Research on the Virtual Item Consumption Willingness of MMORPG Players Based on the Theory of Basic Psychological Needs

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Abstract: Based on the theory of basic psychological needs, this article deeply explores the influencing factors of players' willingness to consume virtual items in MMORPGs (Massively Multiplayer Online Role-Playing Games). By reviewing relevant literature and combining the characteristics of MMORPGs, this paper analyzes the mechanism of their influence on players' consumption willingness from three dimensions: autonomy need, competence need and relationship need, and verifies it through actual case analysis. The aim is to provide theoretical basis and practical guidance for game enterprises to understand players' consumption behavior and formulate marketing strategies.

Keywords: Basic Psychological Needs Theory; MMORPG; Virtual Props; Willingness to Consume

1. Introduction

In the current era of the digital wave sweeping through, the online game industry is showing a vigorous development trend. Among them, MMORPG, with its unique charm, has become a widely popular online game type worldwide. Mmorpgs build a vast and rich virtual world where players can take on various roles, interact, cooperate and compete with other players in real time, experiencing unprecedented gaming fun [1]. This immersive gaming experience not only meets players' demands for entertainment but also provides them with a platform to showcase themselves and realize their self-worth.

Virtual items, as an important component of MMORPGs, possess multiple functions and values. From the perspective of appearance, virtual props can provide personalized decorations for players' characters, such as unique clothing, hairstyles, accessories, etc., making players' characters stand out among many players and showcase their unique personality styles [2]. Functionally speaking, virtual items can enhance a character's abilities, such as increasing attack power, defense, and health points, helping players deal with various challenges and tasks more easily in the game. In addition, some virtual items also have social attributes. Players can express emotions such as friendliness and gratitude by giving virtual items, promoting social interaction and relationship building among players [3].

With the continuous expansion of the MMORPG market, the sale of virtual items has become one of the important sources of profit for game enterprises. Players' willingness to consume virtual items directly affects the economic benefits and market competitiveness of game enterprises. Therefore, delving deeply into the factors influencing the willingness of MMORPG players to consume virtual items is of great practical significance for game enterprises to formulate effective marketing strategies and enhance players' consumption satisfaction and loyalty.

The Basic psychological Needs theory was proposed by Deci and Ryan. This theory holds that humans have three fundamental psychological needs: autonomous needs, competent needs, and relational needs [4]. When these needs are met in specific situations, individuals will exhibit higher levels of motivation and positive behaviors. In the virtual environment of MMORPGs, players' psychological needs may also be affected, which in turn influences their willingness to consume virtual items. For instance, in order to meet their autonomy needs, players might independently choose to purchase virtual items with unique functions to customize their game characters and gameplay. To meet the requirements of being competent, players may purchase items that can enhance their characters' abilities, so as to better cope with the challenges in the game and gain a

sense of achievement. To meet the needs of relationships, players may purchase items for social interaction, such as giving gifts to other players, to enhance the relationship and sense of belonging among them [5]. Therefore, it is of great theoretical and practical significance to study the consumption willingness of virtual items among MMORPG players by applying the theory of basic psychological needs.

2. Literature Review

2.1 Overview of Basic Psychological Needs Theory

Self-Determination Theory (SDT) is a motivation theory proposed by Deci and Ryan in the 1980s. This theory emphasizes that the need for autonomy, the need for competence, and the need for relationship are inherent and universal psychological needs of human beings [4]. The need for autonomy refers to an individual's desire to independently control their own behavior and decisions, experiencing that their actions stem from self-choice rather than external pressure. When an individual's autonomous needs are met, they will exhibit higher intrinsic motivation, be more actively engaged in activities, and experience more happiness and satisfaction [6].

Competency needs are an individual's desire to pursue challenges, demonstrate abilities and achieve success. When an individual feels in an activity that their ability can cope with challenges, their competency needs are met, thereby enhancing their self-confidence and self-efficacy [7]. In the game, players can gain a strong sense of competence by constantly challenging themselves, improving their skills and achieving success. This sense of competence is one of the important driving forces that keep players engaged in the game.

Relationship needs refer to an individual's desire to establish close, warm and meaningful relationships with others, and to feel a sense of belonging and acceptance. Human beings are social animals. Good interpersonal relationships are of vital importance to an individual's mental health and sense of happiness. In the game, players can meet their relationship needs by interacting, cooperating and competing with other players, build virtual social networks, and gain emotional support and a sense of belonging.

In recent years, the theory of basic psychological needs has been widely applied and studied in multiple fields. In the field of education, research has found that meeting students' autonomous needs, competency needs and relational needs can enhance their learning motivation and academic performance [8]. In the workplace, meeting the basic psychological needs of employees can enhance their job satisfaction and performance. In the field of gaming, the basic psychological needs theory is also used to explain issues such as players' gaming motivations, gaming immersion, and gaming addiction.

