Game Design and Player Characteristics in Chinese MMORPGs: A Case Study of Justice

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Abstract: Technological advancements and changes in social habits have driven the rapid growth of mobile users, leading to a boom in mobile games that enrich people's leisure time and transform entertainment consumption patterns. This study selects deep players of "Justice" as samples, using in-depth interviews to explore the behavioral characteristics of Chinese gaming culture phenomena. The research collected insights from 14 experienced players regarding their motivations, behavioral traits, and views on game design and dissemination. By analyzing the content features of the game, it examines players' multifaceted motivations from the perspective of use and satisfaction, including stress relief, emotional experiences, social and individual integration, and cognitive needs. The study also found that demographic characteristics of players, the social attributes of MMORPG, and the effectiveness of game dissemination all influence player loyalty. In this study, respondents gave mixed reviews of the game, which demonstrates that player satisfaction with the game is not directly linked to their usage loyalty. Their reliance on the game is more reflected in habits and social needs, making gaming a daily habit or lifestyle. Furthermore, this study aims to analyze the usage motivations and need satisfaction of users of the mobile ancient-style MMORPG game through qualitative research, providing some supplementary insights into the application of the "use and satisfaction" theory in games, particularly mobile games.

Keywords: Use and satisfaction, Video games, MMORPG mobile game

1. Introduction

In recent years, advancements in the internet and smart hardware have driven the development of mobile games. Enthusiasm from players has fueled game production and competition, gradually industrialized the gaming industry and showcased trends towards mobility, competitiveness, and internationalization. Mobile games offer more flexible and fragmented options, and their integration with major payment platforms has simplified payment processes, enhancing commercial advantages. The gaming industry has become a new growth point for the national economy. According to the 2023 China Game Industry Report [1], the domestic game market achieved a historic peak with actual sales revenue of 302.964 billion yuan and 668 million users. Notably, role-playing (MMO) mobile games dominated the market, representing 31% of total revenue. As part of the cultural and creative entertainment industry, the large scale and broad user base of role-playing (MMO) mobile games make them highly promising in terms of market consumption and dissemination potential, warranting more detailed research and analysis. MMORPG games, with their unique interactivity and immersion,

provide a more authentic platform for experiencing the world of martial arts, attracting many young players to delve deeper and explore the essence of traditional martial arts culture. This trend injects new vitality into traditional martial arts culture, making it shine even brighter. It also provides a continuous supply of IP resources for the gaming industry, promoting steady and sustained development of the domestic gaming sector.

According to App Growing data, multiple MMORPG mobile games were launched in China in 2023, such as "Lost Ark" and "Jade Dynasty". Among them, according to Sensor Tower [2], Justice Mobile Game consistently ranked in the top three of China's iOS game charts for six months post-launch, demonstrating exceptional market retention. As of May 2024, "Justice Mobile Game" has been active in the Chinese gaming market for nearly ten months, with slogans like "No selling numbers; different paths lead to the same goal" and "Make MMOs great again."

Existing research predominantly focuses on satisfaction processes in traditional media and PC-based games [3], while mobile games—deeply integrated with internet ecosystems and characterized by larger user bases—exhibit more complex behavioral patterns [4,5]."Justice Mobile Game" serves as a classic case, boasting a large number of active players. Systematically analyzing the motivations and behaviors of its players can help understand how Mobile Game Media attract and retain players. Additionally, studying the physical and mental states, as well as behaviors, of players in games can reveal the impact of mobile MMORPG games on players' lives and provide new insights for future game design.

Based on the above analysis, this study will focus on the following issues:

1. How does the game design in "Justice Mobile Game" serve traditional culture?
2. What are the main game motivations and behaviors of users of "Justice Mobile?

2.   Methodology

2.1.   Content research method

This study, through the research on the game content design in the mobile game "Justice", the cultural integration and dissemination phenomena related to the game, the innovative application of the game, as well as the game's dissemination and field, combined with in-depth interviews, analyzes the compatibility between the content design and traditional culture and collects and integrates game players' evaluations and opinions on the game.

