# FROM "THE LIGHT OF THE COUNTRY" TO "THE PHENOMENAL EXPLOSION" —— THE AUDIENCE RELATIONSHIP AND THE WAY TO "BREAK THE CIRCLE" IN DECODING "NEZHA 2"

Baoshuo Wang

*Department of Statistics, Guangxi Normal University, Guilin, 541006, China*
*Corresponding Author: Baoshuo Wang, Email: 3095045418@qq.com*

**Abstract:** "China's 'Fourteenth Five-Year Plan' explicitly proposes to promote the development of the digital culture industry. Animation, as an important carrier for 'telling Chinese stories well, ' has received special funding support. The government advocates for the 'creative transformation of fine traditional Chinese culture, ' promoting the exploration of themes such as mythology, history, and intangible cultural heritage in national animation, which aids in cultural exports and national identity. As a sequel to the domestic animated film 'Ne Zha: The Devil Child Makes His Debut, ' 'Ne Zha 2' continues the industry topic of'the rise of national animation'with the accumulated popularity of the national IP and audience expectation s from the predecessor. This study uses a questionnaire survey method, focusing on the population from four regions in Guangxi, aiming to analyze how 'Ne Zha 2' breaks through the audience layer limitations of animated films to become a universally popular hit and to summarize its 'breakthrough' market strategies, providing a reference for the national animation industry. A total of 528 questionnaires were collected, and after removing invalid questionnaires, 430 were left. Through basic descriptive analysis of the data, we gained an understanding of the general distribution. Then, differential analysis and multiple response analysis were conducted to explore the correlation between the respondents' basic information and the rese arch questions. Finally, a structural equation model was constructed to explore the complex relationship between the subjects' understanding of 'Ne Zha 2' and its development strategies. The study found that the audience's understanding of 'Ne Zha 2' is generally high, and 'Ne Zha 2' has also had a certain impact on the future development of national animation. The reasons for 'Ne Zha 2' being able to truly 'break th rough' include content and emotional, technical, and marketing aspects. By delving into the reasons for the success of 'Ne Zha 2', we can further promote the development of the domestic animated film industry and build a more prosperous and innovative cultural industry structure. Only by fully understanding and drawing on the successful experience of 'Ne Zha 2' can we better meet a more competitive film and television market and achieve the long-term development goals of the national cultural industry.

**Keywords:** Population from four regions in Guangxi, "Ne Zha 2", "Breakthrough" strategies, Differential analysis, Multiple response, Structural equation model.

## 1 INTRODUCTION

### 1.1 Research Background and Significance of the Topic

#### 1.1.1 Research background

In recent years, driven by policy support, capital investment, technological innovation and market demand, China's domestic animation gradually got rid of the passive situation dominated by Japanese animation for a long time, showing a rapid development trend. According to the Research Report of China Animation Industry in 2023, the market scale of animation industry in China has exceeded 300 billion yuan, and the annual growth rate has remained above 15%. Guo Man's works, such as Ne Zha, The Return of the Great Sage, Three Wan Li in Chang 'an, etc., not only made a breakthrough in business, but also formed a unique "national aesthetics" by integrating the traditional cultural elements of China and became an important carrier of cultural output. Nezha 2 does not stay in the superficial reappearance of Nezha's fairy tales, but guards the cultural roots with awe. Through the in-depth study of the text textual research, folk custom evolution and artistic representation of IP stories and their background times, it finds the cultural anchor point that can produce national emotional connection, so that it can realize value remodeling and cultural resonance in the contemporary context[1]. For example, Nezha's The Devil's Child Roars the Sea, with its innovative narrative, vivid characters and unique cultural expression, broke the audience's inherent cognition of fairy tales, and at the same time, it won a high box office and stimulated the creators' enthusiasm for exploring heroic movies[2].

