Community vs. Soloplaying

in Multiplayer Internetgames

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ABSTRACT

The growing phenomenon of Internet gaming has brought with it an increased curiosity into the motivations behind playing these games. It is argued that one of the reasons for playing these games is the motivation to belong to a community. However, it is also the case that solo-playing can be an equally powerful motivation for Internet gaming. We posit that some of this confusion and seemingly-contradictory findings comes from an imprecise and vague notion of Internet gaming, as the term is used to include several types of long-term and short-term, browser-based and client-based games. This paper aims to clarify some of this confusion by distinguishing between different types of Internet games. The paper further attempts to explain how different features of these games – specifically, the number of players, game genre, and game setting – can make more or less salient community and solo-playing motivations. Results are discussed and placed within the larger framework of game studies.

Keywords

Internet games, online games, long-term browser-based games, PBBGs, community, solo-playing, player's motivations, MMORPGs, client games, casual games, genre, setting, number of users

INTRODUCTION

"The community is what keeps me playing, though.

If not for that, I would probably have quit by now."

(Anonymous participant of the survey for this study)

Communication and entertainment technologies have been merged such that we now play video games via

the Internet. Some of these games are played as a way of fostering a sense of community; a "third place" to socialize beyond work and home (e.g., Williams, 2006) that is one of the more important factors that motivates players to use Internet games (Yee 2007, Schultheiss 2007). Of course, not all Internet games elicit a sense of community among players, nor is community a motivation for playing all Internet games. For example, evidence suggests other motivations for game play, such as playing solo (Schultheiss, 2007), which seems to have little to do with socialization or community. This paper takes a closer look at both community and solo-playing as two prominent-yet-contrary factors of Internet gameplay and tries to explain under which conditions they occur.

Offering a definitional framework with which to more presicely understand Internet gaming is essential for figuring out the impact of different motiavtions. So this paper also endeavors to make clear an important distinction that must be made with respect to Internet games: the difference between games that use the Internet for gameplay (e.g., massively multiplayer online role-playing games, or MMORPGs) opposed to games that use the Internet as a channel for distribution (e.g., downloadable singleplayer Flash games), as well as mixed forms of both. Although both are very popular forms of Internet games in their own right, there are important distinctions between them that are not trivial. This paper aims to clarify some of these distinctions and present a useful typology of Internet games for future research on the topic.

A TYPOLOGY OF INTERNET GAMES

As alluded to, there are different conceptualizations of Internet games. Therefore, it is important to define what we mean by Internet games within the context of this research project. Perhaps most important to our current study, we must make clear that Internet games and online games are not the same thing, although Internet games can be online games. To say this in one sentence, and to offer our definition of Internet games: *Internet games are games which can be accessed through the Internet and played without any media break.*

Notably, a distinction has to be made between games which are played over the Internet, games which only use the Internet as a model of distribution, and games which are a mix of both. Although are all considered Internet games in the broader sense, each has distinct properties. To give a clearer view of these properties,

we offer a typology of Internet games that makes distinctions based on their architecture and their usage in

Table 1; each category is explained in more detail below (Schultheiss, Schumann & Joeckel, 2008).

Table 1: *Categorization of Internet games.*

Architecture	Usage	
	Long-term (persistent gameworld)	Short-term (casual)
Client (downloadable)	Long-term client games (e.g. *Silkroad Online*)	Downloadable casual games (e.g., *Bejeweled*)
Browser-based (e.g., IE, Firefox, Safari)	Long-term browser-based games (e.g., *Travian*)	Casual browser-based games (e.g., *Slingo Millenium*)

When considering Internet game architecture, we identify two forms: client games (CGs) and browser-based

games (BBGs). Whereas CGs require the player to download and install a proprietary client software in order

to play the game, BBGs are games that can be played on any standard Web browser without any software

installation. This is an important distinction because it has implications for how accessible an Internet game

is. For example, a CG would have to be installed to one machine, meaning that the game could only be

played by an individual when they have access to their own computer; conversely, a BBG could be played by

an individual on any computer with Internet access. This technical limitation can influence the players usage

behavior. When considering Internet game usage, we make distinctions between games that are mostly

played over a longer period of time (weeks, months or years) and games which are used casually (usually in

minutes or a few hours). Importantly for this study, games which are played for a longer time contain a

persistent game world, which continues to exist while the player is not logged in. In contrast, casual games

are played for much smaller periods of time, and are not persistent; that is, when the gamer decides to stop

playing, the game world no longer exist. From these broader categories, we are now able to identify four

types of Internet games: long-term client games, downloadable casual games, long-term browser-based

games and casual browser-based games.

