide access to data from the game's large back-end databases. Sony further worked with the research team to help field the large survey described below. This is the first instance of this kind of cooperation between a game developer and an academic research team. It enabled a stratified sample rather than a convenience sample, helped establish trust with the potential survey takers, and most importantly, it allowed the linkage of survey data with unobtrusively collected game-based behavioral data.

Sampling and Procedure

Survey sampling in the world of MMOs requires focusing on the player as the unit of analysis, but being aware of the fact that players can maintain more than one character. These characters may reside on multiple servers. However, Williams et al. (2006) found that most players play one character most actively and consider it their "main." Thus, the first step in establishing the sampling frame was to examine the game databases to determine which of the player's characters was played the most frequently over the prior year. This "main" character became the sampling unit in the study and established the equivalent of residency for the player—their main character determined which server they belonged to. These characters then populated the sampling frame and were listed evenly across the four servers used in the study.

Players with a character within the frame were then invited to participate in the survey if they logged in during the survey window. There were no special efforts made to hide the nature of the survey as it was what it was labeled to be: a general study of who plays EverQuest II. However, the variables used in this study comprised less than 25% of the total questions. If the players agreed to participate, they were directed to a secure Web page. After giving informed consent, the players

completed the survey, which took about 25 minutes. Players were not offered a cash or prize incentive for their participation. Instead, they were promised a special virtual item that would be added to their in-game inventory as compensation. This item, the ''Greatstaff of the Sun Serpent'' was created by Sony for this unique use. It was considered desirable for players of all levels because of its rarity and its potency in combat and proved to be a valuable recruiting tool for the survey. Based on prior work in this area using cash incentives or no incentive (Williams, 2006; Yee, 2006a), the prediction was that the survey would take 1−2 weeks to fill to a cap of 7,000 respondents, but the total was reached in just over 2 days.

Participants were identified by an unseen account number in Sony's databases. These account numbers were used to link the survey data with the game's databases. The main measure derived from Sony's databases was total playing time, calculated by averaging the number of cumulative seconds of play over the playing window on each account. These data were then used to compute the players' average time in the game per week and were matched back to their entries from the survey. Because players could maintain multiple characters on their account, each character's playing time was collapsed into one meta-level play value for the player. These calculations occurred within the database and separate from the survey, so subjects were unaware that their time online, their server residence, or their character use were part of the research. All data remained anonymous.

Measures

To answer the research questions and hypotheses, the survey instrument used a variety of standard demographic measures. Players were asked for their age, gender, race, household income, education, sexuality, and religion using standard measures. Marginal groups were operationalized as members of minority populations based on race, income, and sexuality.

To measure RP, players were asked a series of questions involving the identity involvement with the character and the practices and motivations for RP. One question was used in the subsequent analysis, focused on the intensity of the player's identification with the character suggested by Bell (2001), ''Some players like to imagine that they are the character and they act and speak like the character would, rather than how they act and speak in their daily lives. Do you prefer to role play or not at all?'' One answer pole was set at ''I role play completely: My character is nothing like the real me, but I 'become' that character.'' The last pole was set as ''I don't role play at all—my character acts just like me.'' Since using one measure of a relatively new concept introduces validity concerns, players were also asked, ''How much would you rather be like your character than yourself?'' and Yee's series of MMO motivations questions (Yee, 2006b). One of the resulting factors from Yee's scale is ''immersion,'' which he describes as incorporating discovery, RP, and escapism. Because the major measure here is intended to detect character identification and RP, a successful measure of construct validity would show a high

correlation with the ''be like the character'' question and a slightly lower correlation with the more multifaceted Yee scale factor. That was the case, with the ''be like'' question yielding a correlation of .74 ($p < .001$) and the immersion factor yielding a correlation of .42 ($p < .001$).

To examine personal problems, players were asked whether they had ever been diagnosed with depression, anxiety, substance, behavioral addiction, attention-deficit disorder, or a learning disability. Question forms and comparative data were taken from national measures (Ipsos-Insight, 2007; Kessler, Chiu, Demler, & Walters, 2005; SAMHSA Office of Applied Studies, 2006), and asked the respondents whether they had ever been diagnosed with the given problem.[3] Other psychosocial measures included the revised UCLA Loneliness Scale (Russell, Peplau, & Cutrona, 1980) and the happiness measures used by Kraut et al. (2002). Lastly, players were asked how frequently they used common voice programs such as Skype, Ventrilo, or Teamspeak while playing.

Intergroup comparisons were made with analyses of variance (ANOVAs) in the case of continuous variables and with chi-square tests in the case of categorical variables. Because the groupwise comparisons did not consist of equally sized groups, post hoc significance tests in ANOVAs were checked for equal variances. One variable (age) did not have an equal variance across subgroups when checked with Levene's test of homogeneity. Therefore, to be conservative, in addition to a standard Bonferroni post hoc test, additional tests for age were done via Tamhane's, Dunett's, and the Games-Howell tests, all of which are appropriate in situations without equal variances. The worst, and thus most conservative, p value was used in significance reporting for age. Lastly, it is notable that with the large data set in use here, nearly all difference tests were statistically significant. Therefore, to allow for true substantive reporting, Cohen's d was also reported throughout. As a rough rule of thumb for Cohen's d, .20 and under is considered a small difference, .20−.50 moderate, and .50−.80 large.

