The Ideal Elf: Identity Exploration in World of Warcraft

KATHERINE BESSIÈRE, M.A., A. FLEMING SEAY, Ph.D., and SARA KIESLER, Ph.D.

ABSTRACT

In this study, we examine the identity exploration possibilities presented by online multiplayer games in which players use graphics tools and character-creation software to construct an avatar, or character. We predicted World of Warcraft players would create their main character more similar to their ideal self than the players themselves were. Our results support this idea; a sample of players rated their character as having more favorable attributes that were more favorable than their own self-rated attributes. This trend was stronger among those with lower psychological well-being, who rated themselves comparatively lower than they rated their character. Our results suggest that the game world allows players the freedom to create successful virtual selves regardless of the constraints of their actual situation.

INTRODUCTION

THE MASSIVELY MULTIPLAYER online role-playing game (MMORPG) is a persistent, immersive online world in which people create and enact characters who pursue adventure, success in war, and other social and nonsocial goals. Like quilting and reality TV, MMORPGs are entertaining and provide an escape from everyday cares.[1,2] The games involve competition and collaborations that enhance gamers' enjoyment.[3] The games also offer players the opportunity for personal expression and competence building through the construction of their character and the character's achievement over time. In the current research, we focus on this last, potentially self-enhancing value of MMORPGs. We report survey results from a sample of players that suggest the players' characters express aspects of the players' ideal selves with implications for their sense of well-being.

Character and identity in MMORPGs

MMORPGs have several critical features that affect players' psychological experience, among which are the characters that players create as an embodied representation of themselves. As players gain experience in the game, their characters accumulate knowledge, skills, and resources, gaining instrumental value over time. Players also feel psychologically connected to their character, often keeping the same one for months or years. Characters also are the medium through which players experience social interaction in the game. MMORPGs are intensely competitive, often in (virtually) violent ways involving death and destruction, and characters cannot survive alone. Players rely on other players' characters for training, information, and resources, forming groups and intergroup collaborations. Players' reliance on others gives rise to robust communities in which players transact their relationships through their virtual characters not only in the game but also through instant messaging, Web forums, e-mail, and voice over IP networks.

Sherry Turkle[4] has argued that online environments offer people the option of creating multiple representations of themselves and exploring new aspects of themselves (see also Reid[5]). Previous research on online groups suggests that in some cases

the representations people make of themselves on-line are an amalgamation of their actual and ideal selves—that is, that the virtual self is a somewhat idealized actual self.[6,7] From these ideas, we argue that MMORPGs are a mode by which the player, through a constructed character, can enact aspects of his or her ideal self—the physical or psychological self the player wishes to be. For instance, a young player can create a character who is more mature, braver, stronger, or more outgoing than the player feels he himself is. This fantasy-creation process is supported by the fact that the player has an audience and collaborators who have no prior knowledge of the player or his real-life situation.

We propose that those who are dissatisfied with aspects of themselves are more likely than those who are content with the way they are to engage in virtual self-enhancement through their character. Some evidence suggests that those with a more marginalized self-identity seek affirmation in their use of the Internet,[7] and those scoring higher in depression are more likely to use the Internet for escape.[8] The chance to exist in a persistent online world where their character can interact with others freely and anonymously may give the former group a means to escape poor self-evaluation by eschewing negative traits and enacting a better virtual self.

Character creation in World of Warcraft

This study was conducted among players of a popular MMORPG titled World of Warcraft (WoW). In WoW, each player creates at least one character (most players have one primary character) that serves as the player's physical representative in the digital world. The character-creation process involves making decisions about the appearance, profession, and personality of the character. Once created, the character travels around the virtual world, gaining skills, experience, and riches and defeating monsters, discovering new locations, and interacting with other players' characters. Players are referred to by their character's name, and they interact with others as that character. This process and the anonymity offered by the game allows players, as their character, to escape real-world norms and expectations and to act out roles and try out personas that range from enhanced versions of their real-life self to alter-egos who behave in reprehensible ways. In these respects, WoW players' characters are virtual selves.

