

# Comparing Taiwanese and American WoW Player Cultures in Terms of Achievement

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## ABSTRACT

When analyzing Taiwanese and American market separation and online gaming cultures, sooner or later researchers hear the assertion that players in Taiwan emphasize achievement and players in the US emphasize recreation. This belief may explain why a significant number of Taiwanese World of Warcraft (*WoW*) players claim that they would rather connect to North American game servers to play. To determine the truth (if any) of this belief, we investigated behaviors, tendencies, and motivations between Taiwanese and American *WoW* players using data collected via *WoW*'s unique client-designed user interface feature. Data on level upgrade efficiency and participation in guild-organized raids indicate that Taiwanese players do place more importance than American players on achievement. An analysis of avatar and guild behaviors provides significant evidence regarding the effects of social context on player behavior.

## Author Keywords

MMORPGs, player modeling, World of Warcraft, client-designed user interface, cross-culture.

## INTRODUCTION

The dramatic increase in the number and quality of Massively Multi-player Online Role-Playing Games (MMORPGs) since 1997 has impacted game markets as well as multiple aspects of gaming society and culture [4]. For instance, today's players not only come together in the same virtual space to play, but also form offline player communities. Today's players frequent game websites and discussion boards to share their experiences and to discuss game-related issues. In Taiwan they often discuss and compare differences between players and games in different countries (e.g., game design, avatar appearance and power balances, special playing styles, game management, and reward mechanisms). A popular topic is comparing player motivations and behaviors between Taiwan and America, and how such differences might affect game servers and vice versa.

When monitoring public online game discussion boards in Taiwan, we have noticed Taiwanese players praising American-based server cultures and player behaviors and criticizing their fellow Taiwanese players' gaming styles and behaviors. A comment occasionally seen on

<http://www.gamer.com.tw> (Taiwan's largest online player community discussion board) states that "Players on American servers place more importance on recreation and cooperation while players on Taiwanese servers place more importance on personal achievement." Other opinions offered without the benefit of supporting evidence include "Taiwanese players are 'level farmers'" (a term used to describe individuals who play aggressively for the sole purpose of upgrading their avatar levels). Consequently, some Taiwanese players tolerate the slower communication speeds and 8-12 hour time differences that accompany connecting to North American servers. These players tend to express strong opinions on American playing scenarios to the detriment of Taiwanese player styles. We found evidence of respect given by indigenous Taiwanese players to their peers who play on America servers, and comments that seem to express a strong desire to participate in the "ideal gaming world" that they perceive as existing in the US.

The content of Taiwanese player discussions on differences between gaming cultures can be categorized in terms of (a) the debate over achievement versus recreation, (b) the degree of "experience farming," and (c) the fairness of "valet experience farming" (i.e., hiring another player to earn experience points for your avatar). As mentioned above, we have noted a tendency among Taiwanese players to criticize each other for placing too much importance on achievement at the expense of a game's recreational aspects. We tested this opinion by observing the efficiency of avatar level upgrades and monitoring avatar movement to determine fixed locations where players know they can farm experience points.

The collection and analysis of in-game data can be used to determine player avatar upgrades and achievement tendencies between Taiwanese and American players. For example, based on the assumption that most players either work or attend school during daytime hours, we can use data on the number of players at different times of the day to estimate the amount of player efforts to automatically upgrade avatars without being present (e.g., using bots or hiring "professional gold farmers"). Results from comparative searches of [ebay.com](http://ebay.com) and [ebay.com.tw](http://ebay.com.tw) indicate that the Taiwanese website offers more of these special services and a greater variety compared to the

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American version. American players who are interested in gaining experience away from the game tend to gravitate toward websites that provide virtual gold exchange services, whereas Taiwanese players are more likely to hire agencies to procure hard-to-earn equipment or to upgrade avatar levels, reputations, and ranks. We view these tendencies as evidence that Taiwanese players place much more importance than their American counterparts on level achievement. However, such an argument must take into account the greater tendency of American *WoW* game masters (GMs) to arrest professional gold farmers to limit unfair behavior—an example of how game management can influence in-game player behavior. Verification requires a large amount of in-game evidence on avatar level upgrading efficiency.