The "14th Five-Year Plan" clearly puts forward "accelerating the development of new cultural formats and promoting the high-quality development of the digital cultural industry". As a part of the digital content industry, Guoman has obtained the policy inclination at the national level. Many local governments, such as Hangzhou and Chengdu, have promoted the development of Guoman industry by building animation industrial parks, holding international animation festivals and comic exhibitions. Despite the rapid development momentum, Guo Man still faces multiple structural challenges: for example, a large number of works focus on fantasy and cultivation of immortals, and the plot is

seriously routine; Social issues and realistic themes facing adult audiences are scarce; Guoman faces cultural differences and limited distribution channels when going out to sea, and has not yet formed a global influence; And the demand for high-end technical and creative talents is in short supply. The rise of Guoman is not only related to the economic benefits of the cultural industry, but also a key link in the construction of China's cultural soft power. From the theoretical level, it is helpful to reveal the development law of emerging cultural formats under the background of globalization and digitalization to dig deep into the development trend and predicament of high-quality animation. From the practical level, it can also provide a path reference for more employees to create high-quality content, and help the country to achieve a leap from "quantitative change" to "qualitative change". From Ne Zha to The Devil's Child in Nezha (hereinafter referred to as Nezha 2), Nezha 2, as a sequel to phenomenal IP Ne Zha, its breakthrough is not only reflected in the continuation of box office or word of mouth, but also through technological innovation, narrative upgrade, industry consolidation and cultural expression. In the aspects of role modeling and narrative structure, the film breaks the inherent pattern of traditional fairy tales and endows the protagonist Nezha with more complex and multidimensional personality characteristics[3]. Guoman industry has set a new benchmark. Therefore, it is of great significance to study the reasons for the "broken circle" in Nezha 2 for the future development of the country. By deepening the audience's understanding of Nezha 2, the influence of Nezha 2 on the development of Guoman and the reasons for its "broken circle", we can provide effective countermeasures and methods for the subsequent development of domestic animation. At the same time, it can also have a positive impact on the development of a series of industries, such as film industry, cultural tourism industry and so on.

### 1.1.2 Research purposes

"Nezha's Devil Children Roaring the Sea" once again confirms the key role of digital technology in promoting the "two innovations" of Chinese excellent traditional culture. In terms of unique advantages, digital technology drives the transformation of Chinese excellent traditional culture from "tradition" to "modernity", promotes its transformation from "recessive" to "dominant" and helps it transform from "roaming the sea" to "going out to sea"[4].The influence of the development of the country on the national cultural industry is multi-faceted and all-round. First of all, the rise of Guoman has injected new vitality into China's cultural industry. By integrating traditional and modern elements, it not only inherits the excellent cultural heritage of the Chinese nation, but also promotes the modern transformation and innovative expression of traditional culture. Secondly, the prosperity of Guoman has promoted the perfection and upgrading of the animation industry chain, from content creation, production technology, distribution channels to derivative development, each link has promoted the cultivation of professional talents and the increase of employment opportunities; Furthermore, the international communication of Guoman has enhanced the international influence of Chinese culture, enhanced the international recognition of national cultural brands, and created new growth points for the export of Chinese cultural products; Finally, the development of Guoman has also stimulated the whole society's attention and investment in cultural and creative industries, promoted the cross-border integration of cultural industries and other fields, and provided strong support for the country's economic restructuring and cultural development and prosperity.

The purpose of this study is to explore the reasons for the great success of Nezha 2. By analyzing the plot conception, character shaping, visual effect, marketing strategy and audience's psychological needs, this paper aims to reveal how Nezha 2 stands out among many animated films and becomes a phenomenal work, and provide useful reference and enlightenment for the development of China's animated film industry, and further promote the innovation and prosperity of domestic animated films. Through text analysis, semiotic interpretation and cross-cultural communication theory, this paper explores how this work establishes meaning resonance in the global cultural market, and analyzes its communication strategies and challenges in the postcolonial context[5].

By deeply exploring the reasons for the success of Nezha 2, we can further promote the development of domestic animated film industry and build a more prosperous and innovative cultural industry pattern. Only by fully understanding and drawing lessons from the successful experience of Nezha II can we better meet a more competitive film and television market and realize the long-term development goal of the national cultural industry.