2.2 Research Status of Consumption Behavior of MMORPG Players

At present, research on the consumption behavior of MMORPG players mainly focuses on aspects such as consumption motivation, influencing factors of consumption, and consumption patterns. Some studies have shown that players' motivations for consuming virtual items include enhancing game competitiveness, pursuing personalized experiences, and social needs, etc. In terms of consumption influencing factors, research has found that game design, players' personal characteristics (such as age, gender, income level, gaming experience, etc.) and social factors all have an impact on players' consumption behavior. However, there are relatively few systematic and in-depth studies on players' willingness to consume virtual items from the perspective of basic psychological needs theory.

2.3 The Correlation between the Willingness to Consume Virtual Items and the Theory of Basic Psychological Needs

In MMORPGs, there exists a potential connection between players' autonomy needs, competence needs, and relationship needs and their willingness to consume virtual items. For instance, in order to meet their autonomy needs, players might independently choose to purchase virtual items with unique functions to customize their game characters and gameplay. To meet the requirements of being competent, players may purchase items that can enhance their characters' abilities, so as to better cope with the challenges in the game and gain a sense of achievement. To meet the needs of relationships, players may purchase items for social interaction, such as giving gifts to other players, to enhance the relationship and sense of belonging among each other. Therefore, the basic psychological needs theory provides a powerful theoretical framework for understanding the willingness of MMORPG players to consume virtual items.

3. The Influence Mechanism of Basic Psychological Needs Theory on the Willingness of MMORPG Players to Consume Virtual Items

3.1 The Impact of Autonomy Needs on the Willingness to Consume Virtual Items

In MMORPGs, autonomy needs to be reflected in players' autonomous control over game characters, gameplay, and game progress. When players can choose their character's profession, skill development path and game tasks according to their own will, they will feel a higher degree of autonomy. To further enhance this autonomous experience, players may be willing to purchase virtual items. For instance, some games offer a wide range of character appearance customization items. Players can choose different clothing, hairstyles and accessories based on their own aesthetic sense and personality, making their characters unique. This process of self-customization meets the players' autonomous needs and stimulates their willingness to consume virtual items. In addition, players can also change the game environment or rules by purchasing items, such as using special teleportation items to quickly reach the destination, or using items that alter weather effects to create a unique game atmosphere. This way, they can better control the game progress, meet their own needs, and thereby promote consumption.

3.2 The Impact of Competency Requirements on the Willingness to Consume Virtual Items

Competency drives players to pursue challenges, enhance skills and achieve success in MMORPGs. The various tasks and dungeons in the game usually have a certain level of difficulty and require players to possess certain abilities and strategies to complete. When players are facing challenges and find that their characters' abilities are insufficient, they may seek to enhance their sense of competence by purchasing virtual items. For instance, players might purchase more powerful weapons, armors and accessories to enhance their characters' attack power, defense and health points and other attributes, thus making it easier for them to deal with enemies and challenges in the game. In addition, some virtual items can also provide special skills or effects to help players win at critical moments, such as increasing critical hit rates and restoring health points. By using these props, players can feel that their abilities have been enhanced and their competency needs have been met, and thus they are more willing to consume to obtain more virtual props that help enhance their sense of competence.

3.3 The Impact of Relationship Needs on the Willingness to Consume Virtual Items

The social nature of MMORPGs makes interaction and cooperation among players an important part of the game. Relationships need to prompt players to be eager to establish connections, interact and cooperate with others, forming good social relationships and a sense of belonging. In games, virtual items can serve as an important medium for social interaction among players. For instance, players can express their friendliness and gratitude by giving virtual gifts to other players, thereby enhancing their mutual affection. Some games also feature team dungeons and guild systems, where players need to cooperate with teammates or guild members to complete tasks and earn rewards. During this process, players may purchase team buff items, such as those that increase the attack or defense power of all teammates, to enhance the team's combat effectiveness and winning chances. At the same time, it also demonstrates their contribution and value to the team and meets the relationship needs. In addition, some virtual items with strong social characteristics, such as unique mounts and pets, can also serve as symbols for players to showcase their social status and identity in the game, attracting the attention and communication of other players, further meeting the needs of relationships, and thereby stimulating players' willingness to consume these items.

