



Video Game Music and Cultural Dissemination: A Study of Honour of Kings as a MOBA Game

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Abstract

As the internationally one of the most-played multiplayer online battle arena (MOBA) game, Honour of Kings (HoK) has created a unique cultural phenomenon apart from its gaming appeal. HoK weaves its aesthetically-pleasing game character, plot, scene, background, and music with Chinese traditional culture (CTC) elements. This contributes to popularise CTC across the world and Chinese music works, accordingly. Therefore, this article starts with the CTC elements and music works in HoK and explores the effect of Video Game Music (VGM) on cultural dissemination. Further, it explores the new ways and trends of traditional culture transmission. Lastly, this article comprehensively discusses the current problems and solutions of cultural and musical promulgation in games. It can be explained that the effort in terms of VGM composition would contribute to the HoK game develop better. These findings can also provide research ideas for developing VGM in Chinese style.

Keywords

Video Game Music; Honour of Kings; Chinese Traditional Culture; Cultural Dissemination; Popular Music



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Музыка видеоигр и культурное распространение: исследование МОБА-игры “Honour of Kings”

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Аннотация

Будучи одной из самых популярных многопользовательских онлайн-боевых арен (МОБА) в мире, “Honour of Kings” (HoK) создала уникальное культурное явление, отличное от её игровой привлекательности. HoK сочетает в себе эстетически приятные игровые персонажи, сюжет, сцену, фон и музыку с элементами китайской традиционной культуры (КТК). Это способствует популяризации КТК во всем мире и китайских музыкальных произведений. Поэтому данная статья начинается с элементов КТК и музыкальных произведений в HoK и исследует влияние музыки видеоигр на культурное распространение. Далее рассматриваются новые способы и тенденции передачи традиционной культуры. Наконец, в статье комплексно обсуждаются текущие проблемы и решения культурного и музыкального распространения в играх. Можно утверждать, что усилия в области композиции музыки видеоигр способствуют лучшему развитию игры HoK. Эти выводы также могут предоставить идеи для исследования музыки видеоигр в китайском стиле.

Ключевые слова

музыка видеоигр; Honour of Kings; китайская традиционная культура; культурное распространение; популярная музыка



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Introduction

Video Game Music (VGM) plays a very important role in the gaming experience: it has certain artistic value while improving the competitiveness of the game. The Honour of Kings (HoK) is regarded as one of the most popular and the most-played multiplayer online battle arena (MOBA) mobile game in China (Ye et al., 2020). It was developed by TiMi Studio Group, which belongs to Tencent Games in Chinese mainland. As the China's internet giant, the game has proven a huge commercial success (Yao & Chen, 2022), while it inadvertently promoted the China's soft power as a carrier of culture. It can help to spread Chinese Traditional Culture (CTC) worldwide through game elements, like character design. Along with the game comes a virtual world rooted in traditional Chinese history and culture unparalleled game and social relationship chain (Liboriussen & Martin, 2020). In the context of the era of mobile internet and digital entertainment, every game player is finding the right role for his/her own in HoK. Mainly, the game is not overly complicated to play and implant some historical and social events and figures in ancient China by presenting them in an interesting and interactive way with modern perspective. Also, some background music and songs become popular and are increasingly familiar to the player. Thus, HoK currently as a popular mobile game is carrying forward CTC, embodying oriental aesthetics, and interpreting classical Chinese stories and cultures. This phenomenon has gone beyond the gaming industry itself and is worthy of conducting to study. Surely, VGM, as an atmosphere aid throughout the game, is undoubtedly the key to the success of the future of interactive gaming.

Music and sound effects act a pivotal role in a gaming experience. They can improve the game's recognition, immersion, and competitiveness and also generate certain artistic value along the way (Marks, 2009; Collins, 2013; Laine & Suk, 2016). Indeed, VGM needs to construct a kind of specific gaming environment and mood, and it is challenging to compose. It can be described that VGM is an important component of online games and may provide musicality to the game (Cavanagh, 2020) and enhance its storytelling process (Somerdin, 2016). However, due to the relatively short development time, the online game industry is in absence of professional talents, development concepts, and industrial standards. Some issues have been noted in the Chinese game music market, including homogenous, rough production, infringement and piracy, which hinder the production and development of VGM. In recent years, led by some internet giants, Chinese game industries are promoting the domestic gaming projects by supporting more in game development, function, production, and VGM. However, there are relatively few studies analyzing the VGM of HoK from the perspective of the game music industry's development.

This article adopts a mixed-methods design, encompassing questionnaire surveys and content analysis. The questionnaire survey aims to gather players' opinions and perceptions regarding music and cultural dissemination in the game HoK.



To achieve this objective, a questionnaire is designed, covering players' cognition, acceptance, and satisfaction towards CTC elements in the game, as well as the current status of VGM circulation. A total of 300 questionnaires are distributed, yielding 278 valid responses. Quantitative analysis methods are subsequently applied to process the questionnaire data, including calculating frequencies, proportions, and means. The analysis of questionnaire results provides insights into players' attitudes and opinions towards the music and cultural promulgation in the game.

Additionally, content analysis is employed to explore the game's music and cultural elements. Specific game elements in HoK are selected for content analysis, such as music scores, character settings, character skills, and scene designs. Relevant data, including in-game music files, character introductions, and game screenshots, serve as the basis for content analysis. This enables an in-depth analysis of the effects and impacts of music and cultural elements on cultural spread in the game. By integrating the results from the questionnaire survey and content analysis, a comprehensive analysis of the effects and influences of music and cultural propagation in the game HoK is conducted. Building upon the findings, strategies and recommendations for the development of the game music industry are proposed, offering research insights to inform the future development of Chinese-style game music. This article contributes to a better understanding of the role of music and cultural elements in enhancing players' experiences and cultural diffusion within the gaming context.

Literature Review

Studying games has always been a concern and it is also an important academic field. With topics ranging from early classics like Donkey Kong and Super Mario Bros. to hits in global like Plants vs. Zombies drew on the scholarly fields of musicology and music theory, film theory, and game studies, to investigate the history, function, style, and conventions of VGM (Donnelly et. al., 2014). Hart (2014) discussed a VGM analysis that incorporates a performative approach to interactivity. Johnston (2014) staked out the territory covering, refreshing and challenging many assumptions regarding sound and digital media in games. Juul (2007) attempted to seek the historical development of the casual game to explore how their game design has evolved over time, and to discuss the opposing perspectives that players and developers have on video game history.

Yu et. al. (2018) introduced MOBA-Slice, a time slice-based evaluation framework of relative advantage between teams in Multiplayer Online Battle Arena (MOBA) games. Zhang et. al. (2019) presented a novel hierarchical reinforcement learning model for mastering MOBA games, a sub-genre of RTS games. Nuyens et al. (2016) investigated the associations between impulsivity and symptoms of addictive use of MOBA games in a sample of highly involved League of Legends (LoL, currently the most popular MOBA game) gamers. Abbasi et al. (2022) discussed the factors



that lead to the consumption of MOBA games, which was to facilitate understanding of how to convert free players to paid consumers in free-to-play games.