Long-term client games exist in different variations. Most common among them are the MMORPGs (e.g.,

Silkroad Online, Rappelz.), although MMOs in several other themes have become increasingly popular (e.g.,

Navy Field). These games are designed as persistent virtual worlds, where gamers can log on and play at any time so long as they have the proprietary client software.

Long-term browser-based games are often referred to as persistent browser-based games (PBBGs)[1]. They share many of the features of the long-term client games, except these games are played via a Web browser and thus can be played on any computer with an Internet connection. Similar to long-term client games, these games are usually multiplayer, although this is not a requirement of the genre. They are mostly free, but many offer 'for-pay' features, such as advertising-free interfaces and more user-friendly game options. Famous examples of long-term browser-based games include *Planetarion, Kingdom of Loathing,* or *Travian.* The collection of **downloadable casual games** and **casual browser-based games** are fairly similar to one another. There are literally millions of these small games on the Internet. They are typified by simple graphics and controls, and usually have very short-term objectives that can be met in a matter of minutes. These games are not persistent, and can be played online via browsers and offline as downloadable games. The only real substantive difference between these two categories of Internet games is the manner in which the games are played: downloaded vs. browser-based. Examples of Web sites that contain both types of these causal games are slingo.com[2] and realarcade.com[3].

In this study, we focus only on **long-term browser-based games** to examine the relative importance of community and solo-playing within this genre for three reasons. First, there is a large, diverse sample of these games, which provides us with a considerable cross-section of game types. Second, long-term browser-based games are considered more user-friendly and flexible. Browser-based games can be played much easier than client games, because there is no download or installation necessary and these games usually require less system resources than client games; these features make them particularly appealing to a wider audience than long-term client games. Finally, we want to look at community and solo-playing patterns as dependent variables. Multiplayer games with a persistent game world – such as those typical of BBGs – need many players using the game for a longer period of time so there is time for communities to

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[1] http://www.pbbg.org
[2] http://www.slingo.com/
[3] http://www.realarcade.com/

emerge. Thus, community might be the reason why players keep playing (a cause of playing, or an independent variable) rather than the outcome of playing.

IMPORTANCE OF COMMUNITY IN (INTERNET) GAMES

The rapid technological evolution of Internet games has forced us to re-evaluate the notion of video game players as an isolated, introverted and socially disconnected lot. Ducheneault and Moore (2004) explain that playing computer games is indeed a social experience, a position further argued by others (e.g., Huh & Bowman, 2008; Bowman & Tamborini, 2008). In stark contrast to Putnam's (2000) gloomy assertions regarding the increase in individualized leisure activities (such as video games) as root cause of the demise of social capital, Williams (2006) argues that certain entertainment media, such as Internet games, actually foster social capital via their specific focus on social interaction.

But what is the importance of communities in regards to Internet gaming? One way to answer this question is by understanding the relative appeal of online games. Research has shown that players of massively multiplayer online games (MMOs: i.e., *World of Warcraft*) use the games to both extend real-life relationships as well as to form new ones (Williams, Ducheneault, Xiong, Zhang, Yee & Nickell, 2006). Choi and Kim (2004) supported this notion using large-scale survey data (N = 1993), describing the optimal experience of Internet gaming as largely determined by the individual player experiencing pleasant social interactions with others. Additionally, Huh and Bowman (2008) found that players high in trait extraversion were most likely to play online games for extended periods of time. The authors of that study argued that high extraverts likely seek more social interactions than can be offered in daily, face-to-face interaction; thus, the relative appeal of online games for these individuals is apparent.

