**Main Interactive Affordances in MMOGs and Players' Experiences: Case Study of World of Warcraft Players’ Experiences**

Meghdad Mehrabi; PhD, Wee Kim Wee School of Communication and Information, Nanyang Technologcal University, Singapore

[megh0004@e.ntu.edu.sg](mailto:megh0004@e.ntu.edu.sg)

line 3-City, Country

line 4-e-mail address if desired

Authors Name/s per 2nd Affiliation (*Author*)

line 1 (of *Affiliation*): dept. name of organization

line 2-name of organization, acronyms acceptable

line 3-City, Country

line 4-e-mail address if desired

*Abstract*— Interactivity has been widely explored in the literature on new media. However, a limited number of studies have explored video game interactivity. This paper has investigated players' experiences with interactivity in a popular Massively Multiplayer Online Game, World of Warcraft, to provide practical implications for designing online games. Through semi-structured interview with 25 veteran World of Warcraft players, we found that game social features that allow player to maintain both weak social ties with unknown players and persistent interaction and strong social ties with in-game or real-life friends make players’ experiences more enjoyable. If video games maintain a balance between providing routine rewards and unexpected rewards players' experiences become more enjoyable and they continue playing the game regularly. Customization is an important game feature that can either create an enjoyable experience or it can make players uninterested in playing the game in the course of time. Customization must keep the balance between difficulty level of the game and player’s capabilities. Finally, implications for designing attractive video games are provided.

Keywords— Massively Multiplayer Online Games; interactive affordances; players' experiences; World of Warcraft; game design

Introduction

Massively Multiplayer Online Games (MMOGs) are among the most popular form of entertainment around the world. It is predicted that global revenue for online games that are played on the PC or video game console will grow from $38.7 billion in 2021 to $53.7 billion in 2024 [6]. It is also predicted that video game market in the region of Asia-Pacific excluding Japan (APEJ) will grow from $19.2 billion in 2021 to $31.3 billion in 2024 [1]. As a result of such growing popularity of video games, researchers have explored factors that influence players’ experiences, and they have defined interactivity as a factor that is highly correlated to gaming enjoyment [3, 17]. Interactivity fosters a strong relationship between a player and artificial intelligent-based software agents, simulated environment, and other players [15].

Several researchers have presented models that categorize different dimensions of interactivity, and they have claimed that their models can measure users’ experience in all new media [8, 9]. However, such models do not provide practical implications to designers of online games about attractive game features. We have applied the theoretical synthesis of interactivity and affordances (actionable probabilities) as our theoretical framework. Theoretical concept of affordances helps us to investigate how players’ actual use of interactive features in the most popular MMOG, World of Warcraft, influences their experience and make World of Warcraft a popular game. We have conducted semi-structures in-depth interview with hard-core players of World of Warcraft to explore players’ experiences.

Theoretical framework: Interactive affordances and Players’ Experiences

The literature on video game interactivity has clasified it into two types: interaction between the player and the game measured by structural-oriented approach, and interaction among players, measured by communication process-oriented approach [2,5,8]. We have applied these two appraches to explore how they influenc players’ experiences. Interactivity is defined as the most distinctive *affordance* of digital media [15]. The concept of “affordance” is defined as design aspect of an object which implies how the object should be used [13]. For instance, the shape of an armchair implies that it is for sitting. We have used this concept in our research and synthesized it with interactivity. The concept of “nteractive affordances” is defined as the range of actionable properties that players use to communicate with other players and/or the game and affect each other. There is not a clear definition for the concept of player experience and scholars have applied different theoretical constructs, such as immersion, presence, or engagement, to explore it. In this paper, player experience is conceptualized as a set of emotional responses, sensations or experiential states that occurs when players interact with the game or other players.

Research Method

Given limited research about how various forms of inyteractivity influence players’ experiences, we have used semi-structured in-depth interview for data collection. 25 players of World of Warcraft participated in our research. Focusing on WoW as the most popular MMOG with more than sixteen million subscribers helps us to focus on attractive features that make a game so popular. The interview protocol was developed based on theoretical framework, literature findings about characteristics of video games [7, 12, 18, 32] and our gaming experiences. Interview questions were generally about how various game features that allow social interaction among players and players’ personal interaction with the game influences players’ emotional responses, sensations, or experiential states.

To recruit World of Warcraft players who are also familiar with other MMOGs, we sent an invitation letter to students via email. We then applied snowball sampling and asked initial participants to invite their guild members and friends to participate in our research. In all, 25 WoW players participated in our research. The interview session continued two hours and half to three hours. The interview was conducted over a three-month period from September to November 2021. Each participant was offered an incentive of cash value USD 52.