Results

A correlation matrix for the major study variables is reported in Table 1.

The first research question called for a basic investigation into the frequency of RP. Players answered the stated question about RP, and the 7-point scale values are shown in Figure 1. The distribution showed that a large group of players finds a bright and clear separation between themselves and their character and engages in no RP at all. Another large cluster of players engages in some small amount of RP. However, given the fantasy nature of the genre, this is a very small bar to clear, and is not indicative of dedicated RP in the sense that Fine and others have explored. Only a very small percentage—5.01%—report being dedicated, or ''hard core'' role players (this finding is supported in Study 2 below). Thus, the answer to the research question is that very few are dedicated role players. Notably, the distribution of RP was even across the different server types as labeled by the game company, that is

Table 1. Correlations of Study 1 Variables

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Role play	—														
2. Age	0.03*	—													
3. Gender	0.05**	0.10**	—												
4. Education	0.03**	0.35**	0.04**	—											
5. Non-heterosexual	0.10**	−0.02*	0.14**	0.00	—										
6. Non-mainstream religion	0.12**	0.02	0.09**	0.01	0.15**	—									
7. Minority	0.08**	−0.08**	0.01	0.01	0.06**	0.05**	—								
8. Loneliness	0.07**	−0.08**	−0.08**	−0.10**	0.05**	0.01	0.03*	—							
9. Happiness	−0.05**	0.03**	0.00	0.03**	−0.08**	−0.02	−0.05**	−0.56**	—						
10. Physical impairment	0.06**	0.12**	0.08**	−0.01	0.08**	0.04**	0.04**	0.10**	−0.11**	—					
11. Depression	0.06**	0.03**	0.16**	−0.03*	0.11**	0.08**	−0.01	0.22**	−0.28**	0.21**	—				
12. Substance addiction	0.02	0.01	−0.06**	−0.05**	0.05**	0.01	0.06**	0.09**	−0.14**	0.10**	0.24**	—			
13. Behavioral addiction	0.04**	−0.04**	−0.04**	−0.05**	0.07**	0.00	0.11**	0.09**	−0.12**	0.10**	0.21**	0.40**	—		
14. ADD	0.05**	−0.10**	−0.02*	−0.07**	0.11**	0.04**	0.03*	0.08**	−0.09**	0.08**	0.26**	0.23**	0.24**	—	
15. Learning disability	0.07**	−0.04**	0.00	−0.07**	0.08**	0.05**	0.06**	0.11**	−0.10**	0.12**	0.18**	0.20**	0.25**	0.37**	—
16. VoIP use	−0.07**	−0.12**	−0.04**	−0.06**	−0.03*	−0.02	−0.01	−0.01	0.01	0.00	0.00	0.04**	0.04**	0.05**	0.03*

NOTE: $n = 6,953$; ADD = attention deficit disorder; VoIP = Voice Over Internet Protocol.
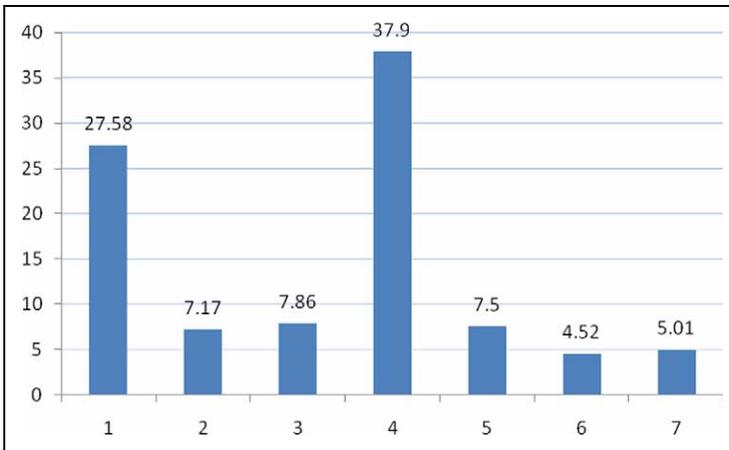* $p < .05$.
** $p < .01$.

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Figure 1. Role-playing distribution across the player base, by percentage. Answers to the question "Do you prefer to role play or not at all?" (1–7, least to most)

there were no more or fewer role players on "role playing" servers than on those labeled for other playing types.

The remainder of the analysis treats the three role-playing groups—those who report little or no RP (those who scored 1–3), those who engage in some RP (scoring 4–6), and those who role play exclusively (those who chose 7)—as distinct populations for statistical analysis using ANOVAs.

The second research question asked for the demographic profile of role players. Table 2 provides mean values of these variables based on the low, medium, and high role-playing subgroups. Compared to the low RP groups, high role players tend to be slightly younger, have a higher percentage of females, and to be slightly less well educated. Thus, the first hypothesis was not supported; younger players were in fact less likely to engage in RP.

The second hypothesis offered the rival explanation—that it was the less-accepted off-line groups who would engage in role play, not those negotiating identity issues associated with age. As Figure 2 shows, this explanation received strong support. Based on their sexuality, religious affiliation and racial group, the more RP the player engaged in, the more likely they were to be from the minority subgroup.