Park (2020) argued that VGM, video games, or classic characters could offer scholars, practitioners, and fans a shared resource library. The original VGM might lead the players to a new life experience. Bates and Bennett (2018) analyzed music and sound composition in several different fields and reviewed several theoretical frameworks and methods. In the 21st century, music composition has been integrated with multimedia techniques, pointing out a new direction for the game music industry. Cayari (2021) suggested an online music composition and online participation theory by applying new-generation multimedia technologies. The proposed theory was applied to pop music education as a new cultural practice. The findings inspired online music education and the broadcasting of cultural elements in music better.

Some scholars have focused on different aspects of the research in the game HoK in recent years. For example, He and Choi (2020) analyzed game characters in HoK from a visual arts perspective. It is argued that successful characterization not only attracts the attention of players, but also plays an appropriate role in spreading culture. Meng and Peng (2021) explored the integration of Chinese history and culture with the cultural attributes of the HoK game itself through a semiotic perspective, coding game characters.

However, it is manifest that the current literature on HoK and its relevant cultural elements lacks systematic and theoretical research and thinking. Although some studies have explored its commerciality and its position in the gaming scope from a cross-cultural perspective, still the research on the VGM and its effect on cultural circulation is rare. Therefore, it is necessary to deeply understand the game's cultural propagation mechanism from the perspective of VGM. This article is believed to help develop the game music industry and cultural dissemination research. To this end, this article classifies the VGM in HoK, analyzes the transmission mechanism and effect of music, and investigates the basic situation of the game players.

Research Methods and Content Analysis

The Types of CTC Elements Embodied in HoK

HoK adopts the concept of the new culture, extends and spreads its thinking with the help of heroes rooted in Chinese history, and integrates different types of culture and music through the game. Game characters are created in a way to attract players through their heroic identities based on famous Chinese history (or stories). Players acknowledge that the game gives them a strong role-play feeling thanks to the elaborate and elegantly-set background stories of their heroes. This adds up to the interestingness of the game and the uniqueness of the character's personality while at the same time helping players to understand CTC. It is reported that many foreigners get interested in learning CTC for the sake of

the game. For commercial purposes, the game developers attract players to buy some high-aesthetic hero skins or by participating in official activities instead of offering them freely by exquisite design and creativity (Wang, 2021). The skin design is extremely rich in styles, most popular is the Chinese ethnic style series. Every skin is designed with a combination of some local cultures and unique cultural Intellectual Property (IP). Thus, this skin-selling strategy not only increases gaming experience and game revenue but also stimulates many players' interest in CTC in a very intuitive way. For example, Figure 1 illustrates the skin 'Meeting Deer God' 遇见神鹿 of the game character Yao 瑶, which is co-produced by the game developer and Dunhuang Research Institute. Figure 2 portrays the customized skin 'The Fox of the Millennium' 千年之狐 of the game character Li Bai 李白, which is co-produced by the game developer and the Chinese TV program National Treasure. Both of two cases are viewed as the inheritance of Chinese civilization from the aesthetic and historical points of view.



Figure 1. The poster of skin by the hero Yao in HoK. [Open Source]



Figure 2. The poster of skin (left) and original modelling (right) by the hero Li Bai in HoK. [Open Source]



Music is inextricably linked with the culture in which it is produced, and it creates an immersive interactive atmosphere for the player (Parsayi & Soyoo, 2018). VGM can continue to play an increasing role in developing a better user experience in HoK and disseminating CTC through the game. Since its release, HoK has integrated many popular and traditional Chinese music and Western music genres as well as it has also invited internationally famous music composers such as Tan Dun 谭盾, Hans Zimmer, and Howard Shore. The VGM involves Beijing opera 京剧, Kunqu 昆曲, Sichuan opera 川剧, Yue opera 越剧, and other traditional Chinese music elements in opera. For example, in order to better restore the elements of Sichuan opera, the game producer also invited Wang Yumei 王玉梅, who is a famous performer in Sichuan opera to involve in production. She dubbed the hero skin by Meng Qi 梦奇 in the game and popularized the knowledge of Sichuan opera in the 'HoK Music Class' on the official website of the game (Figure 3). It can indicate that the HoK team spread the characters' historical and cultural origins in virtue of music and simultaneously increase the players' game interaction.

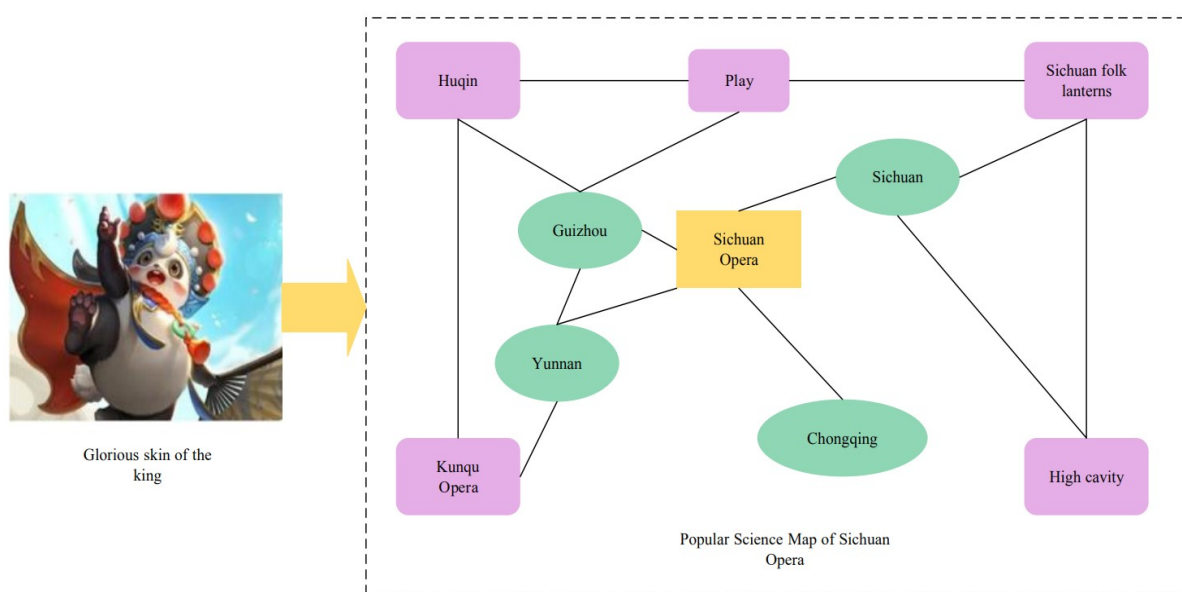


Figure 3. The schematic diagram of HoK to popularize the knowledge of Sichuan opera.

