

# The Main Factor Affecting the Consumption of Chinese Gamers

Jiarui Kong

*Heilongjiang University of Science and Technology, Heilongjiang, China*

**Abstract:** This paper reviews the recent research progress on the main factors influencing the chosen consumption patterns of game players in China, including the in-depth discussion of individual psychological characteristics, social environment, and game characteristics. This paper presents conclusions about the importance of individual psychological characteristics and the influence of social context and cultural background. These conclusions not only reveal the complex factors that affect the consumption patterns of Chinese gamers, but also provide valuable insights for game developers and market researchers to help them better understand player needs, design game consumption patterns that are more in line with market trends, and develop effective marketing strategies.

**Keyword:** Chinese Game Consumption Factors; Factor Analysis

## 1. Introduction

With the rapid development of network technology and the popularization of intelligent terminals, China's game market has shown a booming trend in recent years. The game industry has become an important part of the cultural and entertainment field, which has had an important impact on the economic and social development. Studying player consumer behavior patterns can help to optimize game design, improve user experience, enhance marketing strategy, and promote innovation and development in the game industry.

## 2. Research Status, Both at Home and Abroad

### 2.1 Domestic Research Status

Although domestic scholars started their research on the consumption pattern of game players relatively late, it has made significant progress and achieved in-depth research results

in recent years.

Zhou Changchun and Luo Min (2006), through the questionnaire survey of college students online game consumption behavior, revealed the preference of game players when consuming, that is, they tend to buy and consume in convenient and fast places, and their main consumption purpose is entertainment and relaxation<sup>[1]</sup>. Liu Yang and Yang Xuecheng (2010) constructed the Technical Acceptance Model (TAM) and conducted a systematic analysis of the factors affecting the behavior intention of online game players. Their research reached a different conclusion from the traditional model, providing a new perspective and theoretical framework for understanding players behavior<sup>[2]</sup>. Gao Zhen (2013), through the in-depth analysis of the design ideas of consumer activities, provides feasible design solutions for game developers, aiming to stimulate the consumption desire of players, so as to promote the healthy development of the game industry<sup>[3]</sup>. Chen Si (2015) focuses on the consumption behavior of mobile game users. He discusses how merchants can make use of consumers psychological characteristics, such as herd mentality and comparison mentality, to effectively carry out market promotion and improve the market competitiveness of mobile game products<sup>[4]</sup>.

In the research on the consumption mode of game players, domestic scholars not only pay attention to the consumption behavior itself, but also penetrate into the level of consumer psychology and market strategy, providing theoretical support and practical guidance for the sustainable development of the game industry.

### 2.2 Foreign Research Status Quo

In foreign countries, game players have accumulated rich experience and in-depth theoretical achievements in the research field of consumption mode. Yue Guo and Stuart Barnes (2009) focused on buying behavior in the virtual world, with a detailed analysis of how multiple factors work together in the decision-making

process for players to buy virtual items in a virtual environment. These factors may include the players personal preferences, the practicality of the virtual item, the social interaction of the game, and how much the player invests to the virtual world<sup>[5]</sup>. The study of Cheng-Hsun Ho and Ting-Yun Wu (2012) explored the influence of consumption value factors on the purchase intention of virtual goods in online games. Their research suggests that game type, as a regulatory variable has a significant impact on players purchase intentions. Different types of games may stimulate players different consumption motives and value perceptions, thus influencing their purchase decisions<sup>[6]</sup>. Lucas Lopes Ferreira de Souza and Ana Augusta Ferreira de Freitas (2017) used structural equation modeling to conduct a comprehensive analysis of multiple attributes that affect game players willingness to pay. Their research not only considers the players personal characteristics, such as age, gender and game experience, but also analyzes the characteristics of the game itself, such as game design and in-game economic system, providing a multi-dimensional perspective on understanding player paying behavior<sup>[7]</sup>. Bujnakova (2023) focused on the players of League of Legends, and studied their microtransaction behavior. Her research may involve the purchases that players make in games, such as buying skins, heroes, or in-game currency, and how these transactions affect the players gaming experience and spending habits<sup>[8]</sup>.

The research results of these foreign scholars not only enrich the understanding of the consumption patterns of game players, but also provide an important reference for the operation and market strategy of the game industry. Through these studies, it is shown that the consumption behavior of game players is a complex multi-factor interaction process, involving psychological, social, economic and other levels.

### **3. Analysis of Influencing Factors**

#### **3.1 Individual Psychological Characteristics**

Individual psychological characteristics are one of the important factors affecting the choice of consumption patterns of game players. The players personality, values, motivation and other psychological characteristics directly influence his consumption decisions. For example, some

players may be more focused on the entertainment and social nature of their games, and therefore prefer to choose game consumption patterns that provide rich social interaction.