The third hypothesis addressed whether role players would be less likely to use voice systems for communication, and that they would be more motivated by the need to be immersed rather than the need to achieve or socialize. There was moderate support for the hypothesis. The mean values were statistically significantly different across the three RP groups, with more the high RP group ($M = 2.67$, $SD = 1.52$) somewhat less likely to use voice systems than the low RP group ($M =$

Table 2. Demographic Profile of Role-Play Subgroups

Variable	Low RP group	Medium RP group	High RP group	Between-groups test	Subgroup-based significance test value and Cohen's d		
					Low vs. medium	Medium vs. high	Low vs. high
Age	30.55 (9.68)	32.12 (9.67)	28.55 (10.36)	$F = 35.49$, $df = 2$, $p < .001$	$p < .001$, $d = .50$	$p < .001$, $d = 1.13$	$p < .005$, $d = .63$
Gender (% female)	0.17 (0.38)	0.21 (0.41)	0.25 (0.43)	$\chi^2 = 27.17$, $p < .001$, $df = 2$	$p < .001$, $d = .06$	n.s.	$p < .005$, $d = .13$
Education (seven categories)	3.55 (1.58)	3.70 (1.58)	3.37 (1.78)	$\chi^2. = 65.29$, $p < .001$, $df = 12$	$p < .001$, $d = .12$	$p < .005$, $d = .25$	n.s.

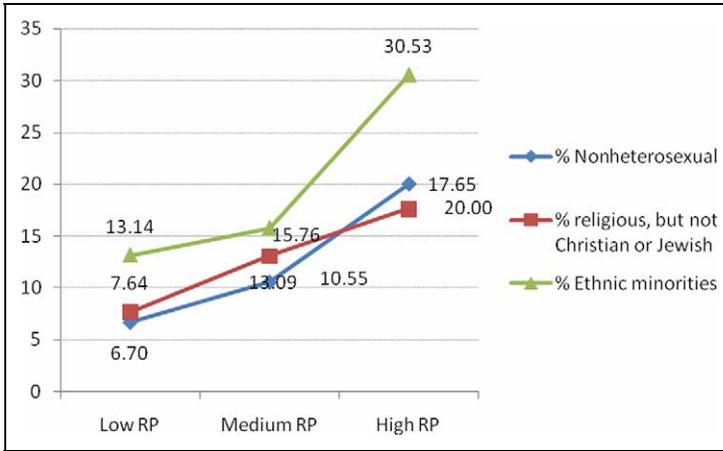NOTE: RP = role playing; n.s. = not significant.

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Figure 2. Role players are from marginalized groups. *Note.* Group sizes: Low RP *n* = 3,037, Medium RP *n* = 3,559, High RP *n* = 357. For sexual orientation, overall $\chi^2 = 73.52$, *df* = 2, *p* < .001, all between-group differences are significant, *p* < .001, *d* for low vs. high = .23. For non-mainstream religion, overall $\chi^2 = 67.36$, *df* = 2, *p* < .001 (groups were Christian or Jew vs. other); low vs. medium and high were both significant, *p* < .001, medium vs. high was significant, *p* < .05, *d* for low vs. high = .18. For minorities, overall $\chi^2 = 75.13$, *df* = 2, *p* < .001, low vs. medium significant, *p* < .01, all others significant, *p* < .001, *d* for low vs. high = .28.

2.99, *SD* = 1.17; between-group test: $\chi^2 = 49.77$, *p* < .001, *df* = 8; low vs. high RP, *p* < .001, *d* = .26).

The last research question asked whether role players would experience personal problems at a greater or lower rate than other players, and whether the most dedicated role players would experience the worst outcomes. ANOVAs found that there were no group-based differences for extroversion, or for having a mental condition that required medication, or for being diagnosed with anxiety. However, a wide range of other indicators revealed that more RP meant having physical, mental, and clinically diagnosed problems at a far worse rate than their counterparts (see Table 3). When compared to either the low or medium RP groups, the dedicated role players were more lonely, less happy, more likely to be disabled, and more likely to have been diagnosed with depression, substance addictions, behavioral addictions, attention-deficit disorder, and learning disabilities. These contrasts were both statistically significant and substantively ranged from medium to very large differences. Notably, these differences could not be tied to their amount of play. In fact, role players played less often than nonrole players, at a difference of more than 2 hr fewer per week compared to the low group (*F* = 10.40, *p* < .001, *df* = 6,576, *d* for low vs. high contrast = .52).