Guild activity is another aspect of this issue that needs to be taken into consideration. Some Taiwanese players who have left *WoW* argue that “all Taiwanese guilds are utilitarian—they only farm equipment and gold.” To test this claim, we collected guild recruitment announcements from Taiwanese and American servers; we found evidence that American guilds do the same. One Taiwanese guild announcement stated that players were welcome to join if they could “regularly attend raid missions 5-6 days a week from 8:00 pm to 12:00 pm.” In contrast, an American guild announcement stated that willing participants “must be ready to farm potions all day. You must have a thick skin and have a high capacity for verbal abuse.” Some guilds in both countries even stipulate that raid leaders have the power fire members who cannot regularly attend raid missions. This leads some players to complain that raid missions can become boring and block individual player efforts to upgrade their levels and/or earn essential equipment. Conflicting motivations can lead to what is now called guild drama—that is, frequent player movement between guilds. On the other hand, guilds that farm gold can reward new members who show a willingness to regularly participate in raid missions. Since the evidence suggests that both Taiwanese and American guilds place great importance on raids, additional in-game data is required to verify which group gives greater emphasis to achievement and benefits. We will address this specific issue in Section 4.

Play researchers generally focus on three topics: player characteristics, player behaviors, and environment. Players from different national or ethnic cultures tend to express different gaming behaviors. These behaviors can be affected not only by physical environment (e.g., alone at home versus group play at an Internet café), but also by the order of virtual game status. Our focus in this paper will be differences in player behaviors that are influenced by national culture. We used the client-designed user interface feature of *WoW* to collect data on avatar level, participation in a guild, time spent online, and frequently visited locations. The avatar data were used to determine level upgrading efficiency and level farming activity, and the

guild data were used to determine the degree to which Taiwanese players treat guild missions as work or play. The two data types were used to evaluate differences in Taiwanese and America *WoW* player behaviors and to support or refute claims commonly found on Taiwanese game community discussion boards.

## BACKGROUND

### World of Warcraft

Between its November 2004 release and January 2007 (the most recent data available), World of Warcraft has attracted more than 8,000,000 subscribers in North America, Europe, Korea, China, Australia, and Taiwan. The previous record of 3,500,000 subscribers was held by *Lineage*. It is currently believed that one-half of the world’s MMORPG subscribers are *WoW* players [9]. In North America, 220 game servers are used by 2,000,000 subscribers—roughly ten times the 200,000 Taiwanese players who have used that country’s 46 *WoW* servers since its release date and January 2007 [1]. Players and analysts generally agree that *WoW* has created completely new styles of play and game culture, therefore it is attracting considerable research interest in the same manner as its most popular predecessors, *Lineage* and *EverQuest*.

### WoW Player Separations

Due to market separation between East Asia and America, most Taiwanese players in the past decade have subscribed to online games designed and marketed by Korean and Japanese firms (e.g., *Lineage* and *Ragnarok Online*). A Taiwanese company aimed *EverQuest* at the American market; lack of interest among Taiwanese players (mostly due to the lack of a quality version in Chinese) caused the company to remove its Taiwan servers in March of 2006. With 200,000 subscribers in the US, *EverQuest* is still number four in popularity, behind *Lineage* (versions I and II), *Final Fantasy XI*, and *WoW*. The success of *WoW* (an American-made and marketed MMORPG) in Taiwan is due to its high-quality Chinese translation of game content and large number (46) of Taiwanese servers. Chinese servers also exist in Hong Kong and China. Still, as mentioned above, a growing number of Taiwanese players are willing to endure lower network speeds in order to play on American game servers.