2.2.   In-depth interview method

2.2.1. Interview design

The interview adopts a way from the superficial to the profound, dividing the interview questions into four major parts: "Basic Information", "Traditional Culture Dissemination", "Players' Usage and Satisfaction", and "Game Dissemination and Social Behaviors". It conducts a comprehensive evaluation by combining open-ended questions with a high degree of freedom, such as players' evaluations of the advantages and disadvantages of the game.

The voice interview was conducted online through Tencent Conference. After obtaining the consent of the interviewees and signing the informed statement, the audio recording was collected, and subsequent transcriptions of the interview audio files were made.

In terms of data collection, to ensure the effectiveness of interview questions, this interview design refers to the previous research on the analysis of game motivation and game behavior related to the use and satisfaction of video game players, as well as the classification analysis based on the five levels of Maslow's hierarchy of needs. Each interview lasts about 30-60 minutes.

2.2.2. Interviewees

Using the convenience sampling method, this study selected gamers with high familiarity and representativeness from my own account to conduct interviews. The specific criteria are (1) players who have been playing "Justice Mobile Game" for more than 300 days; (2) users who have logged in within the past 7 days; (3) samples include multiple classes, covering players at different stages of recharging; (4) include both male and female participants, aiming to maintain an even distribution; (5) age between 18-28 (inclusive). Based on these characteristics, 14 representative interviewees were recruited in the *YunchuanXueqing* server. From March 18,2024, to May 10,2024, in a semi-structured one-on-one format, in-depth interviews were conducted, and basic information of the interviewees was collected, organized as follows in Figure 1, numbered M (Male) 1-8 and F (Female) 1-6:

ID	Nickname	Gender	Age	Occupation	Play Duration	Relationship Status	Total Spending
m1	RiverNot	Male	23	Unemployed	318 days	In a relationship	¥7,342
m2	Chaos	Male	23	Unemployed	319 days	In a relationship	¥136,193
m3	OverMountains	Male	24	Office Worker	319 days	In a relationship	¥2,130
m4	SkyCannon	Male	26	Teacher	319 days	Single	¥1,756
m5	WindCrossing	Male	20	Student	319 days	In a relationship	¥741,952
m6	PluckFlowersPlayQin	Male	28	Freelancer	301 days	Single	¥877
m7	Alina	Male	24	Student	319 days	Single	¥502
m8	TrueMeaning	Male	18	Student	319 days	Single	¥370
f1	MagicShield	Female	22	Student	319 days	In a relationship	¥1,657
f2	GatherWheat	Female	19	Student	319 days	Single	¥0
f3	SnowyMountains	Female	23	Student	319 days	Single	¥4,263
f4	LittleYummy	Female	22	Student	306 days	In a relationship	¥6,708
f5	InvinciblePrettyBoy	Female	22	Student	319 days	Single	¥6,320
f6	ForecastRain	Female	23	Civil Servant	319 days	Single	¥2,790

Figure 1: Statistics of respondents' personal information

3. Content research

3.1. Game IP and cultural background

Domestic ancient-style MMORPG games are often adapted from famous works or novels to build a large world with various themes. As a martial arts game, the early plot of "Justice Mobile Game" focuses on restoring the original work, attracting lovers of ancient-style literature.

"I read the original book of Inverse Water Cold... Every character in this game, as well as some scene modeling and voice acting, are quite appropriate." (M7)

"The original books, such as the four famous detectives, are all in the game, and I find them very interesting to play." (M8)

Marie-Laure Ryan [6] argues that the foundation of transmedia storytelling should be the "story world" (p. 35), which serves as a cohesive universe enabling narratives to expand across multiple media platforms. Attention should be paid to how to construct a complete world, and it is necessary to integrate the textual structure and the interactive mode to resolve the contradiction between the linear nature of narrative and the non-linear nature of audience participation. Therefore, in the subsequent development of the game's plot, the mobile game "Justice" breaks the single-line narrative with the original plot as the only main storyline. Players can independently choose the plot they want to experience. Some inconspicuous minor characters in the scenes also have their own exclusive stories, which not only enriches the scale of the entire martial arts world but also gives players a stronger sense of experience and immersion.