### 1.1.3 Research significance

The film has achieved a breakthrough innovation in the use of traditional cultural elements. By drawing lessons from the bronze portraits of Sanxingdui site, the film created a unique image of "boundary beast"; However, the role of Taiyi real person has realized the modern transformation of traditional characters by integrating Sichuan dialect and comedy elements[6]. In this book, we will deeply explore the audience's attitude towards Nezha 2, the influence of Nezha 2 on the development of Guoman, the reason why Nezha 2 broke the circle successfully and the possible development direction of Guoman in the future. First of all, through online literature review, we will sort out the relevant research results and deeply understand the influencing factors and existing solutions of the development of Guoman in the direction of high quality. Secondly, we will conduct a questionnaire survey to find out the interviewees' understanding, experience and feelings about Nezha 2 and their expectations for the future development of the country. At the same time, we will also interview relatives and friends around us.

Through in-depth communication and observation, we can collect more specific and in-depth information in order to understand all aspects of the phenomenon of word poverty more comprehensively.

By analyzing the collected data, we will be able to clearly understand the audience's attitude towards Nezha 2' s going out of the circle and the actual impact that they think Nezha 2 has brought to the development of the country. Based on these analysis results, we will analyze the corresponding measures and suggestions for the development and improvement of Guoman, so as to help the domestic animation industry develop better, improve its production quality and technical level, and then better contribute to the development of the domestic animation industry and go global.

If we can effectively analyze the real reason of "Nezha 2" breaking the circle, it will not only directly improve the overall quality of the domestic animation industry, but also become a bridge for cultural exchange, ease the obstacles of international cultural exchange and enhance the national cultural soft power. By improving the quality of Guo Man's production, the traditional culture is innovated in the form of modern animation, which makes it more in line with modern aesthetics and values, thus alleviating the problem of cultural fault and traditional loss; It is conducive to transmitting positive values and knowledge to young people and improving the interest and effectiveness of education; At the same time, the development of animation industry has created a large number of employment opportunities, which has alleviated the employment pressure to some extent. Therefore, the significance of this study is not only to explore the reasons for the "broken circle" of Nezha 2, but also to make positive contributions to the progress of more industries, society and even the country.

## 1.2 Research Status

Based on the perspective of collective memory theory, the cultural practice of Nezha's Devil Children Naughting the Sea provides a typical sample for the construction of Chinese cultural identity[7]. Since its release in the Spring Festival in 2025, Nezha's Devil Children Naughty the Sea (hereinafter referred to as Nezha 2) has set a number of box office records. As of February 16th, the global box office has reached 11.934 billion yuan, approaching the top ten in the world (for example, The Lion King is 12.051 billion yuan), and it has become the first China film to break through 10 billion yuan. It is predicted that the box office will rise to 16 billion yuan, which is expected to hit the top of the global animated film box office. Although the North American market is due to statistics, the lag caused controversy (the single-day box office of $853 was a false positive), but the actual first weekend box office exceeded $20 million, which topped the New Zealand Chinese film box office champion and attracted the attention of the Oscar judges, and was rated as "the pride of China culture".

Nezha is one of the most successful films in recent years, both at the box office and by word-of-mouth[8]. The success of "Nezha 2" promoted the full activation of the film industry chain in China. The share price of Light Media soared 13.8 billion yuan in six days, and derivatives (such as hand-made blind boxes and picture books) sold well, and capital and policies further promoted the animation industry.

The success of Nezha 2 is the result of many factors, such as precise positioning, excellent quality, adaptability, emotional value, word-of-mouth communication, social topics, technological empowerment and cross-border linkage[9]. However, the industry is still facing stability challenges, and it is necessary to continuously improve the profit model of animation companies and the treatment of employees. In the future, Nezha 3 is scheduled to be released in 2030, and director jiaozi emphasized that "every film should break through the limit". The global release of Nezha 2 (covering North America, Australia and New Zealand) provides a new paradigm for China's cultural export, but it also needs to deal with cultural differences and market adaptability.

The success of Nezha II is a model of synergy among technology, culture and market. Its box office miracle confirms the audience's demand for high-quality local content. The industrialization cooperation model sets a benchmark for the industry, while cultural self-confidence and narrative innovation give vitality to the traditional IP era. This case not only marks the rise of China animation, but also provides a new path of "content-led technology" for the global film industry. The success of "Nezha" series films shows that in the global cultural interaction, while maintaining cultural subjectivity, we should adhere to openness, tolerance, exchange and mutual learning, promote the paradigm upgrade of cultural security concept, reconstruct modern discourse and shape a new pattern of civilized dialogue, and finally move towards a pluralistic symbiotic picture of "beauty and beauty together"[10].