Hypotheses

We predicted, first, that WoW players would create characters who represent aspects of both themselves and their ideal selves. In other words, the difference between the attributes of a player's virtual (character) and ideal selves, henceforth called the *character discrepancy*, will be smaller than the difference between the attributes of a player's real and ideal selves, henceforth called the *self discrepancy*.

Hypothesis 1: Players will view their character as being more similar to their ideal self than they themselves are, thus making the character discrepancy smaller than the self discrepancy.

Based on previous research, we also argued that those with poorer psychological well-being and larger self discrepancies would be more likely to idealize their character.

Hypothesis 2: Those scoring less positively on measures of psychological well-being will create characters who are closer to their ideal self and less like their actual self than will those scoring more positively on measures of psychological well-being.

METHOD

We administered a survey via the Internet to a sample of players of WoW as part of a laboratory study of the game. E-mails soliciting participation in the online survey were sent to a listserv at a local university and to a local gaming group. Participants received no compensation for completing this survey.

Participants

Sixty-eight participants responded to the e-mail query for WoW players and subsequently completed the survey. From the answers to filtering questions about their play, we determined that 17 respondents were not WoW players. They were dropped from the sample, leaving 51 valid participants. The valid participants' ages ranged from 18 to 27 years old with a mean of 21 years. Participants were primarily male (43 men, 8 women).

Measures

The survey was conducted in the spring of 2005. Respondents were asked a battery of questions about WoW, their actual self, their character, and their ideal self. An adjective rating method, a version of the Big Five Personality Inventory, was used to assess the different self and character views.[9] The Big Five traits consist of 44 items in five categories: conscientiousness (e.g., thorough, reliable, orga-

nized; Cronbach's $\alpha = 0.88$), extraversion (e.g., talkative, energetic, assertive; Cronbach's $\alpha = 0.87$), neuroticism (depressed, worried, nervous; Cronbach's $\alpha = 0.85$), agreeableness (e.g., trusting, forgiving, kind; Cronbach's $\alpha = 0.69$), and openness to experience (e.g., creative, artistic, inventive; Cronbach's $\alpha = 0.82$). Participants rated how similar each personality characteristic was to their actual and ideal selves. They used the same rating scale to evaluate their primary WoW character. Each measure (actual self, ideal self, and character ratings) was separated by a battery of other questions on different pages to encourage independence of responses.

When the participants rated their actual self, the question was worded, "Please think of yourself and answer the following questions. 'I see myself as someone who _____.' " When they rated their ideal self, they were told, "Now think of yourself as you would like to be, ideally, and answer the following questions. 'Ideally, I would like to be someone who _____.' " When they rated their main WoW character, the question was worded, "Please think of your main character in World of Warcraft and answer the following questions. 'I see my main character in World of Warcraft as someone who _____.' " Participants rated themselves and their character on the 44 characteristics using seven-point Likert-type scales ranging from "disagree strongly'" to "agree strongly."

To measure psychological well-being, we used two measures. One measure was the 12-item Center for Epidemiologic Studies Depression Scale (CES-D).[10] Participants reported how frequently in the past week they had experienced symptoms of depression, including "I felt that everything I did was an effort," "My sleep was restless," and "I had trouble keeping my mind on what I was doing" (Cronbach's $\alpha = 0.60$). The second measure was a subset of items from the Positive Affect Negative Affect Scale (PANAS).[11] Eleven items indicate the participant's current confidence in his or her abilities and intelligence, or self-esteem (Cronbach's $\alpha = 0.85$). These two measures, depression and self-esteem, were not correlated with each other in any meaningful way ($r = 0.30$).

RESULTS

Our first prediction was that the character discrepancy would be smaller than the self discrepancy. We began this analysis by verifying that players created their character more like themselves than like other players' selves. We found the expected main effect showing that each participant's character was more similar to the participant's actual self than to a random other participant's actual self ($F [1, 36] = 5.3$, $p = 0.02$).