According to Yee, N. (2006), personality traits such as extroversion and openness were significantly associated with players preference for the game type of play. For example, outgoing players may be more inclined to choose games that emphasize social interaction, such as World of Warcraft or League of Legends, because these games offer rich social platforms and teamwork opportunities<sup>[9]</sup>. Hsu, M. H., Yen, C. M., & Hsu, Y. H. (2011). Research shows that players values can also affect their spending patterns<sup>[10]</sup>. For example, fulfilling fulfillment may be more willing to pay for in-game achievement systems to receive special rewards or logos, such as the achievement system in the Final Fantasy series. The study by Nabi and Kalogeropoulos (2010) revealed the impact of social motivation on gamer behavior<sup>[11]</sup>. In the case of Second Life, the game allows players to create their own avatar and interact with other players in an open world. Players who seek social contact and self-expression may purchase virtual items or services more frequently to enhance their social experience.

You can see from these examples that psychological traits such as character, values and motivation do play a key role in their consumption decisions. Game designers and market analysts need to consider these factors to better meet the needs of players and design games and consumption patterns that can attract and maintain player interest.

#### **3.2 Social Environment**

Social environment is also a factor that affects the choice of consumption mode of game players. Chinas unique cultural background, consumption concepts, policies and regulations may have an impact on players consumption behavior. For example, in Chinese culture, social factors may be more important, and players may choose to pay for social interaction or to show their characters.

Zhangs research (2018) found that the concept of collectivism and relationship network emphasized in Chinese culture has a significant impact on players online game consumption behavior<sup>[12]</sup>. For example, in Honor of Kings, players tend to buy equipment or characters that

enhance teamwork to enhance social interaction with other players, reflecting the importance of collective harmony and social relations in Chinese culture. The study by Liu and Wang (2019) reveals how the consumption concepts of Chinese players are influenced by cultural values<sup>[13]</sup>. During certain festivals or celebrations, players may be more willing to purchase special in-game items or services to show their characters or celebrate cultural traditions, such as in *Onmyoji*, players may buy holiday-related skins or decorations to show respect and celebration for traditional culture. Wang and Liu (2020) have noted that China's strict online game management policies also have an impact on players' consumption behavior<sup>[14]</sup>. For example, online gaming time restrictions and consumption restrictions for minors may encourage parents or gamers to be more cautious when buying in-game items to avoid violating the rules. The implementation of this policy reflects from the side that the Chinese government supervises the consumption behavior of online games, as well as the control of youth game time and consumption. Specific cultural backgrounds such as the Chinese culture of filial piety may also influence players' spending on virtual items. For example, in some games, players may buy virtual gifts to in-game friends or family members to show respect and gratitude, a consumption behavior that may not be common in other cultures. Moreover, the interaction between individual psychological characteristics and the social environment cannot be ignored. For example, in China, a collectivist culture may prompt players to buy virtual items in games to enhance teamwork and social interaction, thus meeting the needs of a social sense of belonging. From these examples, we can see that China's unique cultural background, consumption concepts, policies and regulations and other social environmental factors do have an important impact on the choice of consumption patterns of players. Game developers and operators need to consider these factors to design games that are more responsive to the needs and cultural background of Chinese players, while complying with relevant policies and regulations to provide a healthy game environment.

### **3.3 Game Features**

The nature of the game itself is also a key factor in the choice of players' spending patterns. The

content, quality, social features, and competitive mode of the game can all affect players' willingness to pay. Kim, J. H., and Kim, Y. G. (2017) emphasized the significant role of game quality and social interaction on the players' willingness to buy in the game. High-quality game content and rich social interaction can attract more players to spend<sup>[15]</sup>. For example, the popular game *Peace Elite* has attracted many players with its excellent game quality, rich and diverse map scenes, as well as social functions such as friends team up and voice communication. Players consume for more unique paid items such as clothing, weapons and skins, which fully reflects the impact of the game's content, quality and social features on the players' spending patterns. In *Fortnite*, the in-game seasonal combat pass provides additional challenges and rewards that motivate players to spend more time in the game, thus increasing the possibility that they will buy virtual currency to unlock those rewards. Furthermore, the social and custom features in *Animal Crossing* allow players to create unique game experiences, a personalized experience that prompts players to purchase additional in-game items such as furniture and clothing to personalize their islands.

### **3.4 Association Between the Factors**

This section explores the interactions and associations between factors such as individual psychological characteristics, social environment, and game characteristics, and analyzes how they jointly influence the players' consumption behavior.

The connection between psychological factors and social environment: individual psychological characteristics, such as conformity mentality and difference-seeking mentality, are the indirect factors leading to consumer consumption. Game developers take advantage of this mentality to encourage consumers to play games and recharge their purchases. For example, a player may be herd-minded because their friends are playing a game, thus increasing their spending in the game<sup>[16]</sup>. At the same time, players may also pursue a personalized consumption experience, which encourages them to buy unique in-game items to distinguish them from other players.

The connection between social environment and game characteristics: the social nature, participation and interactivity of online games

are increasingly prominent, and the combination of game and social characteristics has become a major trend at present. For example, in-game social features such as teamwork and friend systems may be influenced by the social environment, and players may prefer these functions in a collectivist culture, thereby increasing spending. In addition, the external environment of the game, such as the marketing environment, legal policy environment and hardware configuration environment, can also affect players consumption behavior<sup>(16)</sup>.