In sum, if we understand that online gaming is an inherently social activity, it becomes clear that Internet games that foster a sense of community will be the most played and most enjoyed. Although most research until now has concentrated on community as independent variable, we argue that if community is understood as a result of gameplay, research should also focus on community as dependent variable. That is, rather than using community to predict gameplay, research should try to identify the conditions that one would expect a community to be more or less a motivating factor of video game play.

IMPORTANCE OF SOLO-PLAYING IN (INTERNET) GAMES

Up to this point, our discussions have largely centered around the community element of Internet games. However, it is important to realize – as mentioned earlier – that not all types of Internet games involve community. For example, Chan and Vorderer (2006) explain that it is quite popular for individuals to play simple games via the Internet. These games are appealing because of the low demands they place on the user, including small time commitments, short-term objectives, low amounts of skill required to play, and lack of social pressures from other gamers (Chan & Vorderer, 2006; CGA, 2007).

Intriguingly, while it makes sense that the notion of community would not be an important variable when considering these simpler Internet games, it is also certainly a possibility that other games can also be played solo, including games with a persistent game world (e.g., *Silkroad Online*) in which community plays a central role. In these games, there are often quests and activities that can only be done solo, such as gold farming (Ducheneault et al., 2006) and other character maintenance activities where the importance community is negligible. Taken further, Bogost (2007) introduces the phenomenon of 'wandering', where gamers simply wants to explore the lush, massive environments typified by MMOs. Thus, we expect that solo-playing is another important factor for playing Internet games, and – similar to the logic above for community – we understand this factor of playing motivation as a second dependent variable.

ASSUMPTIONS

For this explorative study, we focus on community and solo-playing in different types of long-term browser-based games. These can be differentiated by the number of users, the genre and the setting.

Because of a lack of research on this topic, it is hardly possible to make exact assumptions as to what results can be expected; furthermore, our study is very explorative in nature. However, we can outline a logical set of testable assumptions as follows:

> *Assumption 1: The importance of community decreases with the amount of users, while the importance of solo-playing increases.*

We argue that games with many users might more anonymous and less familiar to gamers than those games with fewer users. Therefore, community as motivational factor for play is seen as more important in games with less players, and solo-playing is less important in those games (Baym 2000). Conversely, games with more users are likely to have a better chance of creating a sense of community as a result of gameplay than games with fewer users.

> *Assumption 2: There are differences in the importance of community and solo-playing between*
>
> *different game genres.*

Although no known research has looked at the relative importance of community and solo-playing between different genres of long-term browser-based games, one could argue that different elements of specific game genres could make these aspects more or less salient.

> *Assumption 3: There are differences in the importance of community and solo-playing between*
>
> *different game settings.*

When we talk about online games as "third places" (Steinkuehler & Williams, 2006), we guess that communities easier establish in game settings further away from reality settings.

METHODOLOGY

To check our assumptions we make use of an online survey. The survey was posted on about 100 international websites dedicated to Internet games (e.g. mmorpg.com, mmoabc.com, bigpoint.com). This way we were able to get a large sample (N=8024) of long-term browser gamers from 103 countries (N=7973). The participants mostly come from Europe and North America (Germany: 59,4%, USA 12,2%). While the participants are between nine and 87 years old, the mean age is at 25 years (N=7899, SD=9,37). The quota of female and male players is similar than in well known studies on MMORPGs (Yee 2006). There are 14,8% female and 85,2% male (N=7904) players.

With respect to our assumtions, we use the motivational factors community and solo-playing as dependent variables and more detailed specifications of long-term browser-based games (number of users, game genre and game setting) as independent variables.

To evaluate the importance of the dependent factors community and solo-playing, we use items partially based on Yee's (2005, 2007) scales. While Yee's (2007) scale contained a factor similar to our notion of community, which he calls "socializing", he also has a factor that is the complete antithesis of our notion of solo-playing, which he labeled "teamwork". After selecting items from these two subsets of Yee's (2007) scale, we created scales designed to measure community and solo-playing; both of these factors were confirmed by factor analysis[4]. Table 2 contains the items from each of our scales.

