

emotional experience, achievement experience, mental experience, and spiritual experience. Spiritual experience refers to the experience generated in pursuing a spiritual destination, such as religious experience. Since it is difficult for consumption experience of e-sports products to reach this depth, this article focuses on the four dimensions of consumption experience: sensory experience, emotional experience, achievement experience, and mental experience.

H1: Consumption experience has a positive impact on the consumption willingness of e-sports product consumers.

Regarding the relationship between product characteristics, consumption experience and consumption willingness. Product characteristics are a series of elements that reflect the uniqueness of a particular product. For e-sports products, product characteristics refer to the traits that can attract consumers in addition to essential functions. The research of (Li, 2010) shows that product attributes positively impact consumption experience and consumption willingness of mobile game users. Compared with product attributes, product characteristics can better reflect the difference of products. Therefore, this study believes that product characteristics can positively impact consumption experience and willingness.

H2: Product characteristics have a positive impact on the consumption experience of e-sports product consumers.

H3: Product characteristics have a positive impact on the consumption willingness of e-sports product consumers.

Regarding the relationship between incentive factors, consumption experience and consumption willingness. Incentive factors are the concept of organizational behavior, which refer to those factors that can bring positive attitudes, satisfaction and motivation. Research objects mainly focus on corporate employees. This research focuses on the primary role of incentive factors, extending incentive factors as the marketing methods adopted by the suppliers of e-sports products to encourage consumers to consume e-sports products. Zhao (2017) shows that intelligent marketing can bring consumers a better consumption experience. Xiang (2018) finds that Weibo marketing factors positively influence consumption intentions through perceived value and trust. Therefore, this study believes that through specific incentives, e-sports product suppliers can not only improve consumers' consumption experience, but also enhance consumers' willingness to consume.

H4: Incentive factors have a positive impact on the consumption willingness of e-sports product consumers.

H5: Incentive factors have a positive impact on the consumption experience of e-sports product consumers.

Regarding the relationship between external environment and the consumption willingness. External environment refers to external factors that have nothing to do with the product's attributes. Wang (2016) indicates that the external environment of e-sports is divided into "hard" environment and "soft" environment. "Hard"

environment refers to the requirements of e-sports on electronic equipment and networks, and "soft" environment refers to opinions of public, relatives and friends on e-sports. External environment in this study refers to the surrounding environment that affects consumers' psychology and behavior, including social environment (public opinion), reference groups, consumption locations, time pressure and other factors. (Liu & Liu, 2017) points out that positive (or negative) online public opinions have a significant positive (or negative) impact on consumers' purchase intentions. Based on this, this study believes that external environment has a positive impact on consumers' willingness to consume e-sports products.

H6: External environment has a positive impact on the consumption willingness of e-sports product consumers.

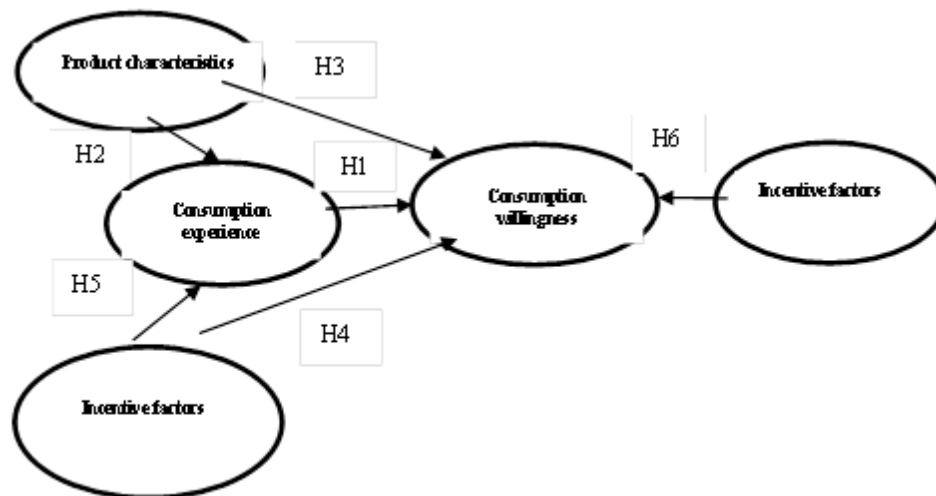


Figure 1: Analysis Model of Consumer Willingness.