Table 3. Role Players and Personal Problems

Variable	Low RP group	Medium RP group	High RP group	Between-groups test	Subgroup-based significance test value and cohen's d		
					Low vs. medium	Medium vs. high	Low vs. high
UCLA Loneliness Scale (4–80 scale)	40.19 (9.70)	41.26 (9.34)	42.48 (10.10)	$F = 13.60$, $p < .001$, $df = 2$	$p < .001$, $d = .34$	n.s.	$p < .001$, $d = .73$
Happiness (2–14 scale)	10.95 (3.71)	10.69 (3.76)	10.28 (4.28)	$F = 7.23$, $p < .001$, $df = 2$	$p < .05$, $d = .13$	n.s.	$p < .05$, $d = .33$
% With a physical disability	7.76% (26.76%)	10.41% (30.55%)	14.24% (35.00%)	$\chi^2 = 22.21$, $p < .001$, $df = 2$	$p < .001$, $d = .49$	n.s.	$p < .001$, $d = 1.17$
% With depression	20.86% (40.63%)	23.79% (42.59%)	30.43% (46.08%)	$\chi^2 = 18.86$, $p < .001$, $df = 2$	$p < .05$, $d = .45$	$p < .05$, $d = 1.00$	$p < .001$, $d = 1.45$
% With substance addiction	5.80% (23.38%)	4.72% (21.22%)	10.12% (30.21%)	$\chi^2 = 17.99$, $p < .001$, $df = 2$	n.s.	$p < .001$, $d = 1.06$	$p < .005$, $d = 0.83$
% With behavioral addiction	3.47% (18.30%)	3.65% (18.76%)	9.48% (29.34%)	$\chi^2 = 29.48$, $p < .001$, $df = 2$	n.s.	$p < .001$, $d = 1.18$	$p < .001$, $d = 1.23$
Attention-deficit disorder	8.69% (28.18%)	9.95% (29.94%)	15.72% (36.46%)	$\chi^2 = 16.86$, $p < .001$, $df = 2$	n.s.	$p < .005$, $d = 1.00$	$p < .001$, $d = 1.23$
Learning disability	4.86% (21.50%)	5.98% (23.73%)	13.35% (34.07%)	$\chi^2 = 22.21$, $p < .001$, $df = 2$	$p < .01$, $d = 0.23$	$p < .05$, $d = 1.37$	$p < .001$, $d = 1.61$

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Study #2: An ethnographic exploration of role-playing culture and context

While the first study addressed who role plays and how common it is within the game population, the second examined the ''why?'' question with a deeper form of analysis. The goal of the second study was to develop a grounded qualitative account of role players to further investigate role-playing culture, to understand the context in which RP is performed in MMOs, and to examine the motivations and practices of role players. In addition, given the insights offered by the quantitative data, the ethnography was able to start off with a series of assumptions and directions for investigation. Chief among these were working knowledge of who role players tend to be, and that RP was more likely to originate out of some off-line situational or demographic factor than for identity exploration or negotiation. It also generated two key items about their backgrounds: first, that role players are likely to come from a marginalized group, and second, that they are more likely to have significant physical or personal challenges. Those starting facts offered an important background for interviewing and suggested that the ethnography take special care to both investigate these angles and be sensitive to players' real-life situations.

Method

Ethnography as a research practice allows researchers to understand the social world of its residents by participating in and observing local cultural practices; it is a useful methodological tool that can complement quantitative tools and allows researchers to comprehend the meanings people make of their social world (Hammersley & Atkinson, 1995). In the context of this study, sociocultural exploration took place within EverQuest II to reveal players' cultural understandings about RP in their lives. Through an unstructured observation inside and outside of game play, it was possible to examine behaviors—including role-playing performances—and to detail and describe the social life of role players, and the broader culture of RP (Johnson, 2000).

The intent of this study was to not only describe a role-playing culture but also to understand another way of life and what people might gain from their own engagement in this world. We attended in-world events that were organized by various guilds; social gatherings held in taverns, special events such as theatrical character performances, and observed and logged the role-playing chat channel. We spent over 150 hr in-world and in-character questing, leveling and interacting with the environment and role players, and allowing us to become ''insiders'' and to situate ourselves in a role-playing community (Wolcott, 1999).

Observing, detailing, describing, and interacting with the EQII world provided valuable knowledge. However, the awareness gained from the process of becoming insiders still situated the experience and knowledge from our standpoint as researchers, rather than the standpoint of the players. Thus, in addition to this participant

observation work, a series of guided, in-depth ethnographic interviews with active adult[4] role players was conducted solely by one author who was experienced and trained in ethnographic research. The interviewer asked questions about their lived experiences to understand the meaning of their actions and the events they participate in so that we may comprehend the perspective of role players more effectively (Spradley, 1979).

To recruit participants in the second study, an in-game text-chat message was posted to several in-game role-playing "channels" outlining the call for participants, and a call for participants was also posted on an active role-playing guild's online forum. This guild was aligned with Qeynos, which represents the morally "good" side of the game's mythology, and prided itself on its open and diverse membership.

Additionally, characters were randomly chosen from in-game role-playing channels and sent a direct text message asking whether they would be interested in participating in the research. Snowball sampling was also used, as some participants provided connections to other players who were interested in participating. In total, there were 21 responses to the call outs; 7 agreed to participate but were then unreachable when scheduling a time for the interview to take place, 1 was under the age of 18 and unable to participate, and 13 were fully interviewed. Prior to participating in the study, participants were provided with a hyperlink to an online consent form that introduced the researchers and our institutional affiliation and described the topic, purpose, and procedures of the study. Participants then agreed to participate by sending an in-game text message indicating they understood the consent form and were willing to participate in the study. The consent form also stated that character names would only be known to the interviewer. Accordingly, pseudonyms are used below.