## 1.3 The Question Raised

The gradual rise of domestic animation has become the object that people in many countries pay close attention to, especially Nezha 2, which is a big hit this year. With its cumulative global box office exceeding 14.5 billion yuan, it has successfully ranked seventh in the global box office history, which has aroused widespread concern in China and has also had an important impact on the international film market. This achievement marks the rise of China's animated films, breaking the long-term monopoly of western capital on the film market and winning respect and status for China's films. The "broken circle" of Nezha 2 not only has an impact on the whole film industry, but also has a certain impact on the cultural field of the whole country. As a key force of social culture, the development trend of domestic animation is in a downturn, which may affect the overall cultural environment of society and even the country. If domestic animation is generally difficult to rise, then the whole society will also be affected to a certain extent, thus affecting the development and progress of the country. This article will focus on the following issues:

1. Analyze the audience's understanding of Nezha 2;
2. Reveal the audience's emotional expression in different aspects when watching Nezha 2;
3. Explore the various influences of Nezha 2 on the domestic animation industry;
4. Analyze the reasons for the "broken circle" in Nezha 2;
5. Put forward suggestions on the future development direction of domestic animation industry.

## 1.4 Research Methods

### 1.4.1 Literature research method
By systematically collecting, sorting out and analyzing the previous research results, the literature method can understand the research status of the development of domestic animation industry and provide theoretical support for this study. Collect,

classify and screen the documents related to the problem through China HowNet database and WeChat official account, and use appropriate methods and tools to make in-depth analysis of the sorted documents, so as to integrate the influence of Nezha 2 on the development of the country and the "Nezha 2". The reasons of "circle" and the effective strategies for the development of the country in the future provide theoretical basis for this paper.

### 1.4.2 Questionnaire survey method

Questionnaire method is an investigation method that investigators use a unified questionnaire to understand the situation or ask for opinions from the selected respondents. After the pre-investigation of the questionnaire was reasonable, this study distributed the questionnaire through the way of distributing leaflets on the test paper online and offline, and obtained the respondents' understanding and suggestions on Nezha 2, and collected a large amount of data to provide a basis for subsequent analysis.

### 1.4.3 Data analysis method

Statistical analysis of the collected questionnaire data reveals the influence of Nezha 2 on the development of the country. The reasons for the "broken circle" in Nezha 2 are convenient for the development of this paper.

## 1.5 Research and Innovation

### 1.5.1 The topic is novel, filling the research blank

The rise of Guoman has gradually aroused widespread social concern in recent years. In recent years, the films released by Guoman industry, such as Return of the Great Sage to the Journey to the West, Big Fish Begonia, Deep Sea, Three Wan Li in Chang 'an, and Black Myth Wukong, are all symbolic representatives of Guoman's gradual rise, but the blockbuster film released in 2025.

"Nezha 2" (full name "The Devil's Child in Nezha") ranked seventh in the box office of the global film history before other films, and the people behind it are obvious to all, which laid the foundation for the national film industry, film industry and even cultural enterprises in the future. Therefore, we study the audience's understanding of Nezha 2, and then study the impact of Nezha 2 on the national animation industry, so as to analyze the reasons for the "broken circle" of Nezha 2, and put forward effective suggestions for the development of domestic animation industry, which can appropriately fill the research gap in this neighborhood and provide some basic data and theoretical support for the follow-up research.

### 1.5.2 The uniqueness, concreteness and development of the research object

In the past, the research on domestic animation may pay more attention to teenagers, college students and animation lovers, while the general population or specific professional groups, as an important part of social members, may have different cognition of domestic animation from other groups. Therefore, it is unique to study the cognition of domestic animation by a wider group. Research on multi-groups involves a wider and more comprehensive scope, and the implementation of measures may be more effective. By studying various groups in society, we can better promote social development.