Next we turned to the question of whether a player's character was viewed as more ideal than the player's actual self. We tested this hypothesis using a paired t-test to examine whether the differences between the self discrepancy and the character discrepancy were significant. The hypothesis was supported for three of the five personality dimensions: conscientiousness (paired $t = 5$, $p < 0.001$), extraversion (paired $t = 3.2$, $p < 0.01$, and neuroticism (paired $t = 4.89$, $p < 0.0001$). These effects can be seen in Figure 1.

The hypothesis was not supported for the personality dimension of agreeableness. There was no difference between agreeableness ratings of the actual self and the virtual character (means: actual = 3.56, character = 3.60, ideal = 4.0). The hypothesis also was not supported for the dimension openness to experience, a measure of artistic talent, creativity, and reflection. Instead, the character rating for openness to experience was lower than ratings of either the actual or the ideal self, and the character discrepancy was significantly larger than the self discrepancy (paired $t = 3.8$, $p < 0.001$). Although unexpected, this result makes sense. Characters in WoW typically do not enact a creative role; they act at the behest of the player. These results suggest that participants did not simply rate their characters positively across all personality dimensions but did so selectively for the Big Five characteristics most relevant to the virtual world.

Our second hypothesis was that those with poorer psychological well-being would be more likely to see their character as realizing aspects of their ideal self. If so, there should be an interaction between players' psychological well-being and their discrepancy scores. To test this hypothesis, we conducted mixed-model analyses of variance on the personality dimensions. The target of the rating (actual self, ideal self, character) is the within-subjects variable, and level of well-being (depression or self-esteem) is a continuous between-subjects variable.

Using depression scores to group participants, the hypothesis was supported for three of the Big Five personality dimensions. When participants rated their own or their character's conscientiousness, there was a main effect (such that their character ratings fell between their actual and ideal self ratings; $F [2, 89] = 50$, $p < 0.001$), a main effect of level of depression (such that ratings of conscientiousness by those high in depression were lower;
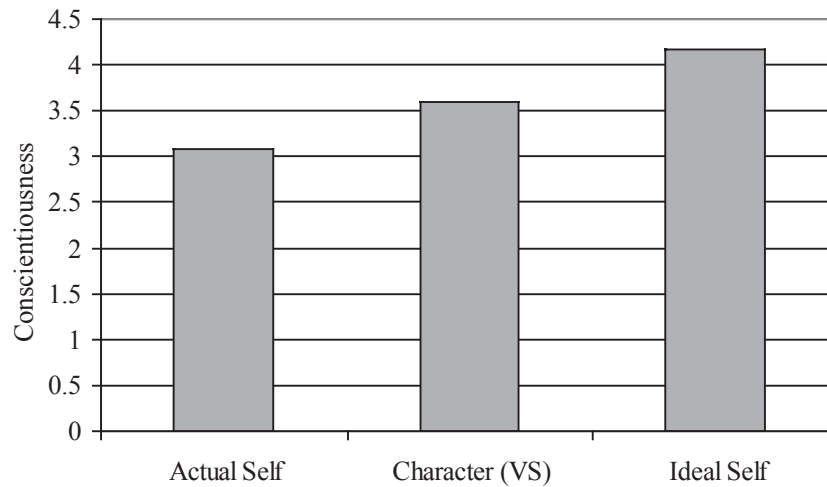
FIG. 1. Big Five personality ratings of participants' actual self, ideal self, and character. Figure shows ratings of conscientiousness; other trait ratings are similar; see text.