We took advantage of *WoW*’s client-designed user interface to collect in-game data on player behavior. The interface executes player commands to control game interface display, change its appearance, and perform such functions as monitoring information on other users and their locations. In addition to deepening the level of player involvement, the feature also provides a means for players to participate in game design. Interested players can therefore modify strategies, communities, and guilds. Players can use *WoW*’s API (based on the Lua programming language for logic design and XML for UI appearance) to develop interfaces that they can share with other players. The worldwide popularity of *WoW* has made this flexible user interface and

its open-source plug-in a hot topic on gaming discussion boards. We will give a detailed explanation of how we used this feature to gather data in a later section.

Bartle's [2] player model is a useful tool for categorizing in-game player behaviors. According to Bartle's definitions, achievers pursue personal achievement (e.g., raising avatar level, earning killing points, collecting equipment and gold); explorers address their curiosity about game world environments and design; killers gain the greatest personal pleasure from harassing other players; and socializers like to build relationships with other players. Most opinions regarding differences between Taiwanese and American players emphasize the behaviors of achievers. For this reason, we collapsed the other three player types into a single "non-achiever" category. Whereas achievers often try to "farm" experience and gold at several fixed locations, non-achievers frequently act like explorers who visit many locations or meet and chat with other players without making any effort to upgrade their levels. Data on habitual in-game behaviors can be used to categorize players as achievers or non-achievers.

#### **Upgrading Avatar Level**

Level upgrade speed is recognized by players as an important factor influencing the popularity of a MMORPGs. The designers of *WoW* clearly focused on this important aspect of their product, creating a game that allows its players to learn the game environment and gain a sense of control very quickly. For example, *WoW* contains several missions specifically aimed at newbies; these missions put them on a fast track to reaching level 10 in less than 5 hours. At each subsequent level, players can take part in more complex actions such as small-group raids (for up to 20 avatars), joining guilds, or riding horses for transportation. A major difference between *WoW* and its predecessors is the speed with which players can reach the highest avatar level (60)—an average of two months but perhaps as fast as one week. At one time, players had to spend at least one year to reach the top level, or never succeeded in reaching the top level. Upgrade speed is strongly influenced by player behaviors. For example, players in groups are required to share experience with other avatars, therefore guild membership and cooperation can slow down player advancement [5]. Players gain experience points much more quickly by repeatedly killing the same monster at a fixed location without guild support. In other words, achievers who are motivated to quickly advance their avatar levels will express different behaviors than non-achievers, making level upgrading a measure of player achievement tendencies.

#### **Guilds and Raids**

Guilds are formal online game player organizations with hierarchical leadership structures that are the most popular format for players interested in executing joint missions [3, 7]. Whereas they were once viewed as informal and unplanned organizations, some recently released online

games have incorporated guild formation into their structure—that is, they contain mechanisms for establishing guilds and designing goals and missions that require coordinated actions. As an important MMORPG feature, guilds must be taken into consideration when analyzing player motivations.

*WoW* designers have incorporated high-end missions called raids (also referred to as raid missions and guild missions) suitable for groups consisting of 40 avatars whose member levels go as high as 60. One game feature that encourages guild membership is the fact that players can obtain rare equipment and treasure only by participating in raid missions. However, a successful raid produces only one copy of a coveted equipment or treasure, therefore a guild must perform the same raid mission many times in order to make sure that all members have their own copies. This design feature requires a sense of trust among guild members [8]; the sense of being a valued member of a team may explain why mission execution is a very popular aspect of *WoW*'s high-end content. Over one-third (35%) of the *WoW* guilds we collected data on were raid guilds. Furthermore, different raids require different combinations of avatar abilities; inappropriate combinations usually fail at completing raid missions and collecting rare treasure.

