The Inner Logic and Correlation Analysis of Game Recharging and Consumer Behavior: A Study Based on Consumer Psychology

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Abstract:
With the constant evolution of network technology, online games, as a significant consumer industry, have seen tremendous growth in recent years. The introduction of online games has accelerated the gaming industry’s growth and provided customers with new gaming experiences. In-game recharging behavior has a tremendous influence on customer behavior. This study will investigate the link between recharge behavior and customer behavior in the online gaming industry, as well as how to improve or minimize consumer stickiness using consumer psychology methodologies such as a literature review and case analysis. It demonstrates that good and negative consequences are formed, and stickiness may be divided into active and passive forms. Thus, the author begins with the perspective of their customers and considers how to prevent being pulled away by gaming businesses for more money. The author also investigates more effective strategies to enhance customer stickiness from the standpoint of merchants.

Keywords: Consumer behavior; Consumer psychology; Customer stickiness; Game recharging; Case study.

1. Introduction
Driven by the digital wave, online games have gradually penetrated people’s daily lives and become an important form of entertainment. With the continuous expansion of the gaming market, game recharging, and consumer behavior have gradually become a hot research topic. Consumer psychology and consumer behavior, as important disciplines that reveal consumers’ intrinsic motivation and extrinsic behavior, are of great significance for analyzing the intrinsic logic and correlation between game recharging and consumer behavior. This study aims to deeply analyze the internal logic and correlation between game recharge and consumer behavior, reveal the psychological and behavioral factors that affect player recharge behavior, and provide targeted marketing strategies and product design suggestions for game companies. Meanwhile, this study also aims to provide new ideas and methods for applying consumer psychology and behavior in gaming through empirical analysis. From a practical perspective, this study helps game companies better understand the needs and preferences of players and enhance the attractiveness and competitiveness of games. At the same time, by optimizing the recharge mechanism and improving user experience, game companies can further increase the consumer stickiness of players and achieve sustainable development. In addition, this study also helps guide players to consume rationally and avoid the negative effects caused by excessive gaming addiction.

This study will adopt a combination of literature review and case analysis methods. Firstly, by reviewing relevant literature, we aim to understand the current research status and development trends of consumer psychology and consumer behavior in gaming, providing theoretical support for this study. Secondly, select representative game cases for in-depth analysis to explore the factors and mechanisms that affect game recharge and consumption behavior. Finally, the research results are validated and explained by combining empirical data. This paper first provides an overview of the basic theories of consumer psychology and behavior, providing theoretical support for subsequent analysis. Next, from the perspective of consumer stickiness, analyze the characteristics and influencing factors of game recharge behavior. Then, combined with specific cases, delve into the inherent logic and correlation between game recharging and consumer behavior. Finally, summarize the research results and propose targeted suggestions and prospects. Based on the above research content and methods, this study aims to reveal the inherent logic and correlation between game recharge and consumer behavior and provide theoretical support and practical guidance for the sustainable development of the game industry.
2. Literature Review

2.1 Consumer Behavior
Consumer behavior refers to the activities and decisions individuals or households make while selecting, purchasing, using, and disposing of a product or service. Many psychological, social, and cultural factors influence how consumers interact with the market [1]. It is the study of people, groups, or organizations and all aspects of the acquisition, use, and disposal of products and services. Consumer behavior refers to how a consumer’s emotions, attitudes, and preferences influence purchasing behavior. It refers to consumer demand psychology’s psychological and practical expressions, including purchasing desire, consuming intention, and other factors. The primary behavioral expression is buying behavior. It is a multi-stage process that involves identifying problems, collecting data, exploring options, deciding to buy, and evaluating the experience afterward [1]. During these stages, consumers may be impacted by personal views and values, social conventions, marketing campaigns, product features, and environmental conditions. Consumer behavior studies consumer purchasing decisions, behavior, and the psychological activities behind these behaviors from multiple perspectives. This includes how consumers choose, purchase, use, or dispose of products and services and various factors that influence these decisions, such as personal needs, market stimuli, prices, brands, etc. In addition, consumer behavior also focuses on the interaction between consumers and marketers, including the experience, stimulus-response, and transaction process during the purchasing process [2].