The ethnographic interviews were between 30 and 90 min in length and took place either in-world via a one-to-one text "channel," or asynchronous in the online guild forum. The interviews were semistructured around two key areas: motivations (Why do individuals role-play online?) and meanings (What is the importance or significance of online role playing to individuals?). Transcripts were read and analyzed, and trends and patterns are reported below, along with representative quotations.

Participants in the ethnographic interviews were all English speaking and between the ages of 19 and 44. Of the thirteen participants, 9 were male and 4 were female. Five participants played over 20 hr per week on average, 6 of the 13 spending on average between 11 and 20 hr per week in game, and 2 played between 5 and 10 hr per week on average. Most of the participants had considerable experience with RP; 7 of the 13 had role played between 6 and 10 years, and 4 for over 11 years. In comparison to the broader survey data, this subsample was slightly more female, played slightly less, and was near the age mean of the heavy role-playing subgroup.

Recruiting individuals to participate in the study was a challenge only overcome by attaining insider status. Legitimacy was an issue, as calls for participation were posted to channels; here we were not only competing for attention with the ongoing conversations but also chat-channel spam. One participant asked outright whether the

research was legitimate and not spam or pornography when given the link to the online consent form. Participants also "tested" the interviewer to see whether it was a real person with true research motivations. There was much more success in recruitment and participation when the interviewer had established an "insider" status within the community, and participants suggested others who might be interested in an interview.

Results

Motivations to Role Play

The ethnographic interviews found patterns and motivations consistent with the survey measures from Study 1, offering further validity for those findings. To begin, RP was indeed a practice of a small minority of players, typically segregated from the larger population via location or medium of communication. The ethnographic interviews showed that immersion was a key motivator to role play, with social motivations a close second. Of the 13 participants, 12 role played for immersion. In keeping with Yee's questions, the players volunteered two central elements of immersion. The first was a desire to construct character histories and fantasies within the game. Consistent with the first study, this identity play revolved more around a person being able to express things they were socially constrained from doing off-line, rather than a journey to discover their true selves. A typical comment suggests that players constructed characters as a space for role freedom:

> Well, in RL I am who I am … and I can't be a Sarnak or a Ratonga. With RP, I can be whoever I want. If I want to be an annoying fairy, I can. If I want to be a mean Iksar, I can. Just gives me an opportunity to be in a world that I could never be in, in RL. (Kathy, age 20)

Another made a conscious link about how that experimentation might bleed over into their off-line life:

> In role playing I am able to play characters similar to myself—but different in some ways. Take one Kerran character—he is similar to me in some ways, but even more outgoing and VERY flirty in a sincere way, just like I would be if I was flirty in RL—but in RL I am NOT flirty. By "trying out" some of these characteristics, I sometimes find aspects of the character I like and I might try to weave them into my daily behaviour. Other things, of course, I throw out that don't work or aren't practical. IE- I'm married, so being flirty all the time isn't practical at all;) (Frank, age 28)

Constructing character histories and fantasies within the game were not necessarily solitary practices. One participant noted that these histories were often created socially:

[Role Playing] is way better than TV, it's interactive. The stories are GREAT. It's a challenge. It's like impromptu acting, and I love my characters. I really do. I think they are interesting and it makes me happy when other people enjoy them too. People want to advance THEIR storylines; they want to get to feel like a hero once in a while. It's fun to help 'em. And it makes me laugh. A lot. (Susan, age 30)

The second element of immersion was escapism. Here, responses focused on the role-playing world as a place to relax and escape from real life. These comments noted positive escapes—release from daily hassles. No responses mentioned the avoidance of real-life issues through role-playing escape. A typical response was:

For a couple of hours each day, I can stop being the construction office secretary and part-time grocery clerk. I can stop being the single mom with two kids who hate cleaning up after themselves and won't eat their veggies, and I can be someone else entirely. I get out of it some peace of mind and a renewed sense of creativity. (Tanya, age 35)

Another participant similarly highlighted the relaxation of RP:

Role play is all about telling a story, and feeling as tho you could be there. What I get is relaxation. I love being able to let my mind wander into the lore, and release my imagination. (Victor, age 35)

Again, although these are role-playing acts in the narrowest sense, both respondents suggest that their ''real'' selves are not the people they would like to be. Each used RP to escape the bonds their off-line identity imposed on them and to express a sense of creativity they did not have in their primary off-line roles.

As Yee (2006b) notes in response to Bartle's (1996) player types, motivations for play in online games are not monolithic and often overlap. Of the 13 participants, 7 noted that both immersion and social interaction were motivators for their RP. Perhaps this is not entirely surprising given that RP is not a solitary activity. Socializing with other characters via casual chat in channels or as they are passing by other players, helping others, and making friends is an important role-playing motivator. One participant gave an example:

There is RP that is just kinda everyday, walking around, acting and talking like your character, chatting in guild crystal or channels, just responding to stuff that happens. There is random RP, where you just go around in heavily populated places and run up and talk to people IC at random . . . I really love it . . . (Susan, age 30)

Participants also felt that forming relationships and building on these casual acquaintances and chatting were important to them. This social element may be one hedge against total immersion in that even though the players are in character, they recognize the ''real'' element of interacting with other people:

> All interpersonal relations we have with -real- people, whether online or off, fictional or not, give us material to learn from and develop ourselves. Those who use the excuse "it is just a game" are often using it to hide from something, or from ignorance. It may be just a game, but if I hurt someone—it hurts a real person whether or not I see them crying, or see what it does to their life, it is real (Frank, age 28)

Unsurprisingly then, some of these virtual relationships spilled into the physical world; as friendships were formed and strengthened through role-playing activities, these encounters lead to real-world relationships:

> Many of my RL friends I met on EQ II. I counted once. I think I may have met as many as 20 online friends in RL (Susan, age 30)

Some of this virtual spillover was guild-based:

> I sometimes hang out with my guild mates, which crosses both education and economic barriers. The guild leaders live nearby and I visit them seasonally. (Nathan, age 44)

Without more precise sampling, it is not clear how common this is, but the findings here suggest a higher rate of real-world meetings than that reported among all MMO players by Williams et al. (2006). Another respondent made the point even more emphatically:

Researcher: Do any of your friends in the 'real' world role play?

Victor: Yes

Researcher: And do you 'hang out' here often with them?

Victor: Every day, but also, the friends I meet in game, those friendships translate to the real world, or I do not keep them

Researcher: oh yes? So you have made a lot of in-game friends and these spill into RL? Do you talk to them outside the game then—your in-world friends?

Victor: Yes, any person I RP with, and become friends with, we talk on the phone, visit each other IRL and so on, if folks are not willing to transition, I do not keep them around, I view that is unhealthy (Victor, age 35)

Meanings of RP

While our survey data indicated heavy role players are more likely to have negative psychosocial indicators, we must allow individuals to "tell their story" to fully comprehend the meanings that role players make from their experiences, and the implications of these meanings (Wolcott, 1999). The ethnographic interviews revealed three key areas of meaning making that suggested RP was a constructive element in their daily lives, enhancing creativity, building skills, and functioning as a health coping mechanism.

First, RP with other people and characters in MMOs takes considerable imagination and creativity. Akin to drama and performance, role players become actors of a persona they create not for a single performance, but one (and often multiple characters) they maintain, nurture, and develop indefinitely. RP is ultimately a performance, and to set the stage for these performances, there are various props and tools available in MMOs for the production. Consistent with the survey data, the ethnographic interviews revealed that role players rarely use voice chat. However, their performances included textual interaction (writing the performance with other avatars and engaging with them), gestures (the avatar waves or curtsies), and emotes (the avatar smiles or frowns). These character performances also took place outside the game in online forums, where participants spent time interacting with others and writing detailed character stories and histories to complement their RP. Of the 13 participants, 8 stated that RP exercised their imaginations and provided a fruitful and innovative haven for creativity, which was an important benefit to them both inside and outside the game. Typical was:

> [Role playing has] . . . inspired some of the best writing I've ever done. It's given me great stories, some real shiver and/or excitement moments. It can really get to your emotions, just like a well-done book or movie—but it's even better b/c you and your buddies are doing it yourself . . . (Susan, age 30)

Another participant similarly noted how RP hones the imagination:

> [Role playing] definitely made my imagination sharper, really built my appreciation for the use and expression of language. I read more carefully now, actively studying the way the writer expresses himself, you know? (Mary, age 27)

In addition to enhancing creativity and imagination, 6 of the 13 participants also noted the practical benefits of RP. For example, one participant played EQII in French to develop language skills, while two others noted how their typing proficiency had increased significantly. Moreover, one participant noted the benefit of role-playing activities with respect to leadership and organizational skills:

> Also, through my experience in guilds and leadership opportunities, it's affected my own understanding of groups and organizations in RL and given me experience that is applicable in RL work, organizations, etc. . . . I have found that interpersonal relationships in a guild organization are often identical with the Church organization—the reasons guilds form, break up, how conflicts are handled—all the same. (Frank, age 28)

Lastly, as noted in the first study, considerable research on online activities has situated Internet use and online gaming as potentially problematic and harmful to heavy

users. The question for the role players—already identified as a population with significant difficulties off-line—was whether their escapist behaviors were a positive outlet, or merely a way to avoid dealing with difficult issues. In the interviews reported here, more than half of the participants volunteered RP as a positive venue for escape from the rigors of RL, noting that RP was a positive outlet for RL stressors. One participant noted how RP worked not for total escape, but rather as a relaxing break:

Victor: it is a game, the rp has little effect on my life as a whole, but as a stress release it does help me unwind.

Researcher: like take your mind of RL stress?

Victor: not take my mind off of it, more of allowing me to enjoy something and relax, so then I can approach the issue that gives me stress in a cool and calm manner

Another participant talked about how RP is a therapeutic tool:

Kathy: I can be creative, and I can "be" someone that I would never be in RL. It's kind of therapeutic to be honest. You can take RL situations, and work them into your character.

Researcher: Can you tell me a little more about what you mean by therapeutic? Or tell me more about how that works for you.

Kathy: Well . . . you know how some song writers write their emotions in their songs, and it gets everything off their chest and they've kind of told the world?

Researcher: nods

Researcher: So you feel that rp'ing helps you work out RL emotions and stress?

Kathy: Yep, not ALL the time. But a lot of the time for sure.