Based on above assumptions, this research constructs a conceptual model between product characteristics, incentive factors, external environment, consumption experience, and consumption willingness, as shown in (Figure 1).

RESEARCH ANALYSIS AND RESULTS

This article combined online and offline methods to conduct a questionnaire survey. The online channel was the “King of Glory” game group, and the offline channel was mainly the scene of the “King of Glory” game, which to a large extent ensured that the subjects of the survey were the “King of Glory” players, thereby improving the effectiveness of data collection. In the end, 310 questionnaires were distributed and 284 valid questionnaires were returned.

In order to understand the basic distribution of the interviewed group, this study conducted a descriptive statistical analysis of the collected samples, including demographic characteristics and characteristics of the interviewed group.

From the results of demographic characteristics, the difference in the proportion of male and female players among the surveyed groups is not obvious, indicating that there is no significant gender difference in the acceptance of the

“King of Glory”. The 18-30 years old group accounts for the largest proportion. At present, the student group still constitutes the mainstream participant group of e-sports games, accounting for 56.3% of the total; followed by personnel from enterprises and institutions, accounting for 14.7% of the total. By summarizing the characteristics of the group, the common point is that the group is relatively young, has strong cognitive and learning abilities, and has a strong ability to accept new things.

Table 1. Characteristics of the interviewed group.

| | Category | Percentage |
|---------------------------------|----------------------|------------|
| Average game time per day | Under 1h | 28.2% |
| | 1-2h | 36.6% |
| | 2-3h | 18.9% |
| | 3h | 16.4% |
| Watch e-sports videos | Yes | 69.3% |
| | No | 30.7% |
| Activities except playing games | Sports | 54.2% |
| | series/Films | 79.8% |
| | Reading | 48.7% |
| | Travelling | 42.9% |
| | Community activities | 18.1% |
| | others | 10.1% |
| Activity location | Home | 62.6% |
| | Internet Bar | 26.1% |
| | Dormitory | 41.6% |
| | E-sports game scene | 16.0% |
| | No specific place | 24.8% |
| | others | 5.9% |

It can be seen in **Table 1** that most of the game players of “King of Glory” spend 1-2 hours a day on the game. At the same time, players will choose to watch e-sports related videos. These activities are mostly at home or dormitory. In addition to games, e-sports players have other hobbies. Nearly 79.8% of the informants will choose to watch series or films in their free time, and some will also choose to read or travel, indicating that playing games is just a part of daily leisure for most respondents.

According to the research hypothesis of this article, five latent variables are set as consumption experience, external environment, product characteristics, incentive factors, and willingness to consume with totally 31 observation variables. Using SPSS to analyze the returned data, the results are in (**Table 2**). The mean values are all above 3, and the questionnaire items can roughly reflect their willingness to consume. At the same time, the skewness is in the range of -1 to 1, the kurtosis is in the range of -3 to 3, and the skewness and kurtosis are both within a reasonable range, which satisfies the normal distribution assumption.

Table 2: Descriptive statistical results of observed variables.