Findings

The average age of participants was 24.5 years old and played 17 hours per week on average. We found that they use social features for two main action possibilities: short-lived and persistent interactions. Rewards and customization features influence players to game interaction. In the following sections, we elaborate on players’ use of these dimensions of interactivity and how they influence players' experiences such as enjoyment.

Short-lived interaction

Short-lived interaction in MMOGs refers to joint activities with strangers to complete a shared objective in a limited period of time. This type of group is typically called pick-up groups (PUGs). World of Warcraft players join parties to complete either of two shared objectives: to kill non-player monsters or to defeat the opposing faction in Horde versus Alliance battle. When the number of group members increases, the level of social interaction such as chatting about real life issues and telling jokes decreases and it becomes more about how to complete raiding or how to defeat the opposing faction. In other words, players’ interaction in PUGs is mainly instrumental and game task related. Players hardly share reward items that drop after killing monsters.

PUGs can be formed through two in-game features of Dungeon Finder and Look for Raid (LFR). These features that were incorporated in expansion packs of WoW several years after the first version of WoW. They have influenced players’ experiences so that most players have become casual or solo players who avoid group commitment. We found that when players find their group members through announcements in chat channels, they consider it a more social experience than finding group members through the above two features. However, finding group members through announcements in chat channels is nettlesome because it takes a long time to recruit enough members and some players may leave the group quickly after achieving the istruments that they needed.

Despite low level of interaction, the various short-lived group activities are popular among WoW players since they offer the most convenient way to enjoy joint activities and obtain rewards. We found that PUGs are attractive to players who either play casually or just need some group sessions to fulfill specific purposes because they do not require long term investment into a specific group and allow more freedom in the time spent on playing the game. When hard-core players want to level up their alternate characters, they play the game with PUGs as well because less time is spent on socialization and players can achive this goal quickly. In other words, most hard-core players described playing with PUGs as a work-like experience that they try to complete the game play session as quickly as possible.

Persistent interaction

Persistent interaction in MMOGs refers to joint activities with in-game or real-life friends in organized groups such as guilds. The guild is an in-game community where players know each other from the game or real-life relationship. Most interviewees admited that their experience in the guild is frindly and openhearted. Players prefer to join the guilds in which their real-life friends are. Players also extend their in-game relationship to real life friendship by meeting up their teammates over dinner or cofee on weekednds.

Those interviewees who mentioned that their experience in the guild is openhearted described that guildmates offer drops to other players who need it even enough they do not have enough points in the group. These interviewees mentioned that they help their guildmates to find or buy the equipments they need. Players are concerned for their performance in the game when they play with guild members because their competence in the game and is often evaluated and commented on and the guild leader warns players who have not played the game efficiently. Players expect that their guidlmates who join the raids should be quite familiar with their character’s capabilities and with game content/strategies to accomplish group goals.

Several interviewees mentioned that they have an enjoyable experience through various action possibilities in guilds such as scheduled joint activities, chatting about real life issues, talking about game-related affairs, telling jokes for fun, and extending game relationship to real life friendship. These social activities create a friendly environment in MMOGs, which promotes a sense of attachment and accountability. Subsequently, if players want to be a guild member, they should spend a lot of time and energy on playing the game.

Rewards and Punishments

We found that rewards and punishments reinforce players’ experiences both positively (through the sense of achievement) and negatively (through the sense of losing). Although most MMOGs have similar reward and punishment systems, the unique rewards in World of Warcraft are so satisfactory to most players that they have an enjoyable experience.

Most interviewees mentioned that the rewards system of points for both player versus non-player characters and player versus player fights are quite fascinating because it allows them to stand out as a inique player. There are daily and weekly quests in WoW and when players complete them on time, they will receive more points. Several interviewees mentioned that they have a satisfactory experience because they spend the points to buy better war equipment from specific vendors. Similar to points, the achievements system in WoW is an expected reward that highly influences most players’ inclination to spend a lot of time on playing the game. Several interviewees who were hard-core players mentioned that altough achievements require a lot of grinding to participate in tedious, time-consuming tasks such as player versus player and player versus environment battles, world exploration and professions, it provides them with a satisfactory experience because it allows them to stand out as a unique player and proudly display their high achievements.

Most players admitted that when the element of surprise is incorporated in expected rewards such as rare drops from monsters, they feel more gratified. Although unexpected rewards depend on players’ luck, the thought of getting them make them willing to continue playing the game.