### 1.5.3 Empirical research is more convincing

Through the questionnaire survey of various groups and groups of all ages to collect data and make empirical analysis, we can intuitively understand the understanding of Nezha 2 by various groups in society, the influence of Nezha 2 on domestic animation, and the reasons for the "broken circle" of Nezha 2. Based on the research results, it can provide targeted policy suggestions for the film industry, animation industry, cultural tourism industry, etc., such as integrating more local culture, lowering the viewing threshold, increasing interest, strengthening cross-border cooperation with other cultures, etc., to help all sectors of the industry develop better, which is also the innovation of this paper.

## 2 THE INVESTIGATION PLAN AND IMPLEMENTATION

## 2.1 Design of Research Scheme

### 2.1.1 Purpose of investigation

Since the release of Nezha's Magic Boy in the Sea in the Spring Festival in 2025, it has grossed 14.883 billion yuan (as of March 9, 2025) set a new global box office record for animated films, and the number of people watching movies exceeded 300 million, making it the first film in China's film history to achieve this achievement. Its success is not only a breakthrough of individual works, but also a symbol of the systematic rise of China animation industry. This paper will analyze the audience's understanding of Nezha 2, the reasons why Nezha 2 broke the circle and the influence of Nezha 2 on the future development of Guoman.

The audience attraction of Nezha 2 stems from multi-level integration and innovation. First of all, on the technical level, the film has created the ultimate audio-visual experience with 1948 special effects shots (accounting for 80%). This technical "dead knock spirit" is not only reflected in the picture accuracy, but also through the integration of intangible elements such as Dong songs and suona soundtracks, a unique oriental aesthetic system has been constructed. Secondly, the deep excavation of cultural resonance is indispensable. In addition, after the production team discovered that the image of the groundhog became popular among young people through social media, it was quickly implanted into the plot and became a key role in a series of jokes. This "invisible director" model accurately captured the aesthetic preferences of contemporary youth groups. Despite the unprecedented success of "Nezha 2", there are still deep contradictions behind it. First, the imbalance between technological breakthrough and narrative depth. Although the film shocked the audience with special effects, Douban commented that its emotional turning point was blunt. Secondly, the structural obstacles of cultural output. The lack of non-English dubbing has led to a significant cultural discount. An American film critic ridiculed that "subtitles are like Chinese listening tests". Furthermore, the risk of simplification of IP ecology. At present, Guoman still relies too much on the adaptation of traditional

myths. Although "Nezha 2" has activated classic IP such as "What's wrong with the sea", its original ability is weak and it has fallen into the "adaptation of Four Great Classical Novels".

The purpose of this paper is as follows:

(1)To understand the audience's understanding of Nezha 2 and the number of times they watched it.

(2)Understand the reasons for the "broken circle" of Nezha 2 and its influence on the future development of Guoman, explain the importance of studying the development of Guoman, and provide an analytical basis for the topic.

(3)Understand the audience's attitude towards the phenomenon of 2-brush, 3-brush or even N-brush "Nezha 2".

(4)For the steady development of domestic animation industry in the future, we will formulate methods and measures through investigation and analysis to help Guoman develop continuously.

### 2.1.2 Object of investigation

Lack of experience in watching movies, weak sense of innovation, fragmented reception of film and television works and over-reliance on special effects scenes may all lead to a shallow understanding of the connotation of movies, making the phenomenon of' difficulty in interpretation' common in film and television reviews. Some people may think that people with difficulty in interpretation are usually ordinary people with low artistic accomplishment, while people with high artistic accomplishment can always talk about it in Kan Kan when watching movies. In fact, it is not the case. In many contemporary social groups, it is not uncommon to find it difficult to interpret movies, and the manifestations are diverse. Based on this situation, we take people of different ages and different groups as the research objects, including teenagers under 18, 18-25, 26-35, 36-45, 46-year-old and above, college students, on-the-job workers, anime fans and other groups, to explore the reasons for the "broken circle" of Nezha 2, in order to reveal how this film stands out among many animated films.

### 2.1.3 Survey content

The survey objects include teenagers, college students, on-the-job personnel, anime lovers and other social groups, and the basic information involves: gender, age and region; This paper investigates the understanding of Nezha 2 by many social groups, understands their times of watching Nezha 2 and their emotional and psychological reactions when watching it, clarifies their post-viewing attitude towards Nezha 2, and analyzes the influence of Nezha 2 on the industrial development of Guoman and the root causes of its "broken circle". Investigate the effective improvement measures of all groups for the future development of the country, collect the methods recognized by most of them, and make reference for the subsequent development of the country.