| Latent variables | Observation variables | Mean value | Standard deviation | Skewness | Kurtosis |
|-------------------------|-----------------------|------------|--------------------|----------|----------|
| Consumption experience | IE1 | 3.20 | 1.165 | -.424 | -.568 |
| | IE2 | 3.00 | 1.189 | -.206 | -.828 |
| | IE3 | 3.28 | 1.169 | -.468 | -.480 |
| | IE4 | 3.28 | 1.075 | -.448 | -.243 |
| | AE1 | 3.24 | 1.206 | -.346 | -.698 |
| | AE2 | 3.34 | 1.157 | -.512 | -.484 |
| | AE3 | 3.46 | 1.101 | -.716 | .053 |
| | AE4 | 3.53 | 1.175 | -.800 | -.057 |
| | AE5 | 3.75 | 1.084 | -1.037 | .769 |
| | FE1 | 3.25 | 1.103 | -.409 | -.233 |
| | FE2 | 3.54 | 1.101 | -.701 | .061 |
| | FE3 | 3.29 | 1.157 | -.403 | -.432 |
| | EE1 | 3.13 | 1.170 | -.232 | -.668 |
| | EE2 | 3.48 | 1.146 | -.643 | -.269 |
| | EE3 | 3.56 | 1.100 | -.746 | .114 |
| EE4 | 3.50 | 1.113 | -.639 | -.127 | |
| External environment | OE1 | 3.24 | 1.200 | -.383 | -.682 |
| | OE2 | 3.30 | 1.132 | -.555 | -.408 |
| | OE3 | 3.19 | 1.135 | -.439 | -.496 |
| Product characteristics | PC1 | 3.39 | 1.167 | -.587 | -.431 |
| | PC2 | 3.35 | 1.159 | -.458 | -.489 |
| | PC3 | 3.39 | 1.184 | -.464 | -.617 |
| | PC4 | 3.20 | 1.232 | -.246 | -.811 |
| | PC5 | 3.27 | 1.152 | -.307 | -.622 |
| Incentive factors | IF1 | 3.16 | 1.273 | -.204 | -.924 |
| | IF2 | 3.34 | 1.135 | -.524 | -.404 |
| | IF3 | 3.39 | 1.174 | -.563 | -.421 |
| | IF4 | 3.17 | 1.146 | -.215 | -.589 |
| Consumption willingness | CW1 | 3.38 | 1.195 | -.385 | -.652 |
| | CW2 | 3.37 | 1.228 | -.479 | -.579 |
| | CW3 | 3.11 | 1.258 | -.131 | -.568 |

KMO measurement and Cronbach index measurement were performed on the questionnaire samples. The results are shown in (Table 3). The Cronbach's Alpha values of the research data are all above 0.8, indicating that the questionnaire items have good consistency, and the KMO values are all above 0.7, which means good structure validity and meets the requirements of factor analysis. AVE's square

root of each index indicates that the overall dimension of the model has discriminative validity.

Table 3: Reliability and validity analysis.

| Latent variables | Observation variables | Cronbach's Alpha | KMO value |
|-------------------------|-----------------------|------------------|-----------|
| Consumption experience | IE1 | 0.869 | 0.762 |
| | IE2 | | |
| | IE3 | | |
| | IE4 | | |
| | AE1 | 0.929 | 0.892 |
| | AE2 | | |
| | AE3 | | |
| | AE4 | | |
| | AE5 | | |
| | FE1 | 0.912 | 0.757 |
| | FE2 | | |
| | FE3 | | |
| | EE1 | 0.918 | 0.849 |
| | EE2 | | |
| EE3 | | | |
| EE4 | | | |
| External environment | OE1 | 0.924 | 0.761 |
| | OE2 | | |
| | OE3 | | |
| Product characteristics | PC1 | 0.936 | 0.902 |
| | PC2 | | |
| | PC3 | | |
| | PC4 | | |
| | PC5 | | |
| Incentive factors | IF1 | 0.918 | 0.838 |
| | IF2 | | |
| | IF3 | | |
| | IF4 | | |
| Consumption willingness | CW1 | 0.918 | 0.748 |
| | CW2 | | |
| | CW3 | | |

Next, this research uses AMOS24.0 to further test the relationship between consumer experience, consumer willingness, product characteristics, external environment, and motivational factors, find the fitting index, and obtain the path

coefficient with the maximum likelihood estimation method. Calculating fitting index, the initial fitting results are shown in (Table 4).