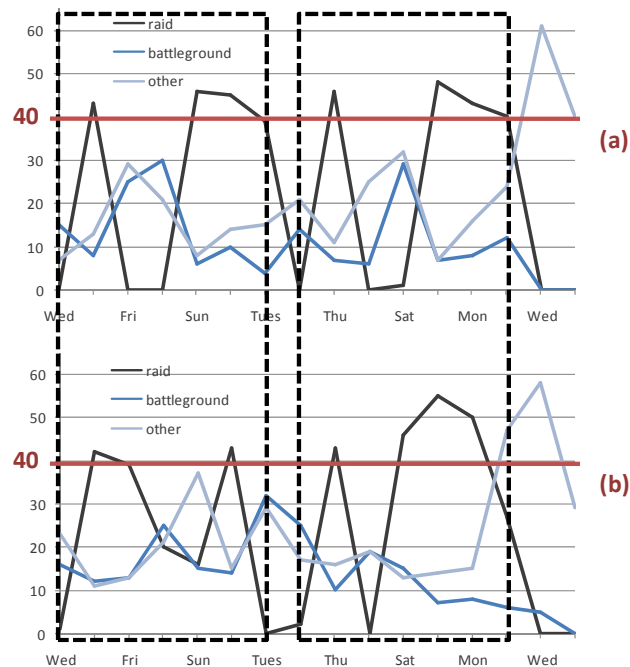
Game researchers interested in collaborative behaviors view online game raids as "large-scale cooperative problem-solving endeavors" [10]. One of their more interesting observations is the willingness of individual players to collaborate according to their avatar abilities. Thus, *WoW* avatars that serve as "tanks" during raids must be willing to withstand attacks from powerful monsters; "healers" accept responsibility for restoring the lives of other avatars; and the sole purpose of "DDers" is to inflict harm on monsters. To manage these tasks, guild members organize themselves into hierarchies that include such positions as "raid leaders" who are skilled at planning and execution and "DKP" managers who reward guild members in accordance with their level of participation in a mission.

The level of emphasis on executing guild missions can be viewed as a guild characteristic, with well-organized raiding guilds completing at least one mission every week. The raiding activities shown in Figures 1a and 1b display the differences in behavior between a well-organized raiding guild (Fig. 1a) and one that is relatively disorganized. Another way of expressing this idea is that the guild in Figure 1a has a high achievement tendency; in turn, players who regularly participate in these raids can be said to have greater tendencies to pursue individual achievement. Accordingly, we view guilds as units for evaluating achievement tendencies in terms of guild raiding periods, as well as a means of comparing achievement tendencies between Taiwanese and American *WoW* players.

## METHODS

### Client-Designed User Interface

We modified the user interface described in an earlier section to collect data on in-game player behavior. This allowed us to overcome a major shortcoming in collecting data on game activities and player perceptions during game sessions—the reliance on post-game surveys or case studies to infer in-game behavior long after players have left a state of immersion [5, 6]. We took advantage of this feature to build a body of quantitative data on avatar level, guild membership, time spent online, and visited locations. Avatar level and online time were used to calculate player level upgrading efficiency and the guild and visited locations data were used to determine if players adhered to raiding guild schedules or took part in farming behavior by repeatedly visiting certain fixed locations.



**Figure 1.** Raiding days over a two-week period for two guilds. Guild (a) has a regular raiding cycle, guild (b) does not.

## DIFFERENCES IN TAIWANESE/AMERICAN WOW PLAYER BEHAVIORS

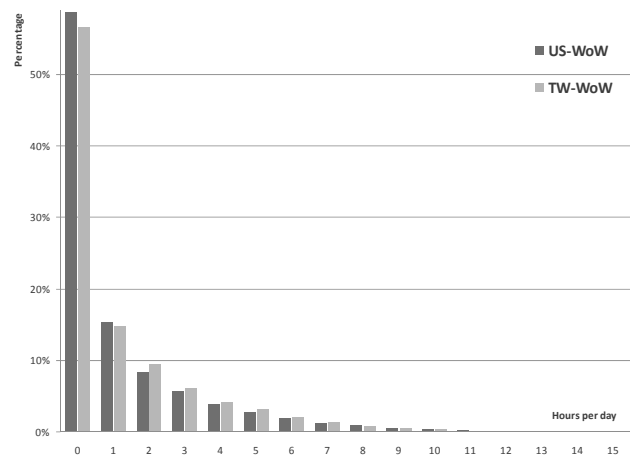
### Data and Method

We collected data from two servers (one PvP in Taiwan and one PvP in the US) between December 2006 and January 2007 (three weeks total). The US “Executus” server hosted 41,097 avatars and the Taiwanese server hosted 8,394. Avatar nicknames, guild affiliations, locations, and levels