2.2 Consumer Psychology
Consumer psychology studies how our ideas, beliefs, feelings, and perceptions impact purchasing and interacting with products and services. This topic of research is especially pertinent in the United States, which is usually seen as a strongly consumerist nation. It evaluates customers’ perceptions, beliefs, sentiments, and ideas, considering them all while analyzing purchase behavior. It also considers social influence and incentives from third parties while making purchase decisions, such as advertisements or advertising. It is also a field investigating how consumers make decisions and the cognitive processes underpinning those decisions. The two primary methods of studying consumer behavior are behavioral and cognitive psychology. One formal definition of the field describes it as “the study of individuals, groups, or organizations and the processes they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society.”[2]

2.3 Recharge Behavior and Consumer Stickiness

3. Recharge Behavior and Consumer Stickiness

3.1 Consumers Reported a Positive Personal Consumption Experience After Recharging
Case 1: The consumer is a gaming enthusiast who often plays games on a certain gaming platform. He chose to recharge on this platform to support his favorite games and obtain more game resources. After recharging, he found that the platform recommended some new games and activities he might be interested in based on his gaming preferences and history. At the same time, the platform also provides him with some opportunities to interact with game characters, such as customizing character costumes and participating in character birthday events. These personalized recommendations and interactions have made the consumer very happy and satisfied. He believes this recharge provided him with more game resources and established a closer connection with the gaming world. First, the reasons for consumer stickiness in active consumption are analyzed below.

3.1.1 Personalized Recommendations and Precision Marketing
After the consumer recharged on the gaming platform, the platform utilized his powerful data analysis capabilities to recommend new games and activities that he may be interested in based on his gaming preferences and historical records. This personalized recommendation method improves the accuracy of recommendations and makes the consumer feel the platform’s attention and respect for him, thereby increasing his consumption stickiness on the platform.

3.1.2 Deep Interaction and Immersive Experience
In addition to personalized recommendations, the platform provides the consumer with opportunities to interact with game characters. These interactions increase the game’s fun and give the consumer a deeper sense of participation
and immersion. By customizing character costumes and participating in character birthday events, the consumer has established a closer connection with the gaming world, prompting him to be more willing to consume on the platform.

3.1.3 Additional Returns After Recharging

The consumer chose to recharge because he hopes to support his favorite games and obtain more game resources through this method. The platform has provided him with these resources, such as priority experience rights for new games, exclusive event benefits, etc. The additional reward after recharging makes him feel that his consumption has received substantial feedback, enhancing his willingness to consume on the platform.

In addition, the platform implements a positive incentive mechanism. The recharge logic of the platform is based on a positive incentive mechanism. By providing personalized recommendations, deep interaction, and additional rewards, the platform encourages consumers to recharge and enhances their satisfaction and stickiness through these value-added services. This mechanism not only meets the psychological expectations of consumers but also effectively promotes the commercial development of the platform.

Moreover, data analysis and precise operation are vital to a positive personal consumption experience. The recharge logic of the platform also relies on powerful data analysis and precise operational capabilities. By deeply mining consumer gaming preferences and historical records, the platform can accurately grasp consumer needs and provide them with more accurate personalized services. This ability improves the recharging conversion rate and enhances consumer trust and dependence on the platform.

The above analysis shows that the game platform has successfully attracted consumers' attention and improved their consumption stickiness through personalized recommendations, deep interaction, and additional rewards after recharging. At the same time, its recharge logic is also based on a positive incentive mechanism, data analysis, and precise operation, which makes the platform's business model meet market demand and have high sustainability.

3.2 Customers Are Prepared To Recharge For Their Gain.

Case 2: Character Ability Enhancement and Equipment Upgrade

In large multiplayer online role-playing games (MMORPGs), players often need to recharge to accelerate character growth. For example, when playing a popular MMORPG, the consumer recharge and purchase experience potions, advanced equipment, and rare items to quickly improve his character level and combat power. Through recharging, the consumer's character has significantly improved quickly. His combat power has greatly increased, and he can also participate in higher-level dungeons and challenges. The consumer said that such recharging behavior gave him a sense of achievement in the game and made him enjoy the gaming process more.