Table 4: Fitting index.

| | χ^2/df | SRMR | RMSEA | GFI | AGFI | NFI | RFI | IFI | CFI | PGFI |
|--------------------|-------------|--------|-------|-------|-------|-------|-------|-------|-------|-------|
| Ideal value | <5 | <0.05 | <0.08 | >0.9 | >0.9 | >0.9 | >0.9 | >0.9 | >0.9 | >0.5 |
| M1 | 7.718 | 0.643 | 0.168 | 0.817 | 0.624 | 0.797 | 0.762 | 0.818 | 0.817 | 0.546 |
| M2 | 2.149 | 0.0237 | 0.070 | 0.871 | 0.826 | 0.945 | 0.934 | 0.970 | 0.970 | 0.646 |

The fitting results show that the significance of the external environment to consumption willingness and consumption experience to consumption willingness fails to meet the standard, but the correction index (M1) gives a certain room for improvement. According to the modified index, the covariant relationship is added between the residual items, and the modified model is finally obtained. The fitting index of the modified model reaches the standard level.

The coefficient estimation results of the model are shown in (Table 5). P value shows the significance of the influence relationship of each path, and P value less than 0.05 means that the influence relationship of the path is established. It can be seen from the table that the four influence paths of incentive factors - consumption willingness, incentive factors - consumption experience, external environment - consumption willingness, and consumption experience-consumption willingness are not significant, so we reject H1, H4, H5 and H6.

Table 5: The coefficient estimation results of the model.

| | | | Unstd. | S.E. | C.R. | P | Std. |
|--------------------------------|------|-------------------------|--------|------|--------|------|-------|
| Consumption experience | <--- | Product characteristics | .562 | .205 | 2.744 | .006 | .633 |
| Consumption experience | <--- | Incentive factors | .263 | .193 | 1.361 | .174 | .312 |
| Consumption willingness | <--- | Product characteristics | .758 | .263 | 2.883 | .004 | .708 |
| Consumption willingness | <--- | Consumption experience | .143 | .152 | .941 | .347 | -.117 |
| Consumption willingness | <--- | Incentive factors | .297 | .220 | 1.353 | .176 | .996 |
| Consumption willingness | <--- | External environment | -.184 | .118 | -1.555 | .120 | -.385 |

The reason for rejecting H1 can be explained as that good consumption experience may not immediately provoke players' willingness to consume which will only be generated under the combined effect of their own economic conditions and other external environments. As a marketing tool, incentive factors have an impact on consumption willingness only under the synergistic effect of the product itself, making H4 and H5 insignificant. Due to the development and change of the

concept of social life, people are increasingly showing independent self-awareness and decision-making, which will weaken the external environmental impact of consumption choices to a certain extent, resulting in H1 insignificant. At the same time, the standardized regression coefficient of product characteristics on consumption experience is 0.633, and the standardized regression coefficient of product characteristics on consumption willingness is 0.708. Both are above 0, and the significance is up to the standard. Therefore, H2 and H3 are accepted.

CONCLUSIONS AND IMPLICATIONS

The research results indicate that e-sports products' characteristics have a significant positive impact on consumption experience of e-sports products. In the field of sports, game products obviously have life cycle characteristics. To extend the life cycle of e-sports games, it is essential to continually improve players' experience, which needs relevant personnel to first pay attention to the characteristics of the product itself. Product characteristics also have a significant positive impact on consumption willingness of e-sports products. The first thing consumers pay attention to when purchasing products and services is the intrinsic properties. Both virtual products in games and derivative products of e-sports, such as e-sports events and peripheral products, should be developed starting with the quality and design of the products, including the fun and beauty of the game products, the artistic and creative nature of the peripheral products, and the appreciation of the event products. Product characteristics are an essential consideration in determining product consumption.

“King of Glory” is currently in a relatively hot state of market consumption, and it is still necessary to extend its mature development period. First of all, continuing to develop and update the details of the product is required and the development direction of product updates can be captured by investigating actual preferences of game players.