"It has some extra new storylines; npc will have some of their own storylines." (M4)

"There is a mission. After achieving the perfect ending and strolling around in the open world, when I see the protagonist living a good life there, I will feel deeply touched and think, Ah, fortunately I saved her at that time." (F5)

At this stage, the game gradually changes to *Xianxia*. While the picture is more gorgeous and the world background is richer, it also brings a broader space for play and imagination for the long-term development of the game.

3.2. Analysis and dissemination of traditional cultural content in games

This game delves deep into and inherits traditional culture. It incorporates elements such as shadow puppetry, lion dance, martial arts, and traditional Chinese folk music, creating a rich ancient atmosphere and providing players with the most intuitive experience of traditional culture. Features like Chinese-style architecture, landscapes, and ancient-style costumes, as well as a wedding system, allow players to experience an authentic Song Dynasty lifestyle.

"There is an NPC at the Hongqiao border who keeps saying that his son has joined the army to fight against the Liao." (F5)

"From small things like bricks and tiles to large things like copy mechanisms and item descriptions, he has the shadow of traditional culture... Some items or martial arts and skill names have something related to poetry." (M4)

In terms of plot, the game launched the *"Chilian"* mood story, which tells the story of an actor who sacrifices himself for the sake of national righteousness. The game invited masters in the field of *Kunqu* opera to sing original operas. Players can also receive free costumes, musical scores, and dance effects to fully experience the extraordinary charm of the national treasure.

"The plot contains some historical elements. For example, there is a historical reflection in it when the Northern Song Dynasty was invaded by the Khitans. " (M5)

In the activity of "Meandering Stream and Floating Goblets," players answer questions to receive rewards. The questions are related to the cultural and entertainment life during the Song Dynasty, such as "Which criterion is the most decisive in the tea-tasting competition?" "Which allusion made the fashion of wearing flowers popular in the Song Dynasty?" and so on. Through the activity of answering questions, players can learn about relevant traditional cultural knowledge. During each solar term, corresponding activity tasks will also be launched, accompanied by customs related to the solar terms, enabling players to experience the folk customs of the Northern Song Dynasty while completing the activity tasks.

"... It will popularize the entertainment life of the Song Dynasty, for example, the earliest night market appeared in the Northern Song Dynasty so that people's nightlife is more abundant." (F4)

In terms of the design of the dungeon mechanism, it contains a wealth of cultural elements, such as poetry recitation, and ink painting. Players need to possess certain traditional knowledge and coordinate it with the game's operational mechanisms to successfully complete levels. For example, in the dungeon "Mirror Heaven Pavilion Forbidden Hall," players enter through a curtain and transform into shadow puppets, accompanied by background music of traditional Chinese opera, to battle the dungeon BOSS. The game also uses modern technology to rejuvenate shadow puppetry, allowing players to experience its charm through interaction and be subtly influenced by periodic and repetitive cultural immersion.

"It will say a line of poetry is missing a word, and the player has several balls on them, one of which is correct, and you have to hit that ball for it to pass through the level." (M7)

"... There are some bosses. For example, Li Bai. He can recite poems and also ask you to recite poems. After you clear the instance several times, you will gradually have a deeper impression of these poems and unconsciously be able to recite all of them." (F3)

3.3. Game features and innovations: the collision of smart technology and ancient Chinese style

On many large world maps, players can occasionally encounter AI-controlled NPCs and freely converse with them. These AI-controlled NPCs have distinct personality traits, and conversations with them can either increase or decrease your affinity for them, even linking interactions between them. In interviews, M3, M4, M6, F1, and others all mentioned this innovation, praising the highly interactive AI for bringing the entire world to life, vividly embodying the concept of a "breathing world."

