

Study on MOBA Game Players' Non-Functional Virtual Goods Consumption Motivation and Consumption Intention

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Abstract: The MOBA game genre is one of the most influential and largest consumer groups in the current online game market, and its source of income is mainly from the sale of non-functional virtual items, which are mainly used to beautify the game characters and enrich the sensory experience, also known as "skins", and are different from functional virtual items, which do not accelerate the progress of the game or disrupt the game balance. Unlike functional virtual items, these items do not speed up the progress of the game, nor do they upset the balance of the game. This paper explores players' motivation and willingness to consume these virtual goods through questionnaire surveys.

Keywords: MOBA gamers; non-functional virtual goods; consumption motivation; consumption intention.

1. Introduction

Online games are created with the rapid development of information technology and Internet technology, and the connection between people and online games has become closer, so it is very necessary to study all aspects of online games. And the consumption of virtual goods in online games is a new way of consumption. It has not been effectively explained due to the numerous types of games. At present, non-functional consumption of virtual items accounts for the majority of MOBA games, so it is of great practical significance to study them based on their consumption motives.

2. Relevant Overview

2.1. MOBA games

MOBA's full name is Multiplayer Online Battle Arena, also known as Action Real Time Strategy, it is a game that is important in contemporary online gaming and is often seen as a sub-genre of RTS, which divides the players into two squads, a team usually has 5 players, each of them controlling a different game map. With the assistance of a regimented computer control system, you can destroy the enemy's main buildings. Throughout the match, the player characters often have a variety of different skills and techniques that can constantly improve and contribute to the overall strategy of the team. MOBA games combine role-playing games, real-time strategy games and action games. In MOBA there are no units or buildings so you can only choose the character of their choice. So MOBA games are considered to be a game where "the main strategy is based on the development of the players and the collaboration of the team." [1]

2.2. Non-functional virtual goods

Virtual goods are virtual items that earn huge amounts of cash through consumption and circulation in free-to-play games, and they are considered a special kind of goods in consumerism. Virtual goods can be categorised into functional and non-functional, and in order to maintain

equality between players, as well as to maintain the purity of the game content, many free-to-play games make money from purely non-functional virtual goods [2]. In MOBA games, those non-functional virtual items, commonly known as "skins", can only make your character look like something in the game. However, this kind of non-functional stuff has no benefit in the game, players prefer aesthetic sense, and this kind of money-making method is very popular among players. So, non-functional virtual items have a huge commercial value in online gaming.

3. Types of Motives for Non-functional Virtual Goods Consumption

If it is some non-functional virtual item, then there is a need to make oneself more handsome, advanced, or unique than other players, or to maintain one's status and image in the team. Still in social activities, the giver's social motivation to consume is aroused when giving a gift. In gaming, the gamer is an entertainment-oriented consumer, which is an entertainment-oriented behaviour. In this case, the gamer's consumption is based on the value of socialising and enjoyment that it has in itself. People have an impulse to consume based on the value of the product itself, which is called the "goods-first" motivation. Among the consumption motives of non-functional props, they can be classified into five types: aesthetics, self-pleasure, role dedication, bragging rights, and novelty [3].

3.1. Aesthetics

For non-functional virtual goods, the aesthetic pleasure they bring (including visual effects, sound effects or animation effects) is also the main reason that motivates consumers to spend money. Many MOBA players look at the game with an aesthetic eye [4]. The biggest reason why these people choose virtual items that are not practical is that they want a visual pleasure in the game, and the computer as a medium to create an aesthetic in the virtual world is very important for teenagers.

3.2. Self-pleasure

Players are rewarded for major achievements in the game by purchasing skins for in-game characters. Such shopping motivation is called "self-gratification". Self-pleasure is a form of self-promoting behaviour that is the primary motivation for consumers to consume products or services, including non-functional virtual goods. Purchasing virtual goods is a method of self-encouragement that can be used to celebrate one's achievements in gaming as well as to demonstrate one's achievements in life.

3.3. Role dedication

Online games consist of a variety of elements, and one of the most central of these is the character. In online games, users can perform a variety of behaviours based on their characters. As the game progresses, the player's emotions will rise and fall along with the character's experiences and play, and they will have a strong emotional bond with the character they have poured the most effort into. As players progress through the game, most of them will focus on one or more characters and maintain this affection by means of extended playing time, monetary investment, etc [5]. Therefore, some players choose to buy some impractical items in order to show their contribution to their characters. Some scholars have pointed out that in the media environment constructed by computers and the Internet, this action is regarded as an intimate relationship between gamers and digital characters.

3.4. Flaunting and comparison

MOBA is a free-for-all game, and for the average player to wear these impractical outfits is a sign that they have invested a lot of money in this game. Spending activities with this goal

in mind can boost the customer's self-confidence [6]. Just like in the game, there are many players who choose some impractical virtual items to show their character, while some just wear the same clothes as a way to show who they are. In the first case, players can show that they are different in this way.

3.5. Novelty

One of the reasons why users choose virtual tools that are not practical in a game is to give them a sense of novelty about the game. After the initial excitement and thrill, this novelty will slowly fade away. However, there are some loyal players who are already very familiar with this game and that is why they have invested so much in this game. Over time, many people have grown tired of the initial free effects, while some continue their gaming experience by purchasing new skins [7].