Second, it is suggested that analyzing and learning from the development experience of other game competitors. For example, LOL and DOTA hosted international events, which has dramatically increased consumer enthusiasm for e-sports games. Almost every international game can trigger a new round of confidence. At the same time, they also seized the industrial opportunity of incorporating e-sports products into 2022 Hangzhou Asian Games, which has promoted the renewal and development of the products themselves, and create a development path for international competitions. Finally, developers need to use marketing methods to stimulate consumption and increase experience such as celebrity endorsements, cultural and creative figures, etc. The economic value of e-sports products includes game products themselves and peripheral products and event products. From the perspective of game products, players consume virtual products, while peripheral products designed around virtual game products are physical. For example, limited products, commemorative products, and blind box creatives are effective means to activate virtual products.

This article made a preliminary study on the factors affecting the consumption intention of e-sports products. Subsequent investigation should expand research samples and consider consumers' economic status, values, cognitive status, and other influencing factors to further deepen and improve research results.

REFERENCES

- Cunningham, G.B., Fairley, S., Ferkins, L. (2018). eSport: Construct specifications and implications for sport management. *Sport Management Review* 21(1), 1-6.
- Funk, D.C., Pizzo, A.D., & Baker, B.J. (2018). Esport management: Embracing esport education and research opportunities. *Sport Management Review* 21(1), 7-13.
- Hamari, J., & Sjoblom, M. (2017). What is esports and why do people watch it *Internet Research* 14(9), 5898-5909.
- Karhulahti, V.M. (2017). Reconsidering Esport Economics and Executive Ownership. *Physical Culture and Sport Studies and Research* 74(1), 43-53.
- Llorens, M.R. (2017). eSport Gaming The Rise of a New Sports Practice. *Sport Ethics and Philosophy* 11(4), 464-476.
- Pizzo, A.D., Baker, B.J., Na, S. (2018). eSport vs. Sport A Comparison of Spectator Motives. *Sport Marketing Quarterly* 27(2), 108-123.
- He, W. (2004). Analysis of related concepts and types of esports. *Sports Culture Guide* 5, 11-13.
- Liao, Y.C. (2005). Literature review of consumption experience and its management. *Economic Management* (14), 43-50.
- Li, L.L. (2010). Research on factors affecting consumption intention of mobile games Masters degree paper. Dalian: Dongbei University of Finance and Economics.
- Liu, Y.H., Liu, Y.S. (2017). Research on the influence of online public opinion on consumers purchase intention Based on the moderating role of public opinion leaders and time distance. *Journal of Yunnan Finance and Trade Institute* (1), 150-160.
- Li, Y.P., Huang, H.J. (2016). Recent problems in the development of esports industry in China. *Shandong Sports Science and Technology*, (6), 35-39.
- Li, Z.H., Wang, J., & Li, B. (2004). Study on conception, category and development process of e-sports. *Journal of Tianjin University of Sport* (1), 1-3.
- Ma, C., Cui, J. (2009). Definition of e-sports and online games. *Journal of Sichuan Normal University* (3), 110-111.
- Wang, Y.H. (2016). Research on influencing factors of consumption intention in esports, Masters degree aper. Shanghai: Shanghai University of Sport.
- Wang, Z.T. (2018). Analysis on investment trend and prospect of esports industry in China. *Sports World* 4, 46-47.
- Xiang, C. (2018). Research on the impact of beauty bloggers marketing on female college students consumption intention Masters degree paper. Xiamen Xiamen University.
- Yang, J.Y., Huang, H.Y., & Zhang, L. (2014). The status quo, problems and development countermeasures of e-sports industry in China. *Journal of Capital University of Physical Education* (3), 201-205.
- Yang, Y. (2018). Research on e-sports and e-sports industry in the new era. *Sports Science* (4), 8-21.
- Zhang, H.M. (2005). Classification and application of five-dimensional system of consumption experience. *Business Dynamics* (8), 18-19.
- Zhao, R.X. (2017). Study on the strategy of intelligent marketing to improve consumption experience in the era of artificial intelligence. *China Market* (11), 213-214+226.