Ian, age 24, tells a similar story:

> It's definitely a stress reliever to be able to log on and be someone else for a while. I get to forget the outside world for a while and drop the face I generally have to keep at work working on a helpdesk. So it's huge for stress relief.

One participant told an interesting story of the meaning and significance of RP in his life. Suffering from depression and severe anxiety to the point where he often could not leave his house, his physician suggested online social interaction in MMOs as a way to have a social life. In another echo of the finding of RP enabling people to be their true self, his response speaks to using RP as a way to ironically bring his "back stage" out to the "front stage." His "performance" sounded closer to his true identity than his "real" life. As he told us:

> Folks with my prob often feel isolated, roleplayin gives you a way to bypass that !# . . . .
> In roleplay . . . you can "Be yourself" Not that I'm an Ogre deep down, just kinda . . .
> ya don't worry about what holds you back irl . . . . You socially interact with real folks,
> chat, joke etc . . . stuff that right now, I 'ave REAL problems doin [that] in "The real
> world." At present I have a panic attack if I go down to the local shops. Here, you can
> "forget" that side . . . . For folks like me . . . it's a true lifeline, a connection to

"normal" folks, a place where ya can forget whatever probs you 'ave [in] "rl" Drs should prescribe this kinda game to folks like me:) (Gary, age 42)

Some participants noted various negative aspects of RP, primarily related to stresses caused by other players violating group norms. These were players using shorthand "l33t" speak, those looking for cyber sex, or those breaking the conventions of the magic circle. This was the case for one participant who was a guild leader:

The game at times has caused me and my hubby too much stress or made us angry. But that has mostly been [out of character] stuff. So I'd say that is the GAME, but not the RP ... and also ... well, as guild leaders, I've had people so upset by other people they wanted to quit the game or they called me crying. (Susan, age 30)

Others discussed how potentially time-consuming game play and RP can be, yet noted they were able to recognize this and maintain a balance:

At one point ... my grades suffered. I had to step back, get control of how, when, and where I role play until I could maintain it and RL properly (Randy, age 27)

Participants in this study talked primarily about the positive implications of role-playing activities in their lives. With the exceptions of the two previous comments, few volunteered any negative outcomes related to their play. And, as noted above, Study 1 reported that role players spent fewer hours per week playing than their counterparts. Role players situated their experiences into their daily lives and actively negotiated the meaning and significance of their role-playing activities. For most of the participants in this study, RP was clearly important to them—both online and off-line, whether they felt it was a healthy outlet, or escape for off-line problems and stressors, a creative tool to exercise the imagination, or a means to build organizational skills and improve writing and typing proficiencies.

Discussion

A two-part study of role players identified their basic demographics, motivations, and play styles, followed by a deeper ethnographic investigation of the context of their play and experiences. The results suggested that role players are a relatively small fraction of the game world's population and that they skew younger and more female than the general EQII population. Role players also tend to come from marginalized off-line groups and to have a disproportionately high level of psychosocial and health problems. They appear to role play more to express their true, often suppressed, identities than to negotiate new ones. In keeping with their desire for immersion, they use voice communication less than others. On closer examination, these players also have a rich social fabric in which they display significant creativity. Role players use their spaces as a therapeutic release from their daily lives, and

often build genuine communities. The implications of the findings for theory and research methodology will be discussed below.

Predictions based on the presentation of self were supported for marginalized groups but not as a result of age in the way that Erikson's (1959) human development predicted. Racial minorities, non-heterosexuals and non-mainstream religious groups were more likely to be high role players. This supports the notion that members of marginalized groups may not feel accepted in their daily lives and that role-playing spaces allow them to be accepted online. It remains to be seen whether this move online is ultimately positive for these groups or for society. By spending less time in off-line social life, these players gain acceptance among each other but perhaps at the cost of integration into the larger society. In turn, social diversity may suffer if these groups leave the mainstream. Future research might test this speculation. In contrast to the minority groups, the findings for age did not support the hypothesis. When combined with the ethnographic evidence, the picture that emerges is one of older players using role play for escapism and creativity rather than identity negotiation. Conversely, since the younger players had similar levels of psychosocial problems, they may not be using role play for identity formation either. Further investigation among young players would be useful to investigate this speculation.

Predictions based on theories of self-disclosure and presentation were largely supported by the data. High role players did indeed use voice communication at a lower rate than low role players. This was a "medium-sized" difference by Cohen's *d* calculations. Based on the findings here and in Williams, Caplan, & Xiong (2007), richer communications media have a significant bearing on the social processes in online groups. In this study, voice use was purposely lowered due to a very particular playing style. The Williams study would suggest that this might have led the role-playing groups to experience lower social bonds and connections because of the relative poorness of the medium; text-only offers fewer personal cues and so presumably less depth in the resulting relationships. However, the ethnographic evidence here pointed to very strong social connections between fellow role players. This may be explained by the central point of Walther's SIP theory in that users of CMC will adapt to the medium and eventually transcend its limitations (Walther, Loh, & Granka, 2005). Although the ethnographic sample was too small to offer any real power, there were a large proportion of cases where online connections among the role players lead to real off-line ties. The rate found here appears to be higher than that found in larger samples of the general MMO population (Williams et al., 2006). So, there is clearly a qualitative difference in the practices of RP that makes the social interactions different—and likely richer—than mainstream players.