4. The Research Process

4.1. Consumption Motivation and Consumption Intention Confidence Analyses

This paper adopts the way of questionnaire survey, investigating the content of the five consumption motives of aesthetics, self-pleasing, role dedication, showing off and comparing, and novelty. Mainly through the questionnaire star website in a variety of MOBA game player groups for the distribution of online questionnaires, recovered questionnaires totaling 180, through the recovered questionnaires after the audit, excluded the game did not buy the skin in the game or the letter is too low invalid samples; screened out the effective sample of 110.

Table 1. Results of item analysis of the questionnaire

	Group (mean± standard deviation)		t	p
	Low grouping (N=54)	High grouping (N=52)		
aesthetics	3.18±2.01	5.8±0.86	-8.243	0.000*
self-pleasing	5.02±1.37	4.52±1.57	-4.668	0.000*
Role dedication	1.72±1.27	4.29±1.97	-5.796	0.000*
Flaunt and climb socially (idiom); to compare oneself with others	1.46±1.19	3.83±2.02	-7.31	0.000*
visual effect	5.35±2.12	6.40±0.82	-3.39	0.001*
Intensity of Willingness	2.32±1.63	5.14±1.23	-9.401	0.000**
Spend repeatedly	3.72±1.46	5.55±0.95	-6.834	0.000**
Referring others	2.32±1.49	5.33±1.51	-8345	0.000**

p<0.05**p<0.01

As shown in Table 1 the study found that both the high and low groups showed a significant P (0.05) on all five questions on consumption motivation, which indicates a good degree of differentiation between the eight items relating to consumption motivation and intention to consume in the formal survey.

By analysing the three questionnaire items of consumption

intention, it can be seen that the reliability of all three questionnaires is 0.754, which is more than 0.7, so the reliability quality of the information of this research is very good, and the CITC coefficients are 0.52,0.622,0.535, which are more than 0.4. Overall, these three items have high reliability and validity, and can be used as a basis for the subsequent research.

Table 2. Cronbach's Reliability Analysis of Consumption Intention

name (of a thing)	Correction term total correlation coefficient (CITC)	Alpha coefficient after deletion of the term	Cronbach's coefficient
Intensity of Willingness	0.57	0.696	0.758
Spend repeatedly	0.664	0.598	
Recommend others	0.539	0.736	

The results of the study showed that the reliability of all three questions measuring consumption intention was high, and in terms of the overall consumption intention of the sample, the sample participants had a higher overall purchase intention for non-functional virtual items in MOBA-type games.

4.2. Correlation analysis of consumption motivation and willingness to consume

Correlation analysis is used to examine the status of the

relationship between quantitative information, whether there is a relationship or not, and the closeness of the relationship. The relationship between each dependent variable and its respective variable is analysed in detail, whether the correlation is positive or negative, and the closeness of the relationship can also be expressed in terms of correlation coefficients: correlation analysis was used to explore the correlation between hedonic motivation, social motivation, utilitarian motivation, and consumption intention, and the following conclusions were drawn:

Table 3. Pearson's correlation coefficient between consumption motivation and willingness to consume

consumer sentiment	correlation coefficient	hedonic motivation	Social motivation	Utilitarian motivation
		0.622**	0.472**	0.500*
	p-value	0	0	0
		p<0.05**p<0.01		

As the specific analyses in Table 3 show: there is a significant correlation between hedonic, social, utilitarian and consumption intention, with correlation coefficients of 0.622,0.472,0.500 and correlation coefficients above 0, which indicates that all three different consumption motives are co-existing positively correlated with consumption intention.

5. Conclusion

This paper takes the consumption motivation of non-functional virtual items as the entry point, and through in-depth interviews with 20 MOBA gamers who have had consumption behaviours, and using content analysis method, we have refined five kinds of consumption motivations of MOBA gamers for purchasing non-functional virtual items in the game and carried out the preliminary design and organisation of the study. On this basis, this study explores the consumption motives of MOBA gamers on non-functional virtual items and the consumption intention associated with them using online data analysis method. This illustrates how dedicated MOBA players are to their gaming experience. Both physically and mentally. It also shows how players in MOBA games are more likely to choose less functional virtual items in order to satisfy their needs, to improve their gaming experience, and to enhance their enjoyment.

References

- [1] Kee, W. B. (2015). Master's thesis on the study related to aggression in adolescents addicted to online games with different game types. Thesis of Dalian Medical University.
- [2] Wu, H., Hui, P. (2010). A Brief Introduction to Virtual Goods. Journal of Tsinghua University (Philosophy and Social Science Edition), 03.
- [3] Wang, W., Xu, S. (2017). Research on virtual item trading behaviour in online games. Journal of Qiqihar Normal Higher and Specialised School, 05.
- [4] Wei H., Zhou Z. K., Tian Y., Luo Q. Wu Shuxin. (2012). A study on the applicability of the Game Role Attachment Questionnaire among Chinese college students. Chinese Journal of Clinical Psychology, 02.
- [5] Wang, X. (2014). Analysing the consumption psychology of consumers buying online virtual goods. Modern Communication, 02.
- [6] Li, B. (2013). An empirical study of new generation consumers' willingness to purchase luxury goods through online channels. Thesis of Southwest University of Finance and Economics.
- [7] Zhu, Y., Bao, Z. (2016). Research on China's online game profit model based on the perspective of consumer psychology. Cultural Industry Research, 02.