Firstly, the recharge mechanism provides the consumer with a pathway for rapid growth. Time and effort are often key factors in enhancing character abilities in games.

However, by recharging, the consumer can bypass this lengthy process and quickly obtain the necessary resources and props, accelerating the character's growth. This instant feedback and satisfaction increased the consumer's investment and stickiness in the game.

Besides, the recharge behavior has given the consumer more competitive advantages in the game. The acquisition of advanced equipment and rare items makes the consumer's character more powerful in battles, allowing him to participate in higher-level dungeons and challenges. Improving this ability enhances the consumer's gaming experience and gives him an advantage in interacting with other players, satisfying their competitive psychology and vanity.

In addition, social elements in the game also impact the consumer's recharge behavior. Collaboration and competition among players are common ways of interaction in games. By recharging to enhance character abilities, the consumer can better collaborate with other players, complete more difficult tasks, or achieve better results in the arena. This social interaction increases the game's fun and encourages the consumer to invest more time and money in the game.

The recharge logic behind it is the game designer’s precise grasp of the player’s psychology and the clever setting of the game mechanism. The game stimulates players' desire to consume and recharge by providing valuable virtual goods and services. At the same time, the game also maintains its appeal to players and encourages them to continue consuming by constantly updating and optimizing content.

From my perspective, this case reflects that consumer behavior and recharge logic in games are influenced by various factors such as game design, player needs, and social interaction. As a game designer or operator, one should deeply understand players' psychology and needs, provide virtual items and services that meet their expectations, and enhance player satisfaction and loyalty. At the same time, attention should also be paid to the balance and fairness of the game, avoiding excessive reliance on recharge mechanisms to obtain benefits to maintain the health and
sustainable development of the game.

3.3 Every extra benefit will result in a rise in consumer pleasure, generating inertia in recharge.

Case 3: First Charge Special Offer
Many online games, such as Love and Deep Space, offer additional benefits to players upon their first recharge, such as double the initial charge and a large gift package. As a new player, the consumer received an additional reward far exceeding the recharge amount on his first recharge, which surprised and satisfied him greatly. This first recharge discount attracts new players like the consumer to make their first recharge and makes them more likely to continue recharging in the future due to the good experience it brings.

The first charge discount strategy has significantly attracted new players and promoted their first recharge. This strategy increases stickiness to the game by providing rewards that far exceed the player’s expectations, causing them to generate strong positive emotional reactions. Players who receive generous rewards during their first recharge will feel that their initial investment has received a high return, which motivates them to be more willing to continue investing in the future. In addition, the additional rewards brought by the first charge discount allow players to enjoy better equipment and resources in the game’s early stages, resulting in a smoother and more interesting gaming experience. This is also an important factor that attracts them to continue spending.

The main reason why consumers are willing to recharge for their harvest is due to value perception and sunk cost effects. Players perceive that the actual value brought by recharging far exceeds the amount paid through the first charge discount, which becomes their main motivation for recharging. Meanwhile, once players make their first recharge and receive additional rewards, they are often unwilling to waste these resources and advantages and, therefore, prefer to continue recharging to maintain or expand their advantage. In addition, the continuous motivation and advancement mechanisms in game design also encourage players to recharge for higher goals.

However, although first-charge discounts can bring about consumption growth in the short term, in the long run, the game still needs to be constantly updated and optimized, providing diverse gameplay and activities to maintain sustained interest and stickiness among players. At the same time, avoiding excessive reliance on recharge profits while neglecting the improvement of game quality and player experience, ensuring a sustainable win-win relationship between the game and players. This way, the first charge discount strategy can truly exert its effectiveness.