"Some players don't want to communicate with others when doing dungeons, so they will team up with AI teammates. When I first started playing this game, I chatted with those AI NPCs every night." (M4)

"Some of the in-game dialogue with NPCs before had fixed responses. You could anticipate what they would say even before they replied. If it's AI, it will add a lot of possibilities." (M6)

"It's very interactive, you can talk to the NPC freely... and it's very innovative." (F1)

In addition to the above experiences of AI functions, the mobile game "Justice" also has functions such as AI face customization, "crew gameplay" for AI film production, AI painting, and so on. Future advancements in AI technology could lead to the upgrading and iteration of these functions.

3.4. Game dissemination and social interaction: the integration of the boundaries between online and offline

Social interaction is at the core of MMORPG games, as players primarily engage through role-playing and character-driven communication [7]. According to Yee, this dynamic fosters a sense of community and belonging within virtual worlds (p. 27). The "Theater Mode" introduced innovatively in the mobile game "Justice" enables players to engage in deeper role-playing with their friends, at the same time,, the advanced push mechanism of the online platform has greatly facilitated the rapid circulation of a vast amount of diverse information. As independent producers, players now have lower costs for releasing content, which has been widely shared and disseminated within the subcultural groups of the "Justice" gaming community. Under the trends of "creating fun content" and "playing with memes," games have significantly improved information dissemination efficiency through player social sharing. The closed loop of "shared interests" aligns with the uses and gratifications theory, where players actively participate in content creation to fulfill social and entertainment needs [8]. Such dissemination modes, as observed in Tencent's global strategies, further enable games to reach broader audiences beyond their original player base [9].

"... You can direct your own plot and find friends to be your actors." (M8)

The formation of players' media usage habits not only shows the extension and innovation of social mechanisms in "Justice Mobile Game", but also reflects the diversity and personalized characteristics of users' information needs in the new media era.

"My own video account can do things like photo taking and check-in techniques, as well as take some funny content with romantic connections. It has over 300000 views and thousands of likes." (M4)

"My friends would pull me to take pictures, and I would go to accompany her." (F5)

With the synergistic effect of multiple media, game dissemination and user acceptance are no longer limited to a single medium, but have formed a cross media interactive circle The connections between players are more diverse, with almost all respondents maintaining contact with friends on social platforms outside of the game and actively participating in game related content interactions. Most respondents also believe that such connections are necessary.

4.   Interview results

In the discussion of "player usage and satisfaction," all surveyed samples gave positive recognition to the social needs carried by the game and exhibited a composite demand characteristic. With the increasing degree of freedom in the subsequent gaming experience, these demands are gradually evolving or giving rise to new autonomous demands. The following will provide a specific analysis of the research results.

4.1.   Satisfaction in relieving stress: avoidance, resolution, and habits

The satisfaction of relieving stress is not only to escape or relieve the pressure of life by playing games, but also to eliminate or wear out the boring time in life. Over time, it will form a daily activity or habit. The majority of respondents reported using games as a daily habit.

"It feels like a habit... and I can't help but open it up "(M5)

"I play games when I have nothing to do." (M7)

"Although he doesn't force you to do it, you always feel like you're missing out on some kind of reward, so you do it every day and get used to it." (M8)

Tasks or activities launched online every day have become a fixed habit and recreation. They believe that the daily activities of games have significant entertainment value, which can effectively release individuals' emotions and stress, thus meeting the need to change their mood in the gap between busy work and daily life, and promoting individuals' physical and mental balance and health.

4.2.   Satisfaction in the needs of social integration: communication and companionship

The satisfaction of social integration needs involves two aspects: games as social media and emotional companionship. As Peng Lan [10] emphasized, interpersonal relationships are becoming increasingly "cybernetic" with the advancement of AI, blurring the boundaries between human and machine interactions (p. 127). This "cybernetic turn" in social relations echoes Haraway's   prophecy of human-machine hybridity, where technology mediates emotional connections, and MMORPG games demonstrate this trend [11,12]. Players can satisfy their social needs by establishing relationships in games such as "love," "loyalty," "brotherhood," "master apprentice," etc.