were automatically recorded once every 30 minutes throughout the collection period. Data sets and results can be found at <http://writing.wvlc.nthu.edu.tw/wow/>. Basic descriptions of the two servers are given in Table 1. We found that the number of avatars on one American server could be five times the number on one Taiwanese server. However, the numbers of level-60 avatars were almost identical. The percentage of avatars at level 60 can be interpreted as the potential capability of all avatars on a server to execute raid missions. Level-60 avatars accounted for 42% of all avatars on the Taiwanese server but only 10.8% on Executus (Results of other American servers can be found at above-mentioned website). Despite this large difference in high-end player proportions, the distribution of player online time was equivalent across the two servers (Fig. 2). We used this measure as the basis for comparing differences in player behaviors (e.g., level upgrading efficiency and periodic participation in raids).

**Table 1.** Descriptive comparison of Taiwanese and American WoW servers.

	US	TW
Number of players	41,097	8,394
Number of level-60 players	4,421	3,552
Level-60 player percentage	10.8%	42%



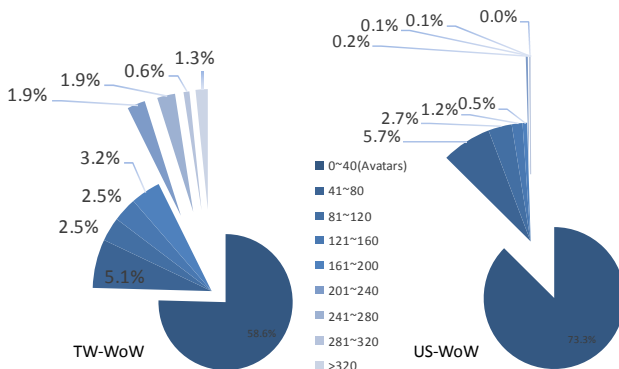
**Figure 2.** Average playing time for players on the Taiwanese and American WoW servers used in the study.

We calculated guild size distribution to gain an understanding of the potential raiding ability of American and Taiwanese game guilds. The results shown in Table 2 indicate that the number of guilds divided by the total number of avatars was higher for the American server versus the Taiwanese server, indicating that guild activity

on the American server is greater than on the Taiwanese server. However, the number of large guilds (with more than 40 level-60 avatars) was similar between the two servers, meaning that the potential raiding abilities of the two groups were also similar. Although the numbers of Taiwanese guilds and avatars was much smaller than those on the American server, the Taiwanese server had a larger percentage of large guilds, indicating greater raiding ability (Fig. 3). As shown in the right-most column of Table 2, our results are in agreement with those reported by Williams et al. [11].

**Table 2.** Comparison of guild-related characteristics for the Taiwanese and American *WoW* servers.

	US	TW	Previous Research [5]
Number of guilds	1,302	157	909 (2,728/3)
Percentage of single-avatar guilds	16%	22%	18%
Maximum avatar number in a guild	368	472	257
Average number of avatars (single avatar guilds deleted)	20.7	46.2	16.8
Median (single avatar guilds deleted)	9	5	9
Number of large guilds (level-60 avatars>40)	27	21	-
Percentage of large guilds (level-60 avatars>40)	2%	14%	-



**Figure 3.** Size distributions of the Taiwanese and American servers.

American guilds used in the study.

### Level Upgrading Efficiency

To measure level upgrading efficiency we collected data on individual avatar levels once every 30 minutes for three weeks; the appearance of an avatar was interpreted as meaning that it participated in the game during the following 30 minutes. At lower levels it is possible to use a simple calculation of upgraded levels divided by online time. However, *WoW* makes it more difficult for players to reach each new level, therefore upgrading from level 21 to 30 is much more difficult than upgrading from level 11 to 20. Ducheneaut et al. [5] used a linear function to estimate *WoW* upgrading time. We adopted this approach to express level upgrading efficiency for each avatar as

$$Level\_Upgrading\_Efficiency = \frac{Estimated\ (lower,\ upper)_{(sec)}}{Actual\ (lower,\ upper)_{(sec)}}$$

Accordingly, the higher the upgrading efficiency level, the less the amount of time spent on upgrading an avatar.