Most interviewees confirmed that they have the enjoyable experience of receiving rewards more than the fear of punishments. Most respondents explained that punishments from the game such as death penalty are not grave since they are designed in the game to teach players a lesson that they should play the game more efficiently. However, players expressed concerns about scolds from guild master or teammates for under-performance in raids.

Customization Capabilities

World of Warcraft, compared to other MMOGs, offers more customization capabilities so that most interviewees mentioned they feel that they have high level of control and personalization over their gameplay. We found that three types of customization in WoW include: capabilities that influence gameplay directly (like talent tree), customization features that do not have any effect on gameplay (like customization of character’s appearance), and customization features that affect players’ performance (like interface customization). The first two types of customization are mostly provided by game features in WoW, and the third customization is facilitated by allowing players to install third party programs.

Some interviewees mentioned that although WoW offers limited options for character customization, the two opposing factions, various races and class with human- or fantasy appearances and attractive story behind each of character satisfy them a lot. Players also enjoy changing the appearance of war equipment by transmogrification feature and increasing proficiency of weapons by forging feature. However, when customization options have high, direct influence on gameplay such as talent tree, most respondents admitted that they merely emulate the talent builds provided in the game forums and websites.

Some interviewees mentioned that the original interface in WoW is badly designed, and they like the ability to replace or change the position of every single feature in user interface by add-ons. In all, high level of customizability in WoW through in-game features and third-party programs make the gameplay experience more enjoyable by granting the sense of personalization and control.

IMPLICATIONS for DESIGN of MMOGs

Our findings on five key dimensions of interactivity provide insight to designers of video games, specifically online games with persistent virtual environments in which the goals, awards and personal achievements are obtained through high level of coordination. Despite the research findings that high level of social interaction is the key for popularity of MMOGs [5], short-lived coordination for instrumental purposes should not be overlooked in MMOGs. There are many players who cannot stay committed to be online at a specific time or to play up to a specific point, and they prefer the weak social ties of pick-up groups. It is essential that the content of tasks for such temporary groups suits their low level of gaming skill and coordination because our respondents revealed concerns about failure in playing with unknown players.

Since close ties in guilds constitute the most memorable experience of social interaction in WoW, MMOGs should encourage players to transform players’ weak ties to strong relationship as well. For example, if players are encouraged to go and form a group rather than being randomly assigned to players from different parts of the world, there is more chance that they deepen their relationship. Otherwise, they feel no commitment to the group, and they behave selfishly in collecting rewards. Since players may get bored of high level of competition among members of persistent groups to play just for more achievement and rewards, MMOG designers should facilitate casual conversation and playful mood in persistent groups as well. For example, some of our respondents mentioned that they left their guilds in WoW because the raiding turned to a mundane daily duty with high level of commitment to be online at least three times per week for several hours.

Successful MMOGs like WoW provide numerous rewards and the combination of rewards motivates players to stay committed to the game [7]. If players have to play the game just for virtual daily or weekly rewards, they consider it as grinding. Like WoW, designers of MMOGs can combine rewards with the element of surprise such as rare mounts and equipment. If rewards gratify players' motive to stand out as a unique character, they keep player more on gaming. Punishments are helpful to make players cautious about their performance, but they shouldn’t cause much downtime. For example, when WoW players die in dungeons and guilds, they have to take a long walk back, and they get frustrated and wait for others to resurrect them.

Finally, high customizability makes MMOGs attractive, but over-emphasis on the direct effects of customization options on gameplay may cause players to emulate pre-determined optimal models in the game forums and websites instead of enjoying the customizability of the game. For example, most WoW players customize the talent tree based on the talent builds in the internet to have maximum performance. MMOG designers should also provide customization options that don’t have any effects on gameplay because some players are concerned about the appearance of their avatars or the game aesthetic aspects. Customization options that influence players’ performance indirectly are mostly missing in WoW. The game designers intelligently avoid making the customization options too complicated by allowing players to install add-ons for such type of customization. If MMOG designers are concerned that providing too many customization options results in cognitive overload, the third-party programs are the best solution to provide more options and promote the fan culture.

Conclusion

A growing body of research confirms that certain structural characteristics of video games influence players’ experience more than people’s psychological, physiological, or socio-economic status [18, 19]. As confirmed by [2], changes in game features of World of Warcraft can influence players’ level of interaction and their trust to each other. Similarly, we suggested changing interactive features can alter players’ gaming experience in a way that players enjoy optimal social interaction with other players and personal interaction with the game.

Future research can measure how various player-to-player and player-to-game interactive affordances influence enjoyable experiences such as flow state [14] and the sense of presence [10].

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