### 2.1.4 Investigation method

(1)Pre-investigation

Before the formal investigation, we distributed pre-questionnaires in the circle of friends, QQ space and private chat with friends, and collected a total of 82 questionnaires in two days. The reliability and validity of these questionnaires were tested by SPSS, aiming at modifying the questionnaires and ensuring the rationality of the questionnaires for subsequent development.

(2)random sampling

Simple random sampling can be divided into two types: sampling with replacement and sampling without replacement. For the sampling with return, each individual drawn is returned to the population, and each individual may be drawn more than once. For non-return sampling, it will not be returned after drawing, and each individual can only be drawn once. Select the key survey method to extract individual samples from each key unit, including Guilin, Nanning, Liuzhou and Qinzhou.

(3)major investigation

Key survey refers to an incomplete survey method that only some key units (here refers to regions) are selected for investigation, so as to obtain data. Although the key units only account for a small part of all the respondents, the number of survey marks accounts for a large proportion, so the data obtained from the survey of these key units can be used to reflect the basic trend of economic changes. In this paper, the social groups in Guilin, Nanning, Liuzhou and Qinzhou in Guangxi are selected as the research objects through the key units shown in the questionnaire to study the audience relationship of Nezha 2 and the related problems of its "broken circle" reasons.

### 2.1.5 Investigation scheme design

(1)Determination of sample frame

According to the results of our questionnaire, the social groups in Guilin, Nanning, Liuzhou and Qinzhou, where the questionnaire groups are relatively concentrated, form a sample frame.

(2)Determination of sample size

Because the registered permanent residence of the survey group is located in several cities, in order to reduce the consumption of manpower, material resources and financial resources, this survey is conducted by simple random sampling. Then, from the sample size formula (1) in simple random sampling

$$n = \frac{Z_{\alpha/2}^{2}}{d^{2}} S^{2} \tag{1}$$

In formula (1), n is the sample size. Under the guarantee of 95% confidence level, $Z_{\alpha/2} = 1.96$, d =0.05 is absolutely wrong, and $S^{2}$ stands for population variance. Through the questionnaire collected this time, it is easy to know our sample. The difference $s^{2}$ is 0.5290, so is the sample variance $s^{2}$ instead of population variance, and the sample size calculated by

formula (1) is 430.

## 2.2 Investigation and Implementation

### 2.2.1 Measuring method

Before the formal questionnaire survey, the personnel involved in the test should be trained uniformly to ensure the standardization of the whole test process. The questioners are all social groups, and the questionnaires will be collected as soon as they are sent out. Before the test, we communicated with the young students' head teachers, college counselors, and company management personnel who participated in the test. Taking all grades and departments as the basic units, we tested the questionnaire-related scales for 20 minutes. The questionnaire was conducted online and offline. The online survey was sent to the official website group and the work exchange group of the school where the members joined, and the offline survey was randomly selected by issuing paper questionnaires. After the questionnaire was collected, the online survey results were directly exported from the Questionnaires platform, and the offline survey results were carefully checked by the team members and integrated with the online survey results into Microsoft Excel. Finally, the data were processed and analyzed by using IBM SPSS Statistics software.

### 2.2.2 Quality control

(1)Quality control principle

Quality control is an important link to ensure the accuracy and reliability of survey data. In order to obtain accurate and effective data and improve the scientificity in the survey, it is necessary to control the quality of each stage of the survey to reduce errors and enhance the credibility of data analysis. Quality control in questionnaire survey should follow the following principles:

(2)The specific implementation process of quality control of questionnaire survey

1)Quality control before investigation

The quality control before the formal investigation includes four aspects, namely, the formulation of questionnaire principles and standards, the selection of sample population, the training of team members and the questionnaire test.

In formulating the principles and standards of the questionnaire: In order to ensure the quality of the collected data, it is necessary to clarify the principles and standards of the questionnaire design before formulating the questionnaire, including the clarity, operability and consistency of each question in the questionnaire.