4. Recharging Habit Forces Consumers To Build Passive Stickiness.

4.1 Producers’ Marketing Strategies Result in Consumers Engaging in Chain or Pre-recharge Activities

Case 4: „Yin Yang Master“ is a popular Japanese mobile game among players. The game has launched a „monthly card“ system, where players can enjoy daily privileges, such as receiving game resources and participating in special dungeons by pre-charging and purchasing monthly cards. This pre-recharge method provides players with a stable source of resources. It enhances their stickiness through a continuous reward mechanism, making them more willing to invest in the game long-term.

Firstly, from the perspective of passive consumption stickiness, the „monthly card“ system of „Yin Yang Master“ provides players with a convenient and sustainable way to obtain resources through pre-recharge. After purchasing a monthly card, players can automatically claim game resources every day without the need for tedious daily recharge operations. This automated and continuous reward mechanism allows players to maintain a stable supply of resources in the game, making it easier for them to immerse themselves in the game world and increase their participation and stickiness.

Secondly, the recharge logic behind the monthly card system lies in utilizing players’ expected benefits and sunk cost effects. When players purchase monthly cards, they have already paid a certain fee, and this sunk cost makes them more inclined to fully utilize the privileges and resources provided by the monthly cards to obtain maximum profits. At the same time, the continuous reward mechanism promised by the monthly card also meets players’ expectations for long-term benefits, prompting them to be more willing to continue investing in the game.

In addition, the monthly card system also provides players with privileges such as participating in special dungeons, which increases the game’s fun and challenge and further enhances the player’s gaming experience. By enjoying these privileges, players can obtain more rare props and equipment, increasing their competitiveness and sense of achievement in the game.

From my perspective, I believe that the monthly card system of „Yin Yang Master“ is an effective marketing strategy. It fully utilizes players’ psychological expectations and sunk cost effects, successfully attracting passive consumption stickiness by providing stable resource sources and privilege mechanisms. At the same time, this system also conforms to players’ consumption habits and needs, providing them with a better gaming experience [4].
4.2 Transformed From Initial Consumer Benefit To Persistent Producer Benefit

Case 5: Skin Purchase and Privilege System in King of Glory

In Honor of Kings, players can purchase various unique hero skins by recharging, which not only enhances the game’s visual experience but also meets the personalized needs of players. In the beginning, players recharge to obtain these skins and enjoy immediate benefits as consumers. However, as the game deepens, skin purchases have gradually evolved into a way for players to maintain their status and image within the game, allowing producers to continue to earn profits. At the same time, the game also introduces a VIP privilege system, where players can upgrade their VIP level by recharging and enjoying more gaming privileges. This privilege system enables players to shift their consumption behavior from one-time purchases to long-term investments, thereby shifting from consumer to producer interests.

As players deepen their investment in the game, skin purchases gradually surpass simple aesthetic needs and evolve into a means for players to maintain their status and image within the game. In a highly competitive gaming environment, advanced skins often provide players with psychological advantages, increasing their confidence and sense of belonging in the game. Therefore, players are willing to continue investing funds in purchasing skins to maintain their position and image in the gaming community. This psychological need enables producers to continuously generate profits while strengthening the emotional bond between players and the game.

By examining the instance of skin purchasing and the VIP privilege system in King of Glory, researchers can observe how these marketing strategies successfully shifted players’ consumption habits from one-time purchases to long-term investments. Producers have effectively influenced player consumption behavior by addressing their customized and social demands and giving extra game benefits, resulting in a shift from consumer to producer interests. This transition increases the financial worth of games and improves their gaming experience and social atmosphere.

However, it is important to remember that gamers should maintain a sensible consuming attitude to gain gaming experience and social standing and prevent excessive investment and game addiction.

5. The Way To Better Increase or Decrease Consumer Stickiness Based on Consumer Psychology

When managing games, the key goal for businesses is to develop user stickiness to reach revenue more effectively. To achieve this, firms should provide appealing gaming material that is both innovative and appealing. By continually upgrading the mechanics, introducing new characters and accessories, and so on, we continue to fulfill players’ interest and exploration. At the same time, offering various promotional activities and incentive systems, such as limited-time discounts, recharge refunds, point redemption, etc., is critical for effectively motivating players to recharge and consume the game, hence increasing the game’s profitability.

