

# Designing Online Games for Real-life Relationships: Examining QQ Farm in Intergenerational Play

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## ABSTRACT

Intergenerational players are online game players of different generations within an extended family. We investigated intergenerational play between older parents and their adult children in the popular Chinese social networking game QQ Farm. We identified game features that encourage intergenerational play. To do this, we conducted online observations and semi-structured interviews with nine pairs of Chinese parents and their adult children. The results of this study suggest that an online game for intergenerational play needs to consider a range of factors, including social and occupational responsibilities, gaming interests, and gaming expertise among extended family members. The data suggests that intergenerational online games may generally benefit from the following features: (1) low entry barrier, (2) appealing game theme, (3) online interactions that extend real-life relationships, (4) low time commitment, and (5) asynchronous play. We have also found features which may have unique appeal to Chinese intergenerational gamers.

## Author Keywords

Intergenerational players, Online games, China, Social networking site.

## ACM Classification Keywords

H.5.2 [User Interfaces]: User-centered design.

## General Terms

Design.

## INTRODUCTION

Intergenerational players are extended family members of different generations who engage in cooperative game play. Intergenerational players pose unique challenges to online game designers. In particular, social norms in the game players' real-life, e.g., parents as teachers and children as learners, may extend to online interactions, and designers of intergenerational games have to consider these issues [1,13].

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Intergenerational games also have to appeal to all its players, although they may vary considerably in age, and possibly in computing skills [13]. Games that appeal to younger players may not appeal to older players [9]. Casual games are video games that are web-based or downloadable in small file sizes [9,10]. Researchers have found that players above forty enjoy these games more than the other game genres [9,10].

Online intergenerational game play is especially relevant in China where this research was conducted. In Chinese tradition, three consecutive generations often live together in the same household [11]. Nevertheless, with rapid economic development, many young adults in China are migrating to seek better jobs and life opportunities elsewhere [11]. New media, such as online games, present an opportunity to support extended family activities in the online environment [14].

In this study, we investigated game features that support intergenerational game play in the online game, QQ Farm. With 23 million daily players, QQ Farm is one of the most successful products of the Chinese Internet company, Tencent, Inc. Tencent developed QQ Farm in 2009 to run in QZone, Tencent's social networking site (SNS), which is similar to Facebook. We identified design features that encourage online game play between intergenerational family members. Some of these features have aligned with findings reported in the literature. In addition, we have also found other features, such as stealing of crops, which may have particular interest to Chinese players.

## RELATED WORK

In 2005, the Entertainment Software Association (ESA) reported that 25% of video gamers are more than fifty years old [9,10]. The majority of these gamers preferred casual games [9,10] over fighting, racing, or sport games [12].

These older parents may adopt communication technologies, such as games, as a way to keep in touch with their children [5]. Due to the busier lifestyles of the adult children, games that require less attention from the users may better facilitate the communication needs between intergenerational members [5].

Intergenerational game design is also challenging because of how real-life relationships can influence online gaming

practices [6,12]; intergenerational players often extend their existing family activities to the gaming environment [7,14]. In studies of play between grandparents and grandchildren, researchers observed that grandparents often perform teaching roles [1,5], while grandchildren act as learners [1], as happens in real-life situations.

Designing intergenerational online games for Chinese players may entail additional challenges. Golub and Lingley [4] describe the social perspective of Chinese parents towards online games:

The allure of Internet games for children is like the poison of opium in China so many years ago; it doesn't discriminate between the poor and the rich, between those of high or low position. It doesn't matter if you're an unemployed worker, a wealthy businessman, or a Party cadre, the highest hopes of innumerable parents for their children's future may well be destroyed by Internet games.

Many Chinese parents vigorously disapprove of the idea of their children playing video games, let alone having the idea of playing them, themselves.

#### QQ FARM

QQ Farm is a popular online game in China and is widely played by both young working adults and their older parents. See Figure 1 showing two older parents discussing the game.

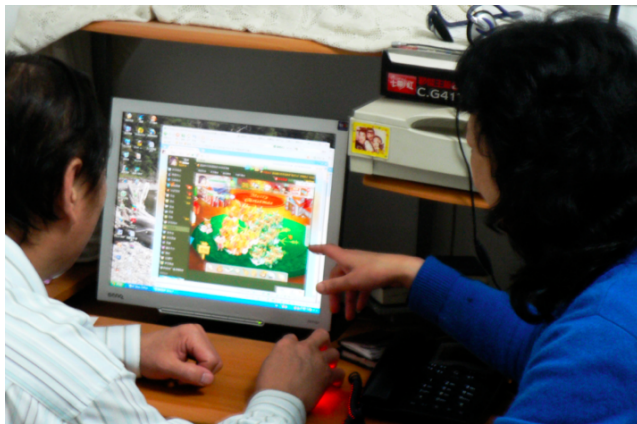


Figure 1 Two parents discussing QQ Farm

QQ Farm has a farm simulation theme, similar to the popular online game known as *Farmville* in the U.S. Nevertheless, features in the two games differ slightly. For example, QQ Farm allows players to steal other players' crops, a common children's game in rural China, whereas *Farmville* contains tractors which are more commonly seen in U.S. farms.