According to Figure 3, the HoK's VGM design starts with the music of the entire hero camp, then designs the music of each genre below, and finally designs the music of each character. This design philosophy enables the game soundtracks to be both connected and different. In this way, players can hear the main melody and theme of the whole camp from the theme music. This logical design method enables each music theme to find its source. Yet, the design is still several steps behind an ideal one from a historical point of view. After all, the game is a romantic presentation of historical anecdotes not totally honest about history (Jiang & Chung, 2021). For example, the character does not fit the image of the historical character which historians believe it to be. Figure 4 shows

the comparison between Li Bai as a poet in Tang Dynasty of Chinese history and Li Bai as a hero in the game:

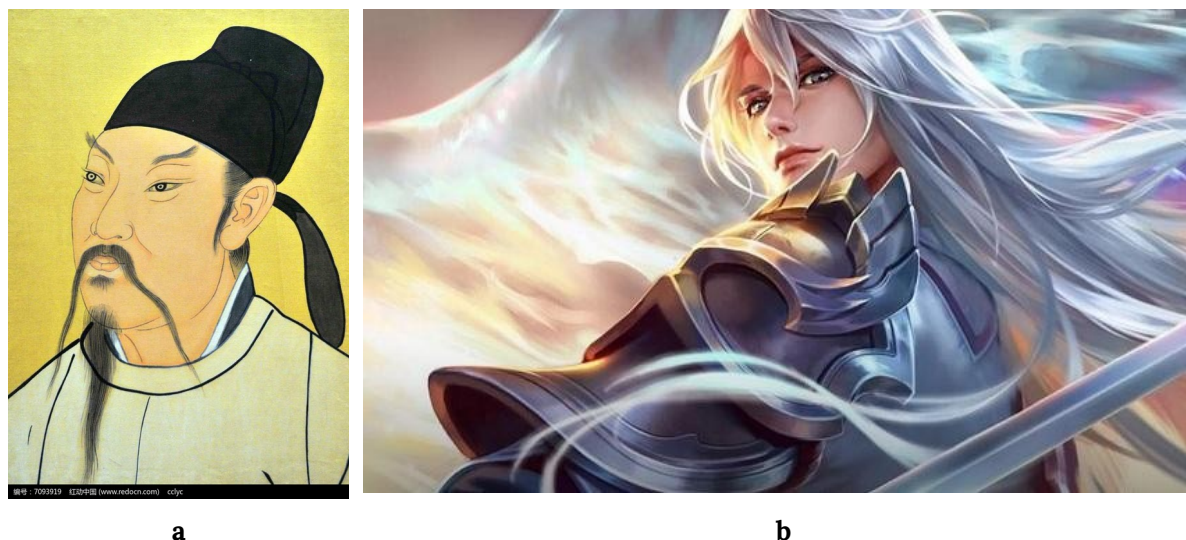


Figure 4. The comparison of Li Bai's image in HoK with history.
[Open Source] (a. historical image; b. game image)

From the beginning of creation, Tencent company has positioned HoK's music style as 'oriental fantasy'. This feature determines the boundary between its music creation and the audience's feelings. More specifically, 'oriental' refers to Asian especially to Chinese, including some ethnic musical instruments and tunes from China. Meanwhile, 'fantasy' involves selective integration of electronic music, orchestral music, synthesizer sound, thus forming unique music creation logic.

The Dissemination Effect of HoK's VGM

'Tencent games' has paid great attention to HoK's VGM since the first version. In 2015, Tencent established a special audio production team and invested a substantial amount of money in-game music development (Shi & Chung, 2019). For this reason, they invited famous composers and singers in and outside China for VGM composition several times. Their efforts easily dwarf small video game companies. Research has shown that music of different styles and genres can help promote the development of the plot and reflect the conflict of characters even though mostly those do not relate to the background of the game. According to whether the complete melody can be heard in the game, it is divided into background music and independent music works. Table 1 lists the partial details in relation to HoK' VGM styles:



	Music Category	Expression
Background music	Login Interface	Music clips played during loading
	Hall Music	
	Map theme music	Music played when maps are involved
	Version theme music	Music created for different versions
Independent music	Game character music	Exclusive music created by a single or certain type of character
	Game skin music	Music created for a skin of a single game character
	Festival Music	Songs created for special festivals such as New Year, Anniversary and Gang up Festival
	Competitive music	Music created for the HoK professional league and championship

Table 1. HoK's VGM category.

Additionally, HoK has a relatively mature production and marketing team with large-scale packaging and marketing services. Thus, it will have greater advantages over other games in VGM development. After peaking at over 100 million daily active users in 2020, the HoK has begun to lose some users (Sun, 2020). Thus, there is a need to refine and innovate the game elements. For example, new music marketing fields can be excavated to lay the foundation for the independent development of subsequent VGM from the game.

HoK is a role-playing game (RPG) set against Chinese history, and it upholds the slogan of transmitting CTC in the 'new cultural and creative' strategy. In addition to the Western symphony orchestra, its VGM has also selected many distinctive traditional Chinese musical instruments, such as the guqin 古琴, dizi 笛子, erhu 二胡, guzheng 古筝 and others. Among them, the most well-known is the 'Five Tigers General Symphony' created by Tan Dun 谭盾 (a Chinese-American composer). This suite was based on several famous heroic characters from the Three Kingdoms (around 184-280 BC) in Chinese history; their names are Ma Chao 马超, Zhao Yun 赵云, Huang Zhong 黄忠, Guan Yu 关羽 and Zhang Fei 张飞. The suite uses five ancient traditional musical instruments including pipa with five strings, haegeum, lusheng 芦笙, shakuhachi and hichiriki, which separately correspond to these five heroes in HoK game (Figure 5). It depicts the unique character and musical spirit of each character. Similarly, the theme music 'Liu Shui Zhi Yin' 流水知音, was launched on the sixth anniversary of the game and mainly played on the guqin (a seven-stringed plucked instrument), which has contributed to the inheritance of the guqin art. Apparently, many successful cases in HoK show that the Cultural IP model is of great significance to promote CTC through VGM.