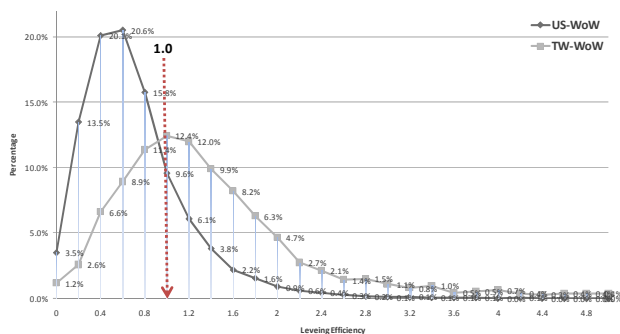
Average avatar level upgrading efficiency values for players on the Taiwanese and American servers are shown in Table 3. The 1.62 value for Taiwanese players means that they upgraded their avatars 1.62 times faster than the original estimated upgrading speed [5]. In comparison, the upgrading efficiency level for American players was 0.93—a significant difference. In terms of average daily playing time, we found that the average for Taiwanese players was only 1.13 times that of the American players. In other words, both Taiwanese and American players spend approximately the same amount of time playing (and have similar time distributions), but the average Taiwanese player upgrades his or her level faster than the average American player. This suggests that Taiwanese players tend to pursue level upgrades more vigorously than American players.

**Table 3.** Data on level upgrading efficiency and playing time per day for players on the Taiwanese and American *WoW* servers used in the study.

Server	Average level upgrading efficiency	Average playing time per day (minutes)
American	0.93	90.46
Taiwanese	1.62	102.19

Figure 4 contains data on upgrading efficiency distribution for Taiwanese and American players; since levels 1-10 are set aside for newbies, only avatars with levels higher than 10 were taken into account. The data indicate (a) a larger divergence in Taiwanese level upgrading efficiency compared to that for American players and (b) most American players' upgrade efficiencies were at slow speeds.

Among players on the Taiwanese server, 9% upgraded their avatars at speeds more than twice the average, but the same was only true for 3% of the players on the American server. Results from comparisons of average rate and distribution of level upgrade efficiency provide further evidence that the players on the Taiwanese server place more importance on level upgrades than players on the American server. The faster speed explains the Taiwanese tendency to reach level 60 in a shorter time period as well as their greater participation in high-end game content. This has several implications in terms of time spent playing, the purchase of pre-paid player cards, and the ability of high-level players to help newbie, organize raiding guilds, or show off their skills to other players. This information cannot be viewed as evidence supporting the idea that Taiwanese players are more likely to participate in level and experience farming, but it does support the contention that Taiwanese players are more motivated by achievement compared to American players.



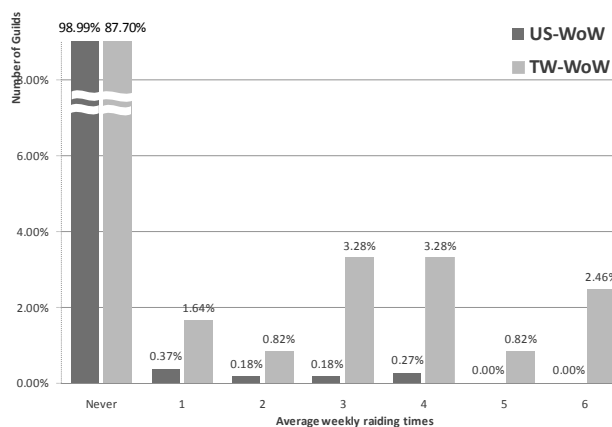
**Figure 4.** Distribution of level upgrading efficiency for players on both servers. Only avatars with levels 11 or higher were considered.