F [1, 46] = 9.3, $p < 0.01$), and also a significant interaction such that those with higher depression showed a significantly larger disparity between their self discrepancy and character discrepancy (F [2, 92] = 5.3, $p < 0.01$). Similarly, the main effects and interaction were significant for neuroticism (main effect of rating target, F [2, 92] = 57, $p < 0.001$; main effect of depression, F [2, 46] = 12, $p < 0.01$; interaction F [2, 92] = 8.7, $p < 0.001$) and for agreeableness (main effect of rating target, F [2, 89] = 24, $p < 0.001$; main effect of depression, F [2, 47] = 2.8, $p < 0.10$; interaction F [2, 89] = 4.7, p = 0.01). The first of these interaction effects is illustrated in Figure 2a, using the depression scores split at the median into high and low depression groups and showing effects on ratings of actual, ideal, and character conscientiousness. The figure uses line graphs so that the slopes for both groups can be seen easily.

a. Participants divided into groups scoring above and below the median of depression.
b. Participants divided into groups scoring above and below the median of self-esteem.

From Figure 2a, it can be seen that the reason for the significant interaction effect derives from two phenomena. First, those with lower depression scores do not rate their character as more ideal than they rate their actual self. Only those with higher depression scores do so. Second, both groups rate their character as equally close to their ideal self. Thus, there is no evidence that the characters of those with high depression scores have different traits from the characters of those with low depres-

sion scores. Nor is there any evidence that their ideal selves differ. Instead, it seems that those with high depression scores, as compared with low depression scores, (a) have much lower actual-self views and (b) create characters who are equally close to their ideal. Those with high depression scores thus create characters who are equivalent to the actual-self scores of those who have lower depression scores.

We found a similar pattern using self-esteem as the moderator variable. Hypothesis 2 was confirmed with significant interaction effects for four of the Big Five personality dimensions: conscientiousness (F [2, 89] = 4.7, $p = 0.01$), neuroticism (F [2, 89] = 3.6, $p < 0.05$), agreeableness (F [2, 86] = 4.9, $p = 0.001$), and openness to experience (F [2, 89] = 2.9, $p = 0.05$). Figure 2b shows the pattern, using conscientiousness as an example. As when depression is the moderator variable, the reason for the interaction is that those with low self-esteem scores had much lower actual-self ratings but rated their character as close to their ideal as did those with high self-esteem.

DISCUSSION

Our data suggest that MMORPG virtual worlds offer players the opportunity to create idealized characters as virtual, alternative selves. On average, participants rated their virtual character as being more conscientious, extraverted, and less neurotic than they themselves were. Furthermore, these trends were more prominent among those who
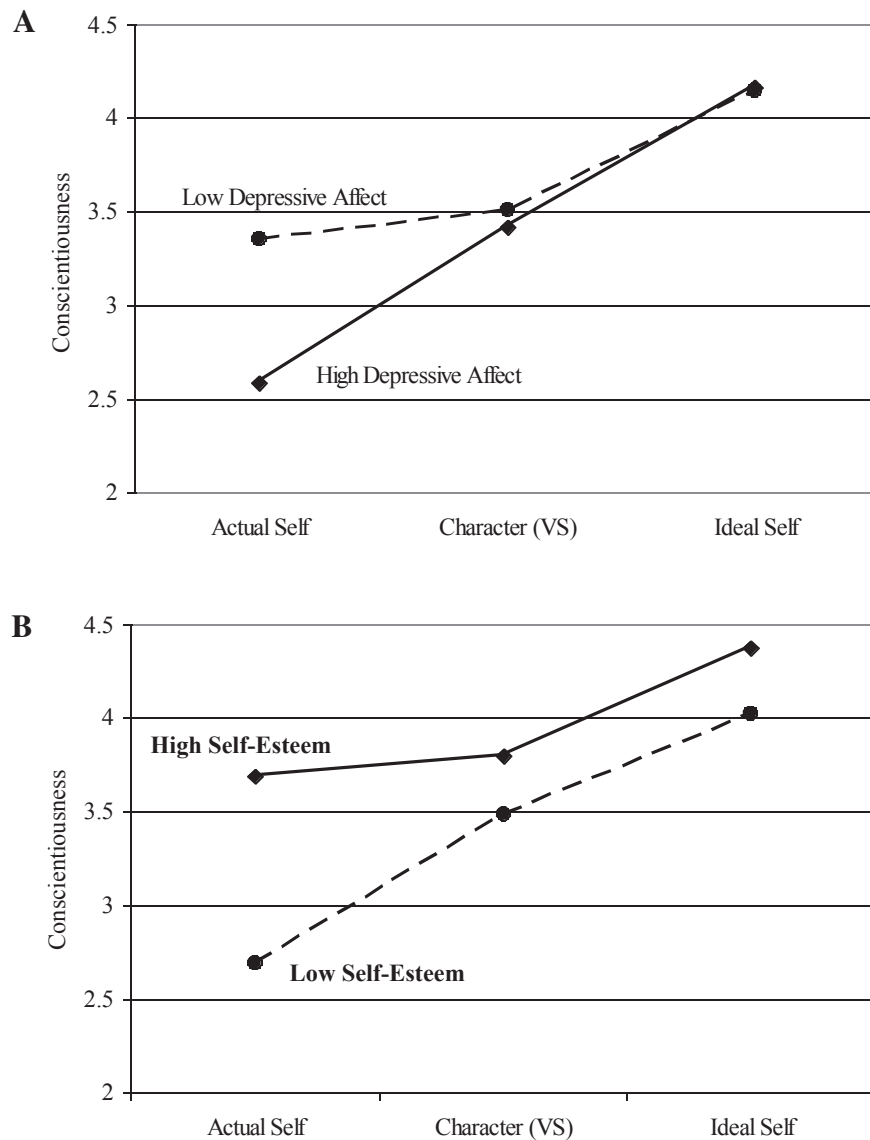
A