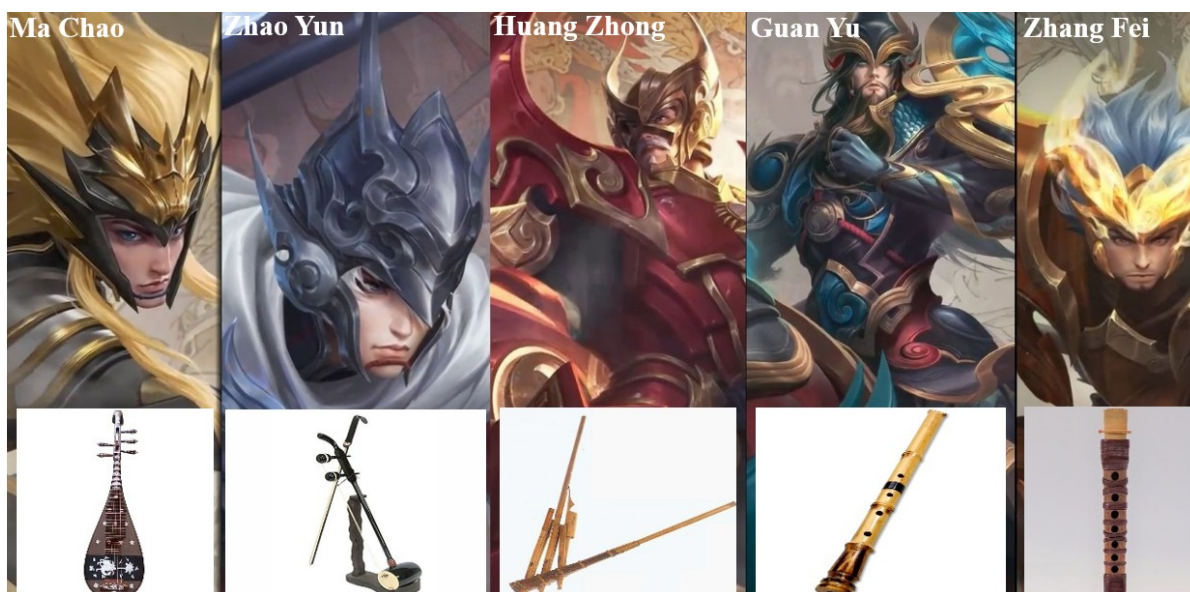


Figure 5. 'Five Tigers General' series skins and respective musical instruments used in VGM of HoK.

In terms of communication mode, the HoK carries out musical dissemination through online and offline modes from four aspects: open class, song release, media publicity, and a symphony concert. At the music level, there is 'King's Music Class' and 'King's Music Listening' in the open class to appreciate and decrypt the background process of music composition, music knowledge, and the original music of the game. QQ music platform has collected the released music albums, videos, and music videos of HoK. With the help of the social attributes of QQ music platform, listeners can comment on their own feelings after listening or share relevant music knowledge by forwarding. This is the secondary spread of VGM. Furthermore, other social media platforms such as Sina Weibo and WeChat official accounts can update game-related information in real-time. The platform also interacts with players for recently released music activities, and promotes VGM in a relaxed and pleasant way. At the same time, some symphonic concert tours are held around the China, where HoK corporates some well-known orchestras and conductors to ensure the quality of music works.

The Current Situation of the HoK Player

This section aims to study the appropriateness of using CTC elements and the dissemination effect of VGM in HoK. To this end, the game player, as the most direct information receiver, is an important research informant group. Therefore, a questionnaire survey, entitled 'The Application and Dissemination Effect of Chinese-Style Cultural Elements in Honour of Kings' was distributed to the game players on WeChat, Sina Weibo, the King Camp, and Zhihu platform. The survey covers 30 provinces and cities in China and lasts for a week. Altogether, 300 pieces



of questionnaires were distributed, recovering 278 effective ones, with a recovery of 92.67%. The questionnaire includes the basic information, as well as the cognition, acceptance, and satisfaction of game players of the CTC elements in the game. The survey also investigated the current situation of the promulgation of VGM. Correspondingly, 20 questions were designed in the questionnaire, including five basic information like the player's gender, age, occupation, nationality, and educational background. The rest is the investigation of the relevant content of the game.

The results of collected questionnaires were statistically analyzed using SPSS25.0. Cronbach's Alpha Coefficient, also known as the Kuder-Richardson Formula 20 (KR-20), a widely used method for assessing internal consistency and measuring the reliability of a questionnaire or measurement tool. Its primary objective is to evaluate whether the items within the questionnaire can measure the same concept or characteristic consistently. This assessment is achieved by calculating the interrelatedness among the individual items.

The coefficient is computed using Eq. (1).

$$\alpha = \frac{K}{K-1} \left(1 - \frac{\sum_{i=1}^K S_i^2}{S_x^2} \right) \quad (1)$$

In Eq. (1), K represents the number of items in the questionnaire, S_i^2 refers to the variance of each item, and S_x^2 represents the total variance of all items. The resulting α coefficient values range from 0 to 1, where 1 indicates perfect internal consistency, and 0 indicates complete inconsistency. Typically, an α value greater than 0.7 is considered to indicate good internal consistency for the questionnaire.

The Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy is a crucial metric used to assess the validity of a questionnaire, gauging the strength of inter-relatedness among its items. The KMO value is derived from the correlation matrix, taking into account the variances of each item and the total variance. The computation of KMO is presented in Eq. (2).

$$KMO = \frac{\sum_{i \neq j} \sum_{j} r_{ij}^2}{\sum_{i \neq j} r_{ij}^2 + \sum_{i \neq j} \sum_{i,j,2k} r_{ij,2k}^2} \quad (2)$$

In Eq. (2), r_{ij}^2 signifies the variance of the correlation coefficient between variables. The KMO value ranges from 0 to 1, with values closer to 1 indicating stronger validity of the questionnaire. Generally, when the KMO value surpasses 0.6, the questionnaire is considered to have good validity.



The Cronbach's Alpha coefficient obtained by reliability analysis was $0.835 > 0.7$; this indicates that the reliability of the questionnaire met the requirements, and the reliability is relatively high and good. Then, the Kaiser-Meyer-Olkin (KMO) value obtained by the validity test is $0.796 > 0.6$; this indicates that the validity of the questionnaire is good, and the data can be further analyzed.

At the same time, 20 of these foreign players were selected to conduct in-depth interviews on HoK's VGM. The primary interview content encompasses the following aspects: the level of acceptance of in-game hero characters or Chinese culture; the cultural elements within the game that are most captivating to players; and when utilizing HoK as a platform for showcasing Chinese cultural export, which cultural product collaborations can best embody the dissemination of Chinese classical culture and cultural cognition. This could help reveal the effect of the HoK and its concert activities on musical diffusion.

The in-depth interviews provided valuable insights, revealing that most players do not actively spend much time exploring the cultural background of the heroes in the game. Instead, they acquire knowledge about the heroes through movies, animations, or other forms of media. As a result, directly conveying culture through games remains a challenge. However, using games to disseminate culture can contribute to a deeper cultural understanding. Regarding the cultural elements that are more attractive to players, feedback from gaming experiences indicates that popular culture, such as Sun Wukong 孙悟空 and superheroes, has the highest acceptance among the respondents. Players have expressed great anticipation for the inclusion of other popular cultural elements in the game. This approach caters to the aesthetic tastes of players from different ethnic backgrounds, considering variations in language and international versions. It also enables users from other countries to witness the unique blend of Chinese culture with other cultural influences. Additionally, some interviewees particularly appreciate Chinese Hanfu 汉服 and Chinese opera, expressing their desire for similar hero skins to be added to the game.