"Friendship, good friends, and even socializing between lovers all have different systems to meet different needs." (M4)

"The social system is more diverse. There is a teapot channel in the game, where 1,000 people can listen to stories together in one teapot, which feels like an ancient storyteller." (F1)

Many players even extend the relationship of online games to offline, "breaking the wall of dimensions," and other players become friends who can talk about everything.

"I know everything about my companions in the game, we are already in a relationship and will meet and even get married in the future." (M5)

"We have all joined a WeChat group for gangs, brotherhood, and other activities... Our relationship extends from the martial arts world to daily life, and this game is more like a medium for making friends. "(M7)

In the circle of friends function of the mobile game "Justice," in addition to sharing the news related to the game, many people will also share their offline life on it. The satisfaction of social needs is one of the important factors that promote the continuous game of Inverse Water Cold players and have the loyalty and stickiness of the game.

"...Talking about how we doing recently, and play other games together, but the most common one is to play Justice." (F1)

"If someone leaves and the friends haven't left, it's likely that the person who left will come back to play." (M5)

"I haven't played games for a while, but because I'm still in the WeChat group, I saw everyone playing all the time, and now I'm back playing." (M3)

4.3. Satisfaction in the needs of personal integration: achievement, presentation and customization

The fulfillment of individual integration needs includes the achievement and personal display of players in the game. In this game, it is manifested as winning against opponents and surpassing others in personal rankings, such as PVP battles where players are ranked from Bronze to Unparalleled, among ten different tiers. Players with higher rankings can participate in the server-wide ranking and receive corresponding titles and item rewards;

"I feel a sense of accomplishment when I can beat others with my own ordinary equipment." (M3)

"If you score high, you will have a ranking, and those who rank high will also receive rewards. Some avatar frames and other things can be seen by others. "(F3)

M3 and M4, as leaders of top guilds in the game, also mentioned similar sources of achievement in interviews: leading the team to win glory together can give them an unparalleled sense of accomplishment. As a large group of players in the game, a guild is no less difficult to operate and manage than a small company. Managers need to invest a lot of time, experience, and even money in it.

"There is something called gang activities, you need to study a lot of things, including skill explanations, game combinations and so on... There are also strengths and weaknesses between each gang. Then I might join some stronger gangs, which makes me feel more proud compared to others, just like having a Beijing household registration." (M4)

Respondent M6 has already recharged nearly 700000 yuan in the game, but in addition to in-game recharge, he spends more on guild management and rewarding members, including sending red envelopes in WeChat communities, lottery draws, etc., with actual expenses already approaching one million yuan. But in the interview, he stated that these expenses can bring him immense satisfaction and a sense of achievement, which is necessary.

"Many people are willing to follow you, we definitely don't want to lose. After winning the game, i feel that everything i put in is worth it. "(M6)

Display is the presentation of personal interests and preferences. Players can customize their "Virtual avatar" according to their own personality, and their personal preferences and styles are also presented on the "Virtual avatar." Most respondents mentioned that they will customize and dress up their avatar according to their real characteristics and preferences:

"This character is as handsome as I am. I usually like a certain color and will wear it like this." (M1)

"I don't like fancy stuff anyway, so I'm sure the game is going to be simple." (M2)

"To play this kind of ancient style game is to be very martial arts, with a great hero style... So I will play the male number to show the power of the great hero." (M4)

In addition, there is also widespread anti gender character selection in the "Justice Mobile Game." Among the 14 samples surveyed, four people (two men and two women) chose characters of the opposite gender to themselves, believing that this is an externalization of their internal traits.

"I can pretend to be a girl... to satisfy my little bad taste."(M5)

"Female characters are generally more attractive than male characters, and many clothes are much more beautiful. I would imagine it was my daughter and dress her up." (M8)

On the other hand, they can also use this avatar to show the dressing and behavior that they cannot or dare not try in their daily life, which is also an external expression of their attitude and consciousness.