The connection between game function and psychological factors: the attitude image and hedonistic value in the perceived value of online games can improve the consumption behavior. Players perceived value of the game, such as the challenge, control and accomplishment, can affect their immersive experience, and thus affect their consumer behavior. For example, a players immersive experience, such as a sense of self and control, may prompt them to spend more in order to enhance the experience.

#### **4. Application of the Factor Analysis Method**

Factor analysis is widely used in the social sciences, especially in marketing and consumer behavior research, to understand the drivers behind complex phenomena. By attributing many variables to a few potential and unobservable factors, factor analysis can reveal the internal links between variables and simplify the data analysis process, thus helping researchers to more effectively identify and understand the key factors that influence consumer decisions. Existing research shows that factor analysis is widely used in the study of consumer behavior, and it has been proved to be an effective method. For example, Li, Y, Wang, L (2019) published in the Journal of Marketing Research to deeply explore multiple factors that influence the choice of consumption patterns of Chinese gamers<sup>(17)</sup>. The study identified several key potential factors through factor analysis, such as the innovation of the game content, the depth of social interaction, and the credibility of the game brand, which together work on the players consumption decisions. The results not only provide a basis for game developers to optimize their strategies, but also provide a new perspective on understanding the consumption behavior of Chinese gamers.

#### **5. Conclusion and Outlook**

To sum up, with the rapid development of Internet technology, Chinas game market presents a diversified and personalized consumption trend. Players consumption patterns are not only influenced by individual psychological factors such as personal interests, values, and consumption habits, but also by social environments such as social culture, family background, and economic status. At the same time, the theme, gameplay, social attributes and other characteristics of the game itself also profoundly affect the players consumption behavior. In the future, researchers should combine big data analysis and artificial intelligence technology to deeply explore the complex relationship between individual psychology and social environment, reveal the internal laws of game consumption patterns, and provide scientific basis for game enterprises and policy makers, so as to promote the healthy development of the game industry.

#### **References**

- [1] Zhou Changchun, & Luo Min. (2006). Study on the characteristics of college students online game consumption behavior. Journal of Kunming University of Science and Technology: Social Science Edition (04), 25-28.
- [2] Liu Yang, C & Yang Xuecheng. (2010). Analysis on the consumption behavior and influencing factors of Chinese online game players. Journal of the Graduate School of the Chinese Academy of Social Sciences (3), 6.
- [3] Gao el. (2013). Consumption activity design of online games. Global Market Information Guide, 000 (016), 46.
- [4] Chen Si. (2015). Analysis of the consumption behavior and consumption behavior of mobile game users. Fujian computer, 31 (1), 2.
- [5] Guo, Y., & Barnes, S. (2009). Virtual item purchase behavior in virtual worlds: An exploratory investigation. Electronic Commerce Research, 9, 77-96
- [6] Ho C H, Wu T Y. Factors affecting intent to purchase virtual goods in online games[J]. Int. J. Electron. Bus. Manag., 2012, 10(3): 204-212
- [7] Souza, L. L. F. D., & Freitas, A. A. F. D. (2017). Consumer behavior of electronic games players: a study on the intentions to play and to pay. Revista de Administração

- (São Paulo), 52, 419-430.
- [8] Bujňáková, E. (2023). Consumer Behavior of League of Legends Players.
- [9] Yee, N. (2006). The relationship between game design and player motivation. *Presence: Teleoperators and Virtual Environments*, 15(1), 77-86.
- [10] Hsu, M. H., Yen, C. M., & Hsu, Y. H. (2011). The influence of personality traits on online gaming addiction. *Computers in Human Behavior*, 27(4), 1542-1550.
- [11] Nabi, R. L., & Kalogeropoulos, D. (2010). The role of social influence in video game play. *Communication Research*, 37(6), 729-755.
- [12] Zhang, Y., & Zhang, Y. (2018). Cultural influences on online game consumption behavior: A case study of Chinese players. *Journal of Interactive Marketing*, 42, 38-52.
- [13] Liu, X., & Wang, Y. (2019). The impact of cultural values on online game addiction and spending behavior in China. *Computers in Human Behavior*, 97, 104775.
- [14] Wang, Y., & Liu, X. (2020). The role of social norms in shaping online game spending behavior in China. *Journal of Business Research*, 114, 66-75.
- [15] Kim, J. H., & Kim, Y. G. (2017). The effects of game quality and social interaction on in-game purchase intention. *Journal of Computer-Mediated Communication*, 22(4), 208-223.
- [16] Zhang Chunhua, and Wenlu. (2018). Empirical research on online game consumption behavior and its influencing factors — Based on the differentiation analysis of college students. *Jiangsu Social Science* (6), 9.
- [17] Li, Y., & Wang, L. (2019). "Exploring the Factors Influencing Chinese Players Consumption Patterns in Online Games." *Journal of Marketing Research*, 56(3), 345-361.