B

FIG. 2. Big Five personality ratings of participants' actual self, ideal self, and character, divided into high and low well-being participant groups. Figures show ratings of conscientiousness. Other trait ratings are similar; see text.

were more depressed or had lower self-esteem. Those with higher levels of well-being did not rate their character much better than they rated themselves, whereas those with lower levels of well-being rated themselves significantly lower than they rated their character. We believe these results support the idea that despite the many rules, constraints, and difficulties of the game world, its anonymity and fantasy frees players from the yoke of their real-life history and social situation, allowing them to be more like the person they wish they were.

Our survey was limited to players of WoW, and the sample consisted mainly of male college and grad-

uate students. Whereas evidence of idealized selves in other domains is consistent with our findings,[12] more research is needed to expand the scope of this study. There also remains much to learn about the process of choosing a character and imbuing it with personality. For instance, do players choose roles for their characters that reflect their own personality (for instance, clerics rather than warriors if they themselves are mild mannered)? Do characters become more idealized over time? It is possible that the process is gradual as players gain the technical and social skills for success in the virtual world.

The ability to create characters who embody aspects of players' ideal selves may have implications

for players' psychological well-being. Self-discrepancy theory[13] suggests that psychological well-being is closely related to a person's actual self (me as I am) versus his or her ideal self (me as I would like to be). People with larger actual–ideal self discrepancies have higher depression and lower self-esteem.[13,14] McKenna and Bargh[7,12] have proposed that enacting an ideal self online may reduce some people's actual–ideal self discrepancy and increase their feelings of self-confidence and self-worth. In therapy, visual imagery techniques can help drug addicts create ideal self-representations, which in turn help them reject the addictive selves.[15] In like manner, it seems possible that players whose characters display desirable qualities could imagine themselves as different and reduce their ideal–actual self discrepancies, with positive consequences for their psychological health. This process might depend on many factors, such as the extent to which players actually tried to emulate their characters' better traits.

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Address reprint requests to:
Katherine Bessière
Human Computer Interaction Institute
Carnegie Mellon University
5000 Forbes Avenue
Pittsburgh, PA 15217

E-mail: katieb@cmu.edu