In QQ Farm, players act as farm owners and manage their own farms. Besides common farming activities such as cultivating, irrigating, and harvesting crops as real farmers do, players can visit farms owned by their SNS friends. In their friends' farm, players can perform limited actions—some helpful, others mischievous. Friends can help perform

the weeding and the watering of plants. Friends can also steal matured crops, resulting in the victim losing part of his potential income. Each player has access to a personal message board telling him when his friends came to his farm and what his friends did. Each player can also personalize her farm, such as giving it a name.

#### METHODS

We performed semi-structured interviews with nine pairs of Chinese parents and their children between March 2010 and November 2010. Participants were recruited through the snowball sampling method. The parents were aged from 47 to 66 years old. The children were aged from 18 to 42 years old. In order to observe various online interactions affected by different real-life living arrangements, we examined four pairs of intergenerational players who lived together in the same households in China, or shared the same neighborhood; the other five pairs of participants lived apart, with the parents living in China and the children residing in the United States and elsewhere. All participants had at least six months of experience playing QQ Farm.

The semi-structured interviews pertained to experiences of intergenerational play in QQ Farm. Specifically, we asked: (1) How did you start playing the QQ Farm game? (2) How do you play the game in general? and (3) How do you play with your parent/child?

We interviewed all parents and children. Of the eighteen interviews, sixteen took place over the telephone, one was performed in-person, and one using instant messenger. All interviews were conducted in Chinese. Interviews were audio recorded and transcribed in Chinese, and then translated into English.

Three researchers independently conducted open coding of the transcripts to identify salient themes [3]. The initial themes and relationships were identified gradually in a manner of convergence. One researcher coded the rest of the data iteratively based on the initial themes. When all codes and memos were collected, the researchers grouped them in line with the categories or properties they represented.

#### KEY FINDINGS

We present five design features in QQ Farm that generally support and encourage intergenerational play. These key features are identified as factors that can be used in designing a wide range of online games for intergenerational play.

##### Low entry barrier

QQ Farm is easy to understand; and this feature appeals to novice gamers. The game rules are intuitive and mirror real-life activities. For example, the players' primary actions are to seed, fertilize, weed, water, harvest, and sell plants. This is easy for players to comprehend. *Liu*, a retired father, began to play QQ Farm when his daughter recommended it to him. He explains how he later became an avid player and even achieved a higher gaming level than his daughter.

Last year my daughter invited me to play QQ Farm, so that I could kill time... Unexpectedly, this game is very simple to learn. Soon, I mastered all the techniques... In order to reach higher game level (game ranks), I set up five different game accounts so that I can gather more crops... now I am the top player in my friends list. (Liu, 61, China)

Intuitive operations and uncomplicated game rules can reduce barriers for novice players, which included many of those from the older generations we studied, encouraging their participation in online games.

### **Widely appealing game theme**

Online gaming in China has become a controversial social issue, often being seen as a contest to parental authority and a hindrance to children's academic achievement [4]. However, we did not hear this rhetoric in our interviews. Rather, parents viewed QQ Farm's farming theme as appealing and viewed playing the game as a reasonable form of relaxation. *Zhang* is a proud mother of two children studying in American universities:

My son and daughter have been hard-working students since they entered high school. Sometimes I can feel that they are tired and stressed by their studies... They needed other activities beyond burying themselves in books...I think that playing QQ farm could be viewed as an entertainment for them... (Zhang, 57, China)

Unlike other online games, QQ Farm has a good reputation among parents who believe that playing QQ Farm is a way to lighten up their life. Parents like Liu readily accepted QQ Farm when their children introduced it to them. Parents like Zhang are supportive of their children playing QQ Farm outside of their academic work as a form of relaxation. An appealing game theme makes parents more likely to play the game themselves and to encourage their children to do so.