Table 2: *Items for community and solo-playing scales.*

Community (Cronbach's Alpha = ,83)	Solo-playing (Cronbach's Alpha = ,70)
'I like it ...'	'I like it ...'
'...to play with other gamers in a group'	'...to be independent from other gamers.'
'...to help other players.'	'...to achieve my goals in the game with as little help as possible from other players.'
'...to get to know other players.'	'...to be a good solo gamer.'
'...to chat with other players.'	
'...to be member of a friendly clan'	

Composite variables were created by summing participants responses to items on each scale. This resulted in two values (values ranging from 1-5[5]) for every participant of our study; these two values represented the relative importance of the factors community and solo-playing for each participant. For measuring the independent variables – the different types of long-term browser-based games - we created a typology of long-term browser-based games that distinguishes them in terms of number of users, game genre, and setting; these correspond with A1-A3, respectively.

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[4]   Principal components analysis; varimax rotated; KMO=,881; 10 factors overall; variance explained: 59,5%.
[5]   1=low importance, 5=high importance

To examine games with more or less users, we split the sample of games in two groups: games with under 20.000 players and games with over 20.000 players. For genre differences, we asked participants to tell us their favorite long-term browser-based game and then assigned a genre to that game by checking the self-descriptions of the game, looking for information on game sites and, in some cases, playing the games for ourselves. We used typical genre classifications from the literature (Lindley 2003; Smith 2006), which allowed us to identify six distinct genres: "action", "fun", "manager", "roleplay", "simulation" and "strategy". Finally, to examine games with different settings, we found the following game settings by the same method: "ancient world", "fantasy", "present-day", "medieval", "modern time", "sea / pirates", "stone age", "underwater", "science-fiction" and "future".

RESULTS

To examine the relative importance of community or solo-playing in different long-term browser-based games and to examine our assumptions, we compared mean scores on community and solo-playing composite scores between games with high and low number of users, games in different genres, and games in different settings. Each of these analyses is explained in detail below.

Influence of the amount of users

Our first assumption claimed that the importance of community should decrease with the amount of users, while the importance of solo-playing should increase. This was confirmed partially. While we can see significant differences in the importance of community between these groups in the predicted direction, there is no significant change in the motivational factor solo-playing. Table 3 displays the mean on each score by number of users.

Table 3: *Indices for number of users on community and solo-playing motivations.*

No. Users	Community (1 = low; 5 = high)	Solo-playing (1 = low; 5 = high)
Under 20.000	3,62 (N = 3.463)	3,44 (N = 3.475)
Over 20.000	3,56 (N = 3.600)	3,45 (N = 3.620)
Sig. (t-Test) *p<0,01	*	-

As we expected, the importance of community is reduced for long-term browser-based games with more users, thus confirming our assumption that the number of users in a long-term browser-based game would significantly decrease the relative importance of community as a motivation for gameplay. However, these results were not replicated when considering solo-playing motivations, as there were no significant differences in the importance of solo-playing as a function of the number of users in a game. Thus, although our assumptions about the effect of the number of players on community was found in the expected direction, there was no effect on solo-playing.

Influence of different game genres

Our second assumption was concerned with the effect of game genre on the relative importance of community and solo-playing; this assumption was confirmed. For this analysis, we limited our comparisons to the four most frequent genres in our study: roleplay, strategy, simulation, and manager games. Table 4 shows the cell sizes of each of these genres, along with composite scores for community and solo-playing.

Table 4: *Indices for game genres on community and solo-playing motivations.*

Genre	Community (1 = low; 5 = high)	Solo-playing (1 = low; 5 = high)
Roleplay	3,66 (N = 1.860)	3,48 (N = 1866)
Strategy	3,65 (N = 4.229)	3,41 (N = 4254)
Simulation	3,52 (N = 802)	3,40 (N = 802)
Manager	2,99 (N = 599)	3,50 (N = 606)
Sig. (One-Way ANOVA) *p<0,01	*	*
Post-Hoc (p < 0,01) Tukey	R: M, Si[6] St: M, Si Si: M, R, St M: R, Si, St	R: St St: R Si: - M: -

This data shows that community as a motivational factor for gameplay is most important for roleplay and strategy games; it is lesser so for strategy games and markedly less so for manager games.