In the selection of sample population: the design of the questionnaire needs to have clear and specific survey objects. In order to ensure the reliability of the collected data, it is necessary to select the appropriate sample population according to the purpose of investigation and study, and accurately screen out the respondents according to the characteristics and requirements of the selected population. Random sampling, stratified sampling and other methods can be adopted to effectively ensure the representativeness of the samples.

In the training of team survey members: in order to ensure the accuracy and consistency of data, team members need to repeatedly determine the purpose and content of the survey, and clearly understand the specific meaning behind each question and the whole survey process, so as to ensure that each member has a unified and correct understanding of the project of this survey.

In the aspect of questionnaire test: before the formal investigation, it is very important and necessary to test the questionnaire. Through the test, the defects and loopholes in the questionnaire can be found in time, so as to make repeated revisions and try to fill in the questionnaire in the group, and constantly check whether there are still problems in the content of the questionnaire. At the same time, effective measures can be taken to improve the recovery rate of the questionnaire, such as offering rewards, setting the deadline of the questionnaire, sending reminders of the questionnaire, etc. Questionnaire test is helpful to evaluate the reliability and validity of the questionnaire, so it is a very important step to test the questionnaire before its formal implementation.

2)Quality control in investigation

Quality control in investigation generally includes questionnaire implementation and regular inspection of the effectiveness of the questionnaire.

In the aspect of questionnaire implementation: the participants in the questionnaire generally ignore the questions and have incomplete understanding of the questions. Team members need to ensure that each participant in the questionnaire understands the specific meaning of the questions in the process of investigation implementation to avoid the above situation.

Regularly check the effectiveness of the questionnaire: team members need to carefully check the effectiveness of the recovered questionnaires at different times, and correspondingly eliminate the recovered invalid questionnaires according to the judgment principle of eliminating invalid questionnaires, and supplement the missing values according to the treatment principle of missing values. However, the number of questionnaires was reduced after the invalid questionnaires were eliminated. At this time, it is necessary to consider whether it is necessary to increase the number of questionnaires distributed to ensure that the number of valid questionnaires recovered in the later period is sufficient, so as to meet the requirements of the pre-survey and formal survey for the best sample size. At the same time, team members need to check the questionnaire regularly during the process of recycling the questionnaire, and if necessary, they can ask the students who have completed the questionnaire, interview their feelings during the questionnaire filling process and give suggestions to improve and modify the questionnaire.

3)Quality control after investigation

After designing the questionnaire in the early stage, it is necessary to effectively recycle the questionnaire, and repeatedly

check, register, code, enter and clean the recovered questionnaire data to avoid missing the recovered effective data. Finally, the data of the questionnaire will be processed to pave the way for the later research and analysis.

## 3 THE QUESTIONNAIR DESIGN

By consulting and reading a lot of relevant data and documents in the early stage, this paper aims at the attitudes of various groups towards Nezha 2, the impact of Nezha 2 on Guoman industry, the reasons for its successful "breaking the circle" and the effective path of Guoman development are analyzed to design a questionnaire. The distribution of the subject content of the questionnaire is shown in the following table 1.

**Table 1** Five Sections of the Questionnaire

| Questionnaire section | explain |
|---|---|
| A. Basic information | Some basic information of respondents from all social groups, such as gender, age, region and group (questions 1-4) |
| B. The audience relationship of Nezha 2 | Respondents' understanding of Nezha 2, the number of times they watched Nezha 2, their emotional and psychological reactions when they watched the movie, and their attitude towards the phenomenon of "Nezha 2" (paras. 5-8 Title) |
| C. The impact of Nezha II | The influence of Nezha 2 on the development of the country (Question 9) |
| D. Influencing factors of "Broken Circle" in "Nezha 2" | Respondents think that the reason why "Nezha 2" was successfully "broken" (questions 11-13) |
| E. Development strategy of Guoman | Respondents' suggestions on the future development of the country, such as the emotional level of content and the level of international competition (questions 14-16) |

## 4 PRE-INVESTIGATION

### 4.1 the Implementation Process of Pre-Investigation

Usually, in order to ensure the overall reliability of the questionnaire and the smooth progress of the formal investigation, it is necessary to make a small-scale pre-investigation before the formal investigation, and according to the analysis of the results of the pre-investigation, find out the mistakes in the questionnaire in time and modify it appropriately, delete the options with repeated meanings, and supplement the questions appropriately when necessary. Our team selected 82 people (including college students, teenagers, on-the-job workers, etc.) from four places in Guangxi for the pre-investigation. The main investigation method was the combination of online and offline, and the paper questionnaire survey was used for the nearby people, while the online questionnaire issued by the Questionnaire platform was used for the people who were far away. The results of 82 questionnaires collected in the pre-survey were analyzed, revised and improved.