On this premise, merchants could employ big data and artificial intelligence technology to fully evaluate players’ gaming activity and consumption patterns, providing individualized game suggestions and accurate marketing material, thereby increasing players’ propensity to recharge. Furthermore, developing a gaming community, fostering player contact and communication, and arranging online and offline activities may all help to increase players’ sense of belonging and stickiness, making them more likely to stay in the game for an extended period.

However, while pursuing profits, firms must also avoid excessive reliance on recharge income. Therefore, balancing in-game purchases and free content is crucial to ensure that players can experience enough free content while setting reasonable purchase points to avoid making players feel forced to consume. In addition, emphasizing game quality and service is also essential. Improving the quality of game graphics, sound effects, smoothness, and providing high-quality customer service can make players more willing to pay for games.

Nevertheless, firms should develop a long-term profit model, diversify earnings through in-game advertising, subscription systems, and other channels, and lessen their dependency on recharge money. Organizations may accomplish long-term profit growth in this method while maintaining game quality.

Consumers should avoid excessive consumption when participating in games and ensure reasonable expenditure. Before deciding to recharge, we should objectively assess the game’s value, thoroughly check its quality and playability, and avoid mindlessly following trends or engaging in impulsive consumption. At the same time, it is critical to establish a fair consumption budget based on our economic condition to effectively avoid excessive expenditure while maintaining financial security.

Furthermore, consumers must remain attentive to avoid being duped by bogus business offers and traps. We must carefully discern between merchant promotional information and avoid being influenced to make unneeded purchases by expensive props or limited-time events.

To improve the gaming experience and lessen our need
for recharges, we can take full advantage of the game's free resources, such as task rewards and event gifts. This eliminates the need for recharging and allows us to have a more immersive experience with the game. Meanwhile, practicing self-discipline and patience is essential. We should resist obsessively pursuing virtual objects and milestones in the game and instead enjoy the process rather than focusing solely on results. Finally, we can improve our lives by engaging in different forms of entertainment such as reading, exercising, etc. This lessens our reliance on games and provides a more diverse entertainment experience.

6. Conclusion

This paper delves into the inherent logic and correlation between game recharge behavior and consumer psychology, particularly analyzing from two dimensions: active consumption stickiness and passive consumption stickiness. Active consumption stickiness refers to the spontaneous willingness of consumers to recharge due to factors such as game content and promotional activities, while passive consumption stickiness is more often due to involuntary recharge behavior caused by game design or social pressure.

According to research, the originality of game material, the attractiveness of promotional efforts, and the level of community involvement all significantly impact the stickiness of active consumption. These components pique players' interest and curiosity and effectively increase their readiness to recharge through rewards. Passive consumption's stickiness is primarily controlled by the placement of in-game purchase points, social pressure, and the psychology of displaying virtual products. These elements may make players feel obliged to make purchases, resulting in involuntary recharging behavior.

However, this study does have certain drawbacks. For starters, the sample variety and representativeness may be insufficient, affecting the universality of the research findings. Second, while this article focuses on consumer psychology, game recharge behavior is influenced by various other issues, including the economy, culture, and society, which are not thoroughly examined. For the prospects of this research or research direction, I believe that the following components can be expanded: The second step is to consider more factors that influence game recharge behavior, such as the economy, culture, and society, to build a more comprehensive analysis framework. The third step is to use more advanced technologies and methods, such as big data analysis and artificial intelligence algorithms, to more accurately and deeply investigate game recharge behavior.

In summary, the study of game recharging and consumer behavior is a complicated and fascinating field that draws on information from various disciplines, including consumer psychology, economics, and sociology. We hope to have a more thorough grasp of this topic in the future as study and technology advancements continue.

References

[5] Shoukun Zhang. The so-called game solicitation welfare is actually an induced recharge Rule of Law Daily, January 18, 2024 (004) DOI: 10.28241/n.cnki.nfzrb.2024.000392