Results and Discussions

Statistics of the Survey Results of the HoK player

The basic information survey results of the above players are shown in Table 2. The results of survey show that the majority of HoK players are women, mainly students and financial workers, and communication staff. Moreover, the majority of players are Chinese nationals.



	Information	Numbers	Proportion
Gender	Male	125	44.96%
	Female	153	55.04%
Age	<18	52	19.02%
	18-25	163	57.98%
	26-35	32	11.78%
	>35	31	11.22%
Educational background	Junior high school and below	6	2.16%
	High school	31	11.05%
	Undergraduate or junior college	173	62.26%
	Master or above	68	24.53%
Occupation	Student	84	30.07%
	Financial	59	21.34%
	Communication	72	25.93%
	Education	34	12.22%
	Others	29	10.44%
Nationality	Chinese	167	60.07%
	Japanese	3	1.07%
	Korean	14	5.04%
	Thai	8	2.88%
	American	17	6.11%
	French	9	3.26%
	German	11	3.95%
	British	11	3.95%
	Russian	15	5.40%
	African	3	1.08%
	Others	20	7.19%

Table 2. HoK player's basic information.

According to the Table 2, female players outnumber male players in the survey. Most players are 18-25 years old, followed by players under 18 years old. In the education distribution, 62.26% of the players have undergraduate or junior college degrees; this indicates that the game is more likely to appeal to players who are still in the student phase. Regarding occupational distribution, students, financial workers, and communication staff are the most, accounting for 30.07%, 21.34%,



and 25.93%, respectively. Thus, the player for the HoK game has a certain educational background and more free time in his/her daily life. Based on this result, a cross-analysis of the two indicators of the questionnaire 'participant age' and 'average online duration of players per day' (short for the active duration) is completed, and the results are shown in Figure 6:

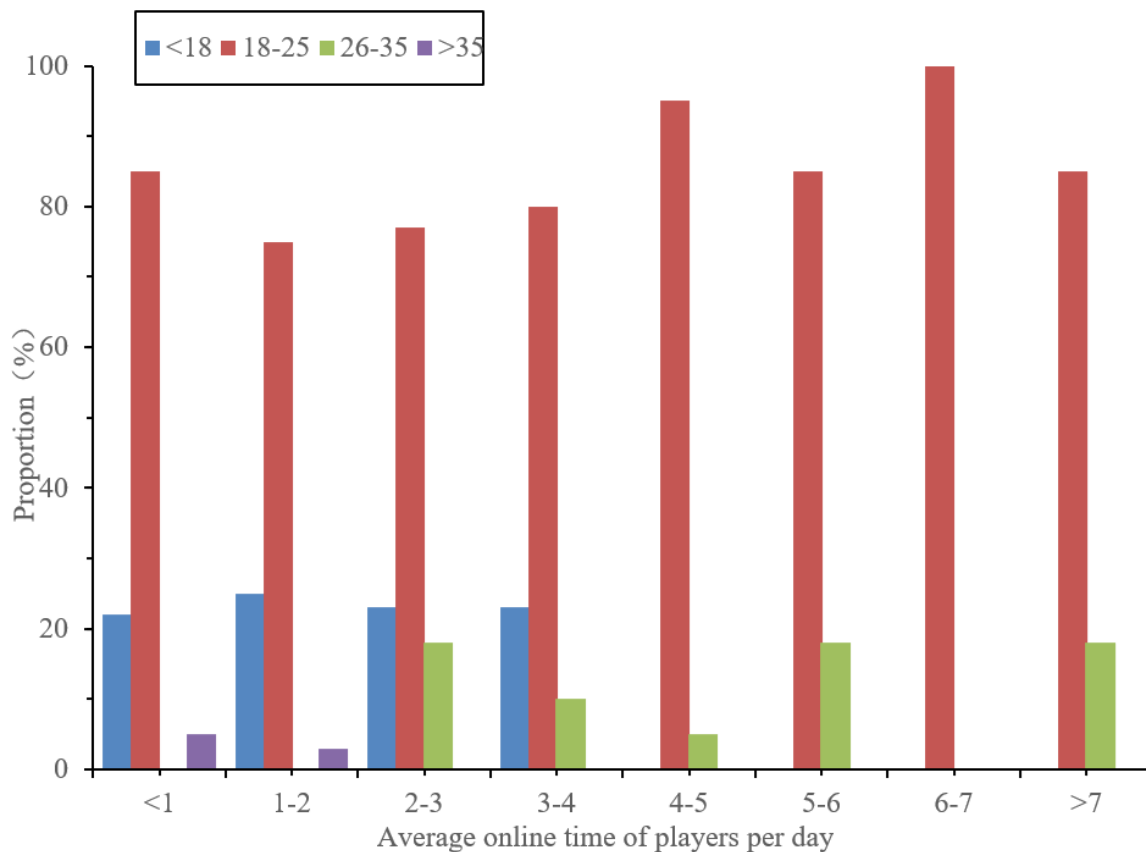


Figure 6. Cross-over analysis of players' age and average active duration.

Figure 6 shows that 18-25 aged players have a longer duration to participate the match of game in HoK; this illustrates that the younger players are more likely to be attracted to the HoK game. Next, CTC elements in HoK are simply refined. The questionnaire selects seven types of CTC elements that are used more frequently. Those are the Chinese ancient celebrity stories (a), traditional clothing culture (b), background soundtrack or theme music (c), literary classic culture (d), folk art culture (e), natural geography culture (f), and others (g). The results are compared in Figure 7:

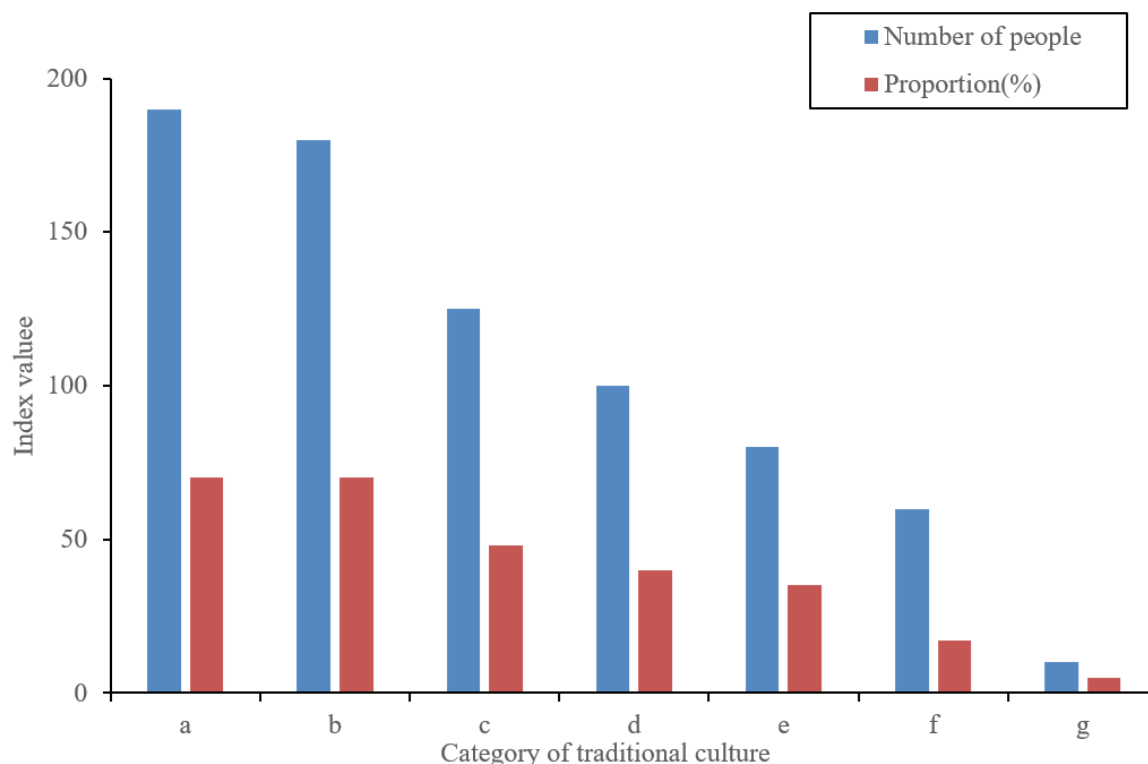


Figure 7. Players' interests in the CTC elements in HoK.

As shown in Figure 7, the top three CTC elements that players are most interested in are: (a), (b), and (c), accounting for 70.23%, 68.43%, and 43.78% respectively. Thus, most players are interested in the source of game characters, the design of game skin, and the source of game lines. Figure 8 shows the statistical situation of cultural dissemination. The question options are: there is the suspicion of tampering with history (h), the historical story behind the characters is not enough (i), the commercialized nature of the surrounding products is heavy (j), the high-quality cultural output is not enough (k), the traditional cultural performance is too superficial (l), and the wrong value orientation misleads the youth (m).

Figure 8 signifies that 'there is a suspicion of tampering with history' and 'wrong values are easy to cause adverse effects on teenagers' are the main problems impeding the dissemination of CTC by HoK, accounting for 66.8% and 66.1% respectively. Two other problems follow that they are 'the output of high-quality cultural content is not enough' and 'the expression of traditional culture is too superficial', accounting for 64.8% and 62.1% respectively. Furthermore, Figure 8 analyzes what actions of the game can arouse players' interest in CTC.

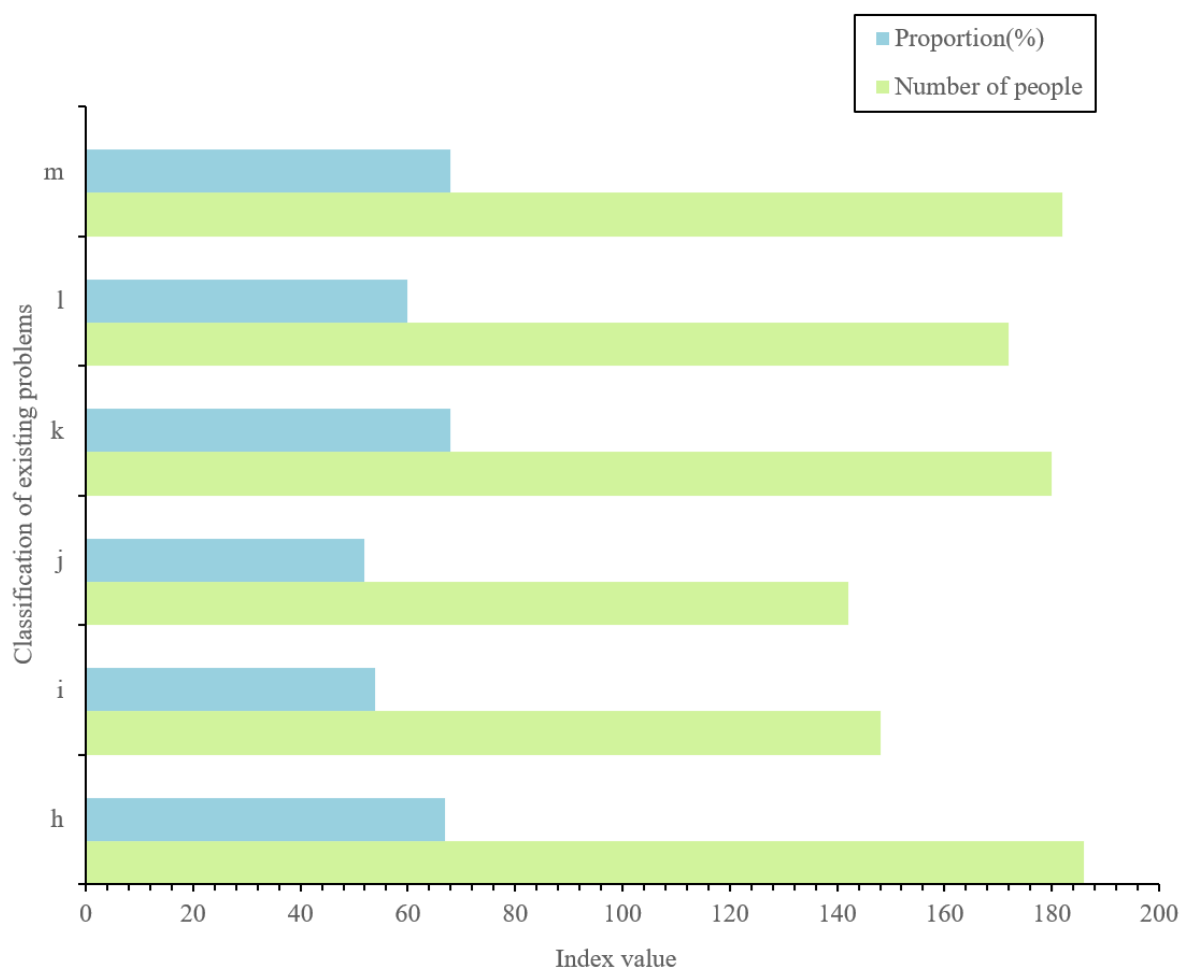


Figure 8. Players' statistics on the problems in the dissemination of CTC in HoK.