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6   Example for reading: The genre roleplay is signifcantly different from the genres manager and simulation.

Conversely, the importance of solo-playing as motivational factor is higher for manager games, followed by roleplay games. Strategy and simulation are the lowest of the four. Thus, data show that there are significantly different patterns of the relative importance of community and solo-playing as a function of game genre.

Influence of different game settings

Our third and final assumption examined the effect of game setting on the relative importance of community or solo-playing motivations. This assumption was confirmed. Again, to give more meaningful results, we examined the four most frequent settings in our study: science fiction, fantasy, medieval, and present-day. Table 5 shows the cell sizes of each game setting, along with composite scores for community and solo-playing.

Table 5: *Indices for game setting on community and solo-playing motivations.*

Setting	Community (1 = low; 5 = high)	Solo-playing (1 = low; 5 = high)
Science **F**iction	3,77 (N = 1.877)	3,38 (N = 1858)
Fantasy	3,71 (N = 1.327)	3,45 (N = 1330)
Medieval	3,51 (N = 2.019)	3,48 (N = 2031)
Present-day	3,27 (N = 1.452)	3,45 (N = 1460)
Sig. (One-Way ANOVA) *p<0,01	*	*
Post-Hoc (p < 0,01) Tukey	SF: P, M[7] F: P, M M: P, F, SF P: F, M, SF	SF: - F: - M: - P: -

This data shows that significant differences in both community and solo-playing motivations as a function of game setting. For community, these motivations are more important in science fiction and fantasy games, and appear to be less important in medieval and present-day games. For solo-playing, motivations are highest for medieval games and lowest for science fiction games, although the practical difference between these means is very small.

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[7]   Example for reading: The setting science fiction is signifcantly different from the settings present-day and medieval.

Discussion and Directions for Future Research

Perhaps most importantly, each of our three assumptions was confirmed by the data. This infers that the number of users, the genre, and the setting of an Internet game each have a significant impact on user's evaluations of the importance of community or solo-playing.

As this research was largely exploratory in nature, future research should attempt to further examine the root causes of our results. In the face of a lack of theoretical background necessary to offer proper, testable hypotheses regarding community or solo-playing (especially solo-playing), perhaps more abductive reasoning from similar studies is merited. One particularly interesting study could be a longitudinal analysis of these motivational factors as dependent variable. A longitudinal study design would allow us to look at different parts of the gamer's life-cycle, and see if different types of games motivations are more or less important at discrete time intervals. Some of these time intervals could include (a) when the player is new in the game, (b) when he or she is dependent on the help from other players, (c) when he or she is more familiar with the game after playing some time, (d) when he or she has developed the skills for being successful playing solo, and (e) when he or she has mastered the game.

CONCLUSIONS

The results of this study show that, within the classification of long-term browser-based games, variables such as the number of gamers, the game genre, and the game setting can significantly affect the relative importance for community or solo-playing for gamers. These motivations – community and solo-playing – were extracted from prior research on video game motivation, and although both factors experience significant change as a result of differences in independent variables identified in this study, the relative importance of community appears to fluctuate much more readily than the importance of solo-playing. More importantly, community and solo-playing motivations were not strongly related to each other, as we found that a high importance of community does not automatically lead to a low importance of solo-playing. This is evidence that these two factors may characterized qualitatively different motivations and styles of playing. Put another way, these two factors mirror substantively different individual needs of game players that have a higher or lower importance based on characteristics of the particular game.

Although game designers may assume that all players of the classification of Internet games we label as long-term browser-based games may all play for similar needs and motivations, data from this study shows that characteristics of different games within this classification – such as the number of total players, game genre, and game setting – can have differential effects on these needs and motivations as a result of gameplay. Future research in this area should be done to and used to make games more interesting, more entertaining or more social for the players, based on his or her needs. Because, in the end, what counts are the player's needs, not the game's.

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