"My personal image tends to be more masculine, just like in real life. So, if I want to dress up and play a game character, I can dress up nicely. There are also some things that I dare not wear normally, but I can experience them." (F1)

In addition, players not only enjoy the content provided by the game design, but also actively explore and create new personalized use motives, such as seeking erotic satisfaction and trading.

"This game's couture can be freely dyed, and some people will dye it in transparent or flesh-colored colors that are more borderline to simulate nudity, and then pinch some extreme body shapes. Many people wear it this way. "(M6)

"I was lucky enough to win the prize twice. This item usually sells for 1200 yuan, which means I made 2400 yuan for nothing." (F6)

5.   Conclusion summarize discussion and reflection

5.1. Findings

In today's era, people need companionship, time has become fragmented, and the demand for entertainment has increased. MMORPG mobile games have emerged, which is not only the insight of game developers into player characteristics during early design and planning, but also the choice of game motivation displayed by most players in order to meet different needs

In the mobile game "Justice" diverse and innovative game designs meet players' multifaceted usage needs, bringing them good economic benefits. The game not only accompanies players and provides a social platform but also offers historical education, humanistic care, and fresh experiences. This study empirically analyzes how the game achieves its cultural heritage goals through multiple innovative designs, such as deeply integrating traditional Chinese values like loyalty, filial piety, integrity, and righteousness into the plot design, and creatively combining cultural elements like poetry and literature with dungeon mechanics. Furthermore, as the first MMORPG mobile game to widely apply AI technology, its intelligent NPC system vividly recreates historical figures. However, player feedback also points out that some commercial designs undermine the seriousness of history, suggesting that developers need to find a better balance between entertainment and cultural inheritance.

This game delves deep into and inherits traditional culture. It incorporates elements such as shadow puppetry, lion dance, martial arts, and traditional Chinese folk music, creating a rich ancient atmosphere and providing players with the most intuitive experience of traditional culture. Features like Chinese-style architecture, landscapes, and ancient-style costumes, as well as a wedding system, allow players to experience an authentic Song Dynasty lifestyle.

Therefore, regarding the second research question, "What are users' gaming motivations?" this study found that players primarily exhibit four core motivations: first, the fulfillment of stress relief needs; second, the satisfaction of social integration needs; third, the fulfillment of personal integration needs. Notably, these motivations often exist in a composite form and dynamically change as the game progresses. The study also reveals that there is room for improvement in areas such as career balance and historical accuracy. It is particularly important to emphasize that while games offer rich social features, players must remain vigilant about personal information security in online social interactions.

Overall, through the integration and innovation of traditional culture and modern technology, "Justice Mobile Game" not only builds a positive interactive ecosystem between manufacturers and players, but also explores new paths for cultural dissemination in the digital age, providing important references for the development of similar games.

5.2. Limitations of research

This study has certain limitations, mainly reflected in the non-random nature of the sample and the limitations of the research methods. Due to the numerous game server zones and relatively free play formats, players are widely distributed and often anonymous, making it difficult for the author to establish a clear sampling standard for random sampling of respondents. Additionally, this study adopted a qualitative research method using paired semi-structured in-depth interviews. While these interviews can provide deep insights into each respondent's gaming motivations and behaviors, they may be subjectively biased and limited, lacking empirical testing and quantitative analysis. Therefore, the conclusions drawn have not yet summarized universal patterns and may not be applicable to all players.

In addition, this study primarily focuses on the satisfaction of players' play needs under the theory of use and gratification in "Justice Mobile Game" and obtains their gaming motivations and behaviors. However, each satisfaction point is listed as an independent item without adequately explaining the interrelated or progressive development between various motivations and needs. It is hoped that future research will continue to address these shortcomings to further validate and expand the theoretical findings of this study.

At present, MMORPG mobile games are gaining momentum in the domestic gaming market and have great potential for future development. It is hoped that scholars can conduct more detailed and comprehensive research in this field to further explore the development potential of mobile games as an emerging medium and their role and influence in the cultural field.

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