Figure 9 highlights the top-three behaviors to win over players' interest in CTC elements of HoK. They are 'hero's background story', 'game-derive IP program of the game', and 'the game peripheral products', accounting for 63.78%, 58.9%, and 56.3%, respectively, followed by the game's 'playing mode' and 'offline activity'.

The feedback from players of different nationalities (excluding Chinese nationals) regarding their understanding of Chinese hero game characters is depicted in Figure 10. Analysis of the results reveals that nearly sixty percent of foreign players possess a general understanding of the protagonist's cultural background and story in the game. Around 81.62% of foreign players are familiar with hero characters from Chinese culture, with the majority of them knowing about up to five Chinese hero characters. Approximately 4.25% of foreign players are aware of six or more Chinese hero characters. However, it is evident that nearly 25% of foreign players have no knowledge of Chinese hero characters, highlighting the game development team's efforts in shaping and promoting Chinese hero characters.

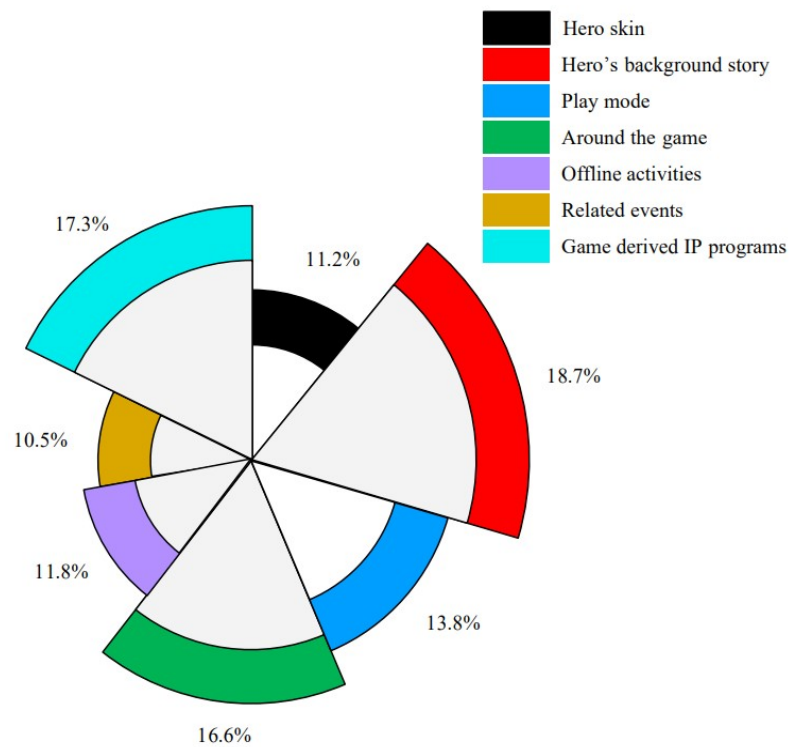
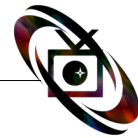


Figure 9. Several aspects to get players interested in the CTC elements of HoK.

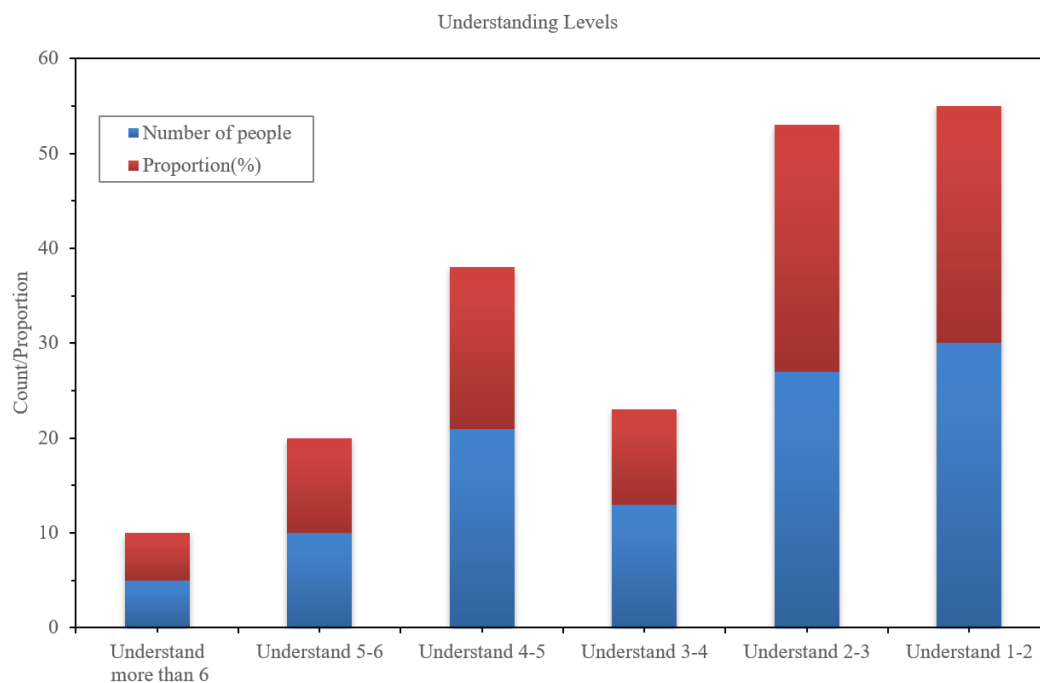


Figure 10. Feedback from players of different nationalities (except Chinese nationality) on understanding the role of Chinese heroes in the game.



Discussions on the Dissemination Effect of HoK's VGM

The above inquiry can help draw the following conclusion. In terms of VGM alone, some players are still in a passive state of acceptance, and most of the information about the symphony concert of offline games comes from relatives and friends or new media platforms.

(1) From a cognitive point of view, most respondents paid attention to HoK's VGM. In the immersive game atmosphere, most players left positive comments on the background music and also paid attention to the independent music works in the game. Meanwhile, they also noticed the information related to the music channels it spread, such as the time of the offline concert.

(2) From the perspective of emotion and attitude, most respondents agreed with the commercial value of the combination of game and art; they believed that the game could carry out cultural circulation and allowed them a better understanding of traditional Chinese art and culture; they also said that the cultural IP model enhanced their gaming experience.

(3) From the perspective of behavior, although they paid attention to music and related information and would listen to VGM on music software after leaving the game, only a small number of respondents said they would put it into practice. Most of them did not choose to participate in the offline concert even though some respondents expressed their willingness to deeply understand the music content of HoK after the interview.