### Faithful Participation in Guild Missions

To investigate the circumstances of executing periodic raid missions, we collected data on 157 guilds on the Taiwanese server and 1,302 guilds on the American server (Table 2). As stated above, although the number of guilds on the American server was larger, the proportion of large guilds was greater on the Taiwanese server (14% versus 2%). We also collected data on each guild's raiding activity during the three weeks; guild raiding time distributions are shown in Figure 5. They indicate that 12.3% of Taiwanese guilds perform raids at least one day per week compared to 1.01% of American guilds. Guilds with more than 20 members participating in a current mission were regarded as major guilds. Raid missions with no major guild participation were not taken into account in our research. We calculated the average number of days per week that guilds conducted

raid missions. Twelve guilds on the Taiwanese server participated in raiding activity at least two days per week; three guilds participated in raids five days per week. Since full raids require participation by 40 avatars, we assumed that 480 avatars took part in the 12 raid missions, accounting for 5.7% of all 8,394 Taiwanese player avatars. These results indicate that the Taiwanese guilds were much more active than the American guilds in terms of executing raid missions.

We limited our analysis to missions requiring the participation of a major guild and assumed that repeated raiding activity was a sign of achievement behavior. *WoW* features three major raid types, each consisting of several smaller missions with various levels of difficulty. Guilds that regularly succeed in executing difficult raid missions earn good reputations in gaming communities, with the official *WoW* website occasionally compiling lists of the top 10 guilds in terms of raiding status. However, some guilds find it difficult to attract 40 members to participate in raids, and therefore are forced to rely on assistance from non-member avatars. Although guilds offer gold or less valuable equipment in return for non-member participation, non-member avatars are usually not allowed to earn a full share of a successful raid's rewards. Accordingly, these non-member players can be viewed as participating in raid missions without promises of achievement. Teams with large percentages of independent or temporary members often find it difficult to assign fair rewards, even when some of those members play for reasons of exploration instead of achievement. We therefore treated raids executed by casual teams as examples of non-achievement raiding.



**Figure 5.** Average weekly raiding time distribution for guilds on both *WoW* servers (single avatar guilds deleted).

Results from our comparison of guild raiding behavior between avatars on the Taiwanese and American servers

indicate that (a) in terms of guild size distribution, the Taiwanese server had a higher proportion of large guilds; (b) guild attitudes toward raid missions differ, as indicated by the number of missions executed by leading guilds versus the number executed without leading guilds; and (c) Taiwanese guilds put more effort into the periodic execution of raid missions. These achievement-oriented guilds cultivate and recruit players based on their willingness to pursue guild achievements, leading us to suggest that Taiwanese *WoW* players have stronger achievement tendencies than American *WoW* players.

## CONCLUSION

In this study we used the client-designed user interface feature of *WoW* to collect data on in-game player behaviors and used the data to determine tendencies among players on one Taiwanese and one American *WoW* game server. The results indicate at least two major differences regarding player achievement tendencies:

1. Although there were no significant differences between Taiwanese and American players in terms of daily playing time distributions, Taiwanese player level upgrading efficiency values were higher than those for American players, indicating that Taiwanese players may pursue achievement to the degree that they overlook the recreational aspect of online gaming.

2. Taiwanese *WoW* guilds and members were more likely to participate in the periodic execution of raid missions to build guild strength and reputation and to earn the most valuable equipment. After obtaining the valuable equipment they need, individual guild members remain and participate in identical raids for the purpose of helping other members gain their own copies of valuable equipment, thereby building trust. This phenomenon indicates that hard-core Taiwanese players tend to obey guild rules and to view game missions in the same manner that they view work in the physical world. Accordingly, Taiwanese guilds have strong tendencies toward achievement.

In conclusion, our results support the argument made by many Taiwanese players on community game boards that they place greater importance than American players on achievement, often to the point of neglecting the recreational features of game designs. The results also support the idea that specific collective player behaviors emerge according to server, region, country, or culture—all of which can determine how newcomers are treated. This continuous interaction between new and veteran players reinforces indigenous game cultures, even when groups from different cultures play the same game.

## ACKNOWLEDGEMENT

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