### **Online interactions that extend real-life relationships**

QQ Farm provides features that allow intergenerational players to convey messages of love, care, and concern for their gaming partners. *Peng*, a faculty member at a Chinese university, told us:

My mother and father took great care of their own farms. To help them level quickly, my husband and I intentionally create opportunities for them to steal crops from our farms. And we have never stolen my parents' crops... My parents were so happy knowing what we have done for them. I have even bought a laptop for them [so that they have their own machine] to play QQ Farm. (Peng, 36, China)

Peng still lives with her parents, who help her take care of her child. Every member of Peng's household plays QQ Farm. For Peng's family, online games reinforce their values because family members behave online as they would in real-life, for example, gifting each other and giving a helping hand. The online interactions of QQ Farm reinforce Peng's family identity in the same way real-life

family activities do. Online gaming activities have, in other words, become an online version of her family's real-life activities.

### **Low time commitment**

Participants play QQ Farm in a way that does not affect their daily activities, such as their job. The game allows players to play as—and when—they want. QQ Farm also does not require players to play continuously for a long period of time in each gaming session. *Lee*, who is a father and a senior official of an institution in the city of Wuhan, China, told us the merits of this feature.

Playing QQ Farm does not take up a big chunk of time. For example, some crops need two or three days to mature and harvest, so it is not necessary for me to attend to my farm in the meantime... on busy days, I usually logon to QQ farm one to two times a day. On other days, I logon three to five times a day. (Lee, 59, China)

This flexibility allows players to participate without affecting their real-life activities. In this sense, game play is inclusive of players with varying real-life commitments.

### **Asynchronous play**

QQ Farm does not require players to logon at the same time. *Tong* is a Ph.D. student in the U.S. His story shows how he and his mother play QQ farm across different time zones.

I helped my mother manage her farm when she is asleep in China... I have my mother's game account, so I can harvest her mature crops and even steal her friends' crops. In turn, when I was sleeping, my mother did the same things for me... that was why we leveled quicker than others, ha-ha... (Tong, 29, U.S.)

Children like Tong can attend to their parents' farm when their parents are offline. As such, extended family members living in different time zones can participate in cooperative play, just as Tong and his mother helped each other level, without the need to logon at the same time.

Asynchronous play is important because intergenerational family members are becoming less likely to live together. They are also likely to have different social and occupational responsibilities. For players varying widely in localities and real-life responsibilities, asynchronous play allows them to cooperate in the same game without the need for them to be playing all at once.

### **DISCUSSION**

Many of the features identified in our study have aligned with what have been reported in the prior literature, which included studies conducted in the U.S., Europe, and Australia [1,5,9,10,13]. These include a low entry barrier, a widely appealing game theme, online interactions that extend real-life relationships, low time commitment, and asynchronous play. The first three features are relevant to intergenerational play and the last two can be broadened to other casual game designs.

As previous studies have reported, parents feel motivated to adopt communication technologies that interest their children [5], and QQ Farm is used as a communication device for intergenerational family members to keep in touch. In addition, older gamers have been reported as having lower expertise in video gaming [13]. Some older gamers, like Liu, are attracted to QQ Farm because it is easy to learn. A gentle learning curve can help older gamers participate in game play (see [13]).

Intergenerational online games need to cater to players with heavy real-life commitments [5]. Playing QQ Farm also requires as little as a few minutes a day, which is ideal for busy players. For players, like Tong and his mother, who are located in different time zones, QQ Farm allows players to play asynchronously, accommodating each player's own real-life schedule. Older gamers, like Liu, are attracted to QQ Farm because it is easy to learn.

QQ Farm also contains features that seem to have evolved out of the Chinese gaming environment. One of these is "stealing of crops." Despite being seemingly unethical, crop stealing was seen by Peng's family as an act of care and concern. One possible explanation is that Chinese players see stealing crops in farming games as a form of social interaction [2]. Crop stealing among players with close-knit ties, such as family members or old friends, is seen by some players as a way of sending daily regards, a display of cordialness and intimacy with each other [2].

Considering that older Chinese parents were reported to distrust video games [4], our older interviewees were surprisingly receptive to QQ Farm. China has only freshly emerged from a rural society. The Chinese rural population only recently saw a reduction from 76% rural in 1985, to 56% in 2006 [8]. Thus, many Chinese individuals, feeling acquainted with the soil, and with rural experiences fresh in their memory, may identify better with the game's farming theme.

While the Chinese may have kept their affinity to notions of the soil due to many of them having actual experiences living on farms, the success of Farmville in the U.S. suggests that such affinity may be rooted culturally in other ways. Notably Farmville contains features, such as tractors, that reflect U.S. notions of farming not found in China. Thus, even when a farming theme appeals to a culture of players, what constitutes "farming" may differ in specific ways.

## CONCLUSION

We have identified general features that support intergenerational online gaming. These design features include a low entry barrier, a widely appealing game theme, a low time commitment, online interactions that extend real-life relationships, and asynchronous play. At the same time, designers may consider paying attention to specific features, such as the stealing of crops, which are appealing to the Chinese gamers.

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