(4) From a cultural dissemination perspective, the survey findings indicate that while a considerable number of foreign players in HoK possess some understanding of Chinese culture and Chinese hero characters, a significant proportion still have limited or no knowledge of Chinese culture. This suggests that the effectiveness of disseminating Chinese culture through the game is limited. This limitation may be partly attributed to the unique characteristics and autonomy of the Chinese gaming industry. The Chinese gaming industry is known for its independence and self-sufficiency, emphasizing local characteristics and cultural elements with less focus on cross-cultural influence and global universality. Based on the results of in-depth interviews, promoting Chinese classical culture through HoK requires consideration of its linkage and resonance with other cultural products. The game should not only act as a conduit for cultural output but also deepen cultural impressions. Given that players and users invest different amounts of time in the game, the specific representation of hero characters becomes the most fundamental and direct way to showcase culture. In the design of hero characters, the use of distinctive cultural symbols can enhance foreign players' understanding of Chinese culture. Such symbolic representations can serve as a bridge to foster cultural connections and facilitate cross-cultural appreciation among players from diverse backgrounds.



Countermeasures and Prospects for Developing VGM

Based on the above analysis, in China, where VGM started relatively late, there are still various problems and limitations in composing VGM. This section looks into these problems from the external and internal points of view and puts forward countermeasures. The specific solution is shown in Figure 11:

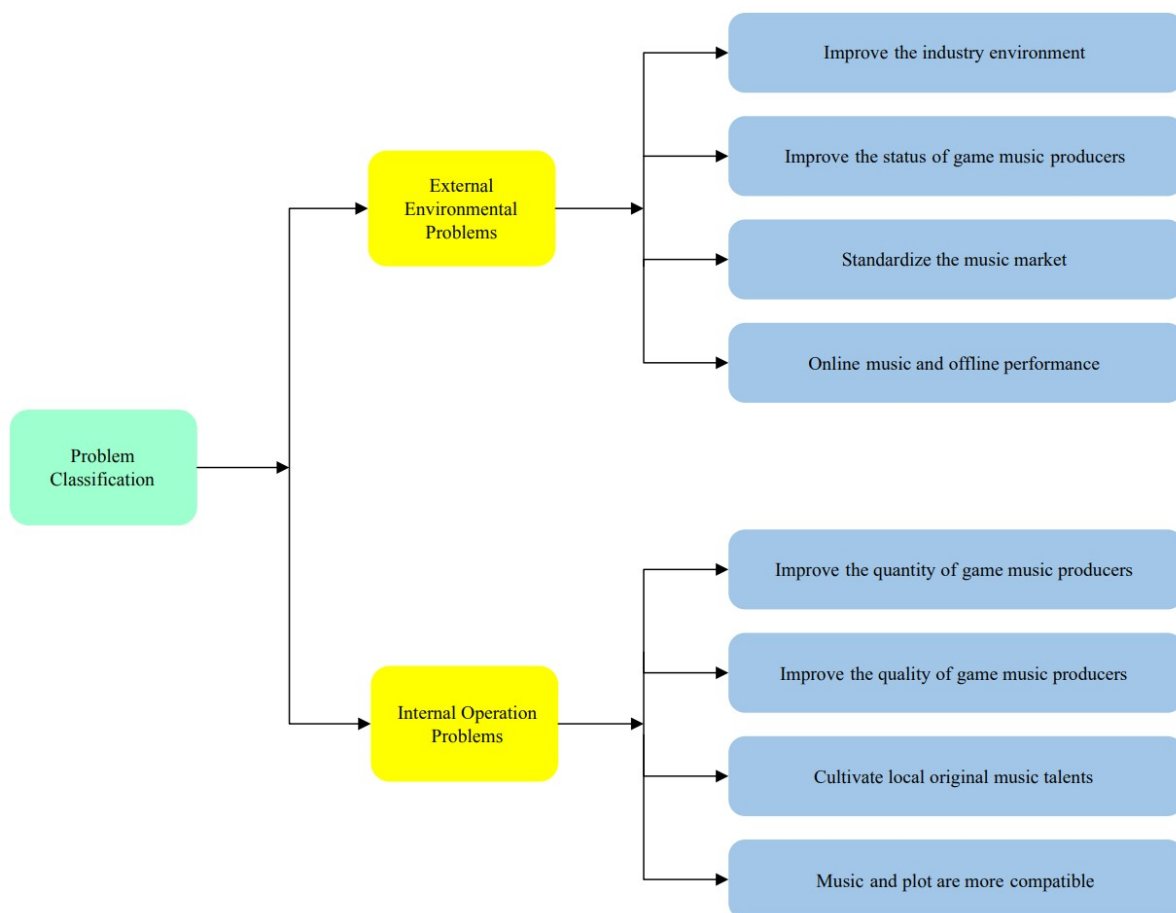


Figure 11. Countermeasures for developing VGM.

According to Figure 11, VGM, as a branch of online music, has been neglected for a long time, resulting in a relatively slow development. (1) There is a need to change the industry environment, such as music copyright protection, and increase the investment in VGM production. Most domestic game companies only pursue the immediate commercial value of games and care less about their artistic value; nor do they consider the long-term benefits of game concerts. Overall, VGM composers are not valued. In order to get better VGM, efforts are needed to improve the status of VGM composers. To achieve this, VGM shall be further integrated into game development. VGM composers shall be given more opportunities to participate in game production. (2) Internally, it is also necessary to improve the overall quality of music producers. Many producers have only learned popular



music production and simply applied it directly to VGM production. Such VGM production lacks unique and appealing characteristics. (3) Standardizing the issue of music copyright. More trademarked VGM designs shall be encouraged and protected to gear to players' gaming moods and immersive experiences.

Conclusion

The primary objective of this article is to investigate the dissemination of CTC and its influence on popular culture through the incorporation of music and cultural elements in the game HoK. The article aims to assess the effectiveness of game music in facilitating cultural propagation and to explore emerging patterns and trends in the propagation of traditional culture within the game. Furthermore, the article offers a detailed analysis of the challenges encountered in the spread of cultural and musical aspects within the game and presents potential strategies and solutions to address these challenges. The specific research starts with the CTC elements contained in the VGM, character background, scene design, and other game modules and then classifies the VGM in HoK. At the same time, this article analyzes the broadcasting mechanism and effect of music and investigates the basic situation of the game players of HoK in the aspects of their cognition, emotions, attitudes, and behavior. Finally, the problems and solutions of cultural and musical dissemination in the game are discussed. The research findings reveal that HoK game players exhibit a discernible educational background and often have ample leisure time in their daily routines. The majority of players display a keen interest in the background stories of game characters, the intricacies of game skins' design, and the origins of game music. While foreign players demonstrate a certain level of familiarity with Chinese culture depicted within the game, it is noteworthy that approximately 25% of foreign players remain unfamiliar with Chinese hero characters. This is of great significance to developing and popularizing CTC and VGM. However, some deficiencies have not been avoided, mainly the limited number of samples. Due to the uneven distribution of the network environment, the coverage of game players still needs more authentic data support, which is also the direction of future research.

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