4. Practical Case Analysis-Taking World of Warcraft as an Example

4.1 Satisfaction of Autonomous Needs and Consumption of Virtual Items in the Game

In World of Warcraft, players enjoy a high degree of autonomy. They can freely choose different races and occupations, and each race and occupation has unique skills and gameplay. In addition, players can also customize their game development paths by learning various professional skills, such as mining, alchemy, tailoring, etc. To further meet the needs of autonomy, the game offers a large number of virtual items for players to choose from. For instance, players can purchase various transformation equipment to dress up their characters in a unique way and showcase their

individual style. Meanwhile, players can also purchase flight mounts to quickly travel around the game world, saving time and enjoying the fun of free flight. The consumption of these virtual props enables players to better achieve autonomous control and personalized expression, meeting their autonomous needs, and thus has been widely welcomed by players.

4.2 Competency Needs in the Game and Virtual Item Consumption

World of Warcraft features a rich and diverse system of dungeons and quests, which places high demands on players' skills and teamwork abilities. To meet these challenges, players need to constantly enhance the abilities of their characters. The game offers a variety of virtual items that enhance attributes, such as high-quality weapons, armors and accessories, etc. Players can enhance their combat power by purchasing these items, better complete dungeons and tasks, and gain a sense of achievement and competence. In addition, some special consumable items, such as potions, food and runes, can provide temporary buff effects for players during battles, helping them turn the tide of the battle at critical moments. Players are willing to spend on these virtual items in order to achieve better results in the game and meet their professional needs.

4.3 The Relationships in the Game Need to be Satisfied with the Consumption of Virtual Items

World of Warcraft emphasizes social interaction and teamwork among players. There is a guild system in the game. Players can join a guild to participate in activities, complete tasks and share resources with other members. In the guild, the relationships among players need to be satisfied. To enhance the cohesion and cooperative atmosphere among guild members, players may purchase virtual items such as guild badges to demonstrate their sense of belonging to the guild. Meanwhile, in team dungeons, the cooperation among players is of vital importance. Some team buff items, such as war drums and flags, can provide bonus effects for all teammates and enhance the team's combat effectiveness. When players purchase and use these props, it not only helps the team win but also demonstrates their contribution to the team and meets the needs of the relationship. In addition, players can also express friendship and affection by giving virtual gifts to each other, promoting the development of social relationships and further stimulating the willingness to consume virtual items.

5. Conclusion

Based on the theory of basic psychological needs, this study deeply analyzes the influence mechanisms of autonomy needs, competence needs and relationship needs on the willingness of MMORPG players to consume virtual items. Research shows that in MMORPGs, there is a close correlation between players' autonomy needs, competence needs and relationship needs and their willingness to consume virtual items. Meeting players' autonomous needs can enable them to experience higher autonomy and personalization in the game, thereby stimulating their willingness to consume virtual items. Meeting the competency requirements can enhance players' gaming skills and sense of achievement, prompting them to purchase virtual items that help improve their characters' abilities. Meeting the needs of relationships helps players establish good social relationships and a sense of belonging, and further enhances their willingness to consume through the social interaction function of virtual items. The actual case analysis has also verified the existence and role of these influence mechanisms in specific games.

For game enterprises, understanding the basic psychological needs of players is crucial for formulating effective marketing strategies and enhancing players' willingness to consume. First of all, game enterprises should focus on enhancing players' autonomous experience, providing a rich variety of character customization options, gameplay choices and game progress control methods. At the same time, they should launch virtual props with personalized characteristics to meet players' autonomous needs and stimulate their consumption desires. Secondly, design challenging and fulfilling game content and tasks, and reasonably set the effect of props on enhancing character abilities, so that players can feel the satisfaction of a sense of competence in the process of obtaining props through efforts, thereby increasing their willingness to consume related virtual props. Finally, enhance the construction of the game's social functions, create a favorable social atmosphere, encourage interaction and cooperation among players, and introduce virtual items with social attributes, such as team enhancement items and social gifts, to meet players' relationship needs and promote consumption behavior among players.

Although this study explored the willingness of

MMORPG players to consume virtual items based on the theory of basic psychological needs, there are still certain limitations. For instance, the research is mainly based on theoretical analysis and practical cases, lacking large-scale empirical research support. The research on the differences in psychological needs and consumption intentions among different types of players, such as novice players, experienced players, paying players and non-paying players, is not in-depth enough. Future research can further carry out large-scale questionnaire surveys or experimental studies to collect more abundant data to verify and improve the results of this study. At the same time, it is possible to deeply explore the psychological needs and consumption behavior differences of different types of players, providing more targeted marketing strategy suggestions for game enterprises.

In conclusion, studying the virtual item consumption willingness of MMORPG players based on the theory of basic psychological needs has significant theoretical and practical value. By meeting players' needs for autonomy, competence and relationships, game enterprises can effectively enhance players' willingness to consume and achieve the sustainable development of the game industry.

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