This difference may also be attributable to the very different kinds of people who seek and engage in role play. The survey data showed that role players skewed much more female and younger than the general population. The high levels of personal problems and diagnosed psychological conditions suggest that this is a troubled

group. One explanation for this connection might be found in the self-disclosure work of Bargh, McKenna and Fitzsimmons (2002). In their early work on Internet friendships, they found that it was not necessarily the outgoing who had the richest relationships, but those who were willing to share their true selves. This may be a real irony of RP—people whose main practice is pretending to be someone else may be also engaging in opening up so much through this practice that they are driving the very self-disclosure that leads to true social bonds. If this is indeed the case, then perhaps RP is a significant therapeutic tool for the disaffected, marginalized, or psychologically troubled. Given the case studies in Turkle (1995), this seems very likely. However, her studies also turned up several cases where the RP did not involve self-disclosure and instead was a dead end of escapism without true, open interactions. Since the handful of ethnographies here did not show evidence of this, but Turkle's work did, this remains an open question. We speculate that the self-disclosure avenue might be a fruitful one for future research on the topic.

There are also a few practical conclusions for those developing or managing online spaces where people may role play. First, role players appear to join and play in their preferred style whether the game suggests and enables it or not. In keeping with SIP theory (Walther et al., 2005), it was clear that role players adapted to the medium at hand. The ethnography revealed that players who did not want to mix with the general game population were able to use their private channels to communicate. And when they wished to add a more physical dimension to their role-playing interactions, they used invitation-only taverns to sequester themselves. This suggests that developers can enable these segregations by building in tools and boundaries for such players, but also that many of the players will likely find ways to separate themselves regardless. This may alleviate the tensions between the populations that concerned Burn and Carr (2003).

Limitations

By choosing complementary methods, the intent of the studies was to offer both the breadth of a large sample with the depth of ethnography. And, by using unobtrusive measures for time played, the study was able to report those data with confidence. Still, the survey was a cross-sectional instrument, and so was unable to demonstrate causal relationships. We cannot know, for instance, if RP leads to psychosocial harms, or vice versa—although the interviews strongly suggest the latter. The deep interviews did not come with a large or random sample, and so we cannot make generalizable claims with them. Still, the combination of the two methods fulfills Williams' charge to engage in more cross-methodological triangulation in games research (Williams, 2005). Also, the addition of the ethnography clearly suggested that RP did not lead to negative psychosocial outcomes. With only the survey data, we would have speculated that the role play might be causing these problems. Nevertheless, further research should investigate more directly causal models of role play outcomes. To control for the possibility of positive life experiences leading to

role play, an experimental or some other time-based methodology would be helpful. Similarly, although the sample here is unusually strong and large, we cannot say whether these same phenomena are present in other online games. The prevalence of the fantasy role-playing genre suggests that it may be, but there may be nuances and features of this particular game that might yield different outcomes than another. As researchers have noted (Williams, 2005), generalizability from game to game is not as simple as comparing television shows or films.

Conclusion

The data here—a combination of quantitative and qualitative—come together to paint a picture of the role-playing population as a small, vibrant, and unique class of game players. Indeed, these players are often playing their own game, largely independent from the other players and the larger world they populate. Knowing that this population exists and is different, future work should consider them separate from other players. Studies of virtual worlds would do well to consider controlling for RP or engaging in sub-analysis. Folding them into the general population would skew many findings, starting at least with the demographic and psychosocial differences shown here, but possibly extending into other measures.

What the present findings also demonstrate is that the theoretical frames of self-presentation are very useful in studying these new (and often quite strange) online spaces. Theories of Goffman and Meyrowitz were all developed long before computer networks, let alone avatar-driven socially networked game environments. Still, their continued usefulness points to the power of these theories as much as it points to the need to apply them carefully in new media. The social contexts, code, and architectures of online spaces are not the same as off-line space, and so these theories needed some translation and adaptation for this new medium; considering the CMC implications of the media here was crucial in implementing these theories.

The current work, when combined with recent findings on avatar psychology (Bailenson, Beall, Blascovich, Loomis, & Turk, 2005; Yee & Bailenson, 2007), suggests that if we carefully consider the medium-based effects of online spaces, we will see a wide range of everyday social behaviors that will translate into virtual worlds. Avatars, elves, wizards, or otherwise, there are real people behind the screens. And after allowing for the particular mediation of a given virtual world, those people continue to behave in predictable, very human ways.

Notes

1. The awkward acronym ''MMORPG'' stands for massively multiplayer online role playing game, but since role playing has become a smaller focus of these titles, many in the industry and academia use the shorter ''MMO.''
2. Data were taken from White's ongoing chart of MMO subscriptions, which provides a genre-based breakdown of the industry with the categories Fantasy RPG, social/puzzle,

sci-fi/superhero, and combat simulation. These data were updated in April 2008 and were accessed from http://mmogdata.voig.com/ on August 3, 2008.

3. The Kessler et al (2005) data were for those 18 years and older.

4. The protocol for the field research was submitted to an IRB committee. We stipulated in our application that participants be over the age of 18 to avoid the need for parental permission to participate in the study.

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