### 4.2 Reliability Test

Generally speaking, the reliability test of questionnaire design quality refers to the process of evaluating the stability and consistency of the questionnaire at different times and in different situations. The purpose of reliability test is to determine the consistency and reliability of the results obtained by the questionnaire measurement tool, that is, whether the questionnaire can get similar results when it is reused. Through the reliability test, we can evaluate the quality and stability of the questionnaire design, confirm that the questionnaire can measure the concepts to be studied stably, and improve the credibility and reliability of the survey results.

Our team will use Cronbach (Cronbach coefficient) reliability to measure the internal consistency coefficient of each scale item in the questionnaire. The specific calculation formula of Cronbach reliability coefficient is formular (2):

$$\alpha = \frac{K}{K-1}\left(1 - \frac{\sum S_i^2}{S_x^2}\right) \tag{2}$$

Where is the reliability coefficient, which usually ranges from [0,1]. The closer to 1, the greater the reliability of the questionnaire, and the closer to 0, the smaller the reliability. K is the number of test questions in the scale, $S_i^2$ Represents the variation of scores of all subjects on question I, and $S_x^2$ is the variance of total scores of all subjects. Generally speaking, a well-designed questionnaire should have a reliability coefficient of at least 0.80, between 0.70-0.80 is an acceptable range, and if the reliability coefficient of each quantity table is lower than 0.60 or the total quantity table, only when the reliability coefficient is lower than 0.80 can the questionnaire be rejected, and the revision of the questionnaire and the supplementary deletion of the questionnaire topics should be reconsidered.

The reliability of five questions in this questionnaire (question 5, question 10, question 11, question 12 and question 13) is tested and analyzed by SPSS software, and the Cronbach coefficients of each questionnaire are shown in the following

table 2:

**Table 2** Cronbach Coefficient Table of Pre-questionnaire Scale

| Item | Cronbach coefficient | number of terms | Reliability evaluation |
|---|---|---|---|
| Question 5 | 0.627 | five | better |
| Question 10 | 0.779 | five | good |
| Question 11 | 0.756 | five | good |
| Question 12 | 0.695 | four | good |
| Question 13 | 0.778 | five | good |

From the Cronbach coefficient table above, we can see that the Cronbach coefficient of each scale item in the questionnaire is greater than 0.6, and most of them are greater than 0.75. The Cronbach coefficient of the whole scale is 0.950 through reliability test and analysis, so it is considered that the reliability of this questionnaire design is good.

### 4.3 Validity Test

The validity test of questionnaire design quality refers to evaluating whether the questionnaire measurement tool can accurately and effectively measure the concepts or variables to be studied. Validity refers to whether the measuring tool can measure what it claims to measure, that is, whether the measuring tool can truly reflect the characteristics or nature of the research object. In questionnaire design, validity test usually includes two main aspects:
Content validity: Content validity refers to whether the contents contained in the questionnaire comprehensively and accurately reflect the concepts or variables to be studied.
Structural validity: structural validity refers to whether the measurement tools in the questionnaire can accurately reflect the internal structure or attributes of the research object. The evaluation of structural validity is usually carried out by statistical methods such as factor analysis and correlation analysis to ensure that the questions in the questionnaire can effectively measure the concepts to be studied.
There are many questions in this questionnaire, so structural validity is chosen to test the data collected in the pre-survey. The specific KMO and Bartlett test coefficients are shown in Table 3 below.

**Table 3** KMO and Bartlett Test Coefficient Table of Pre-questionnaire Scale

| Item | KMO coefficient | Approximate chi-square | significance |
|---|---|---|---|
| Question 5 | 0.681 | 46.069 | 0.000 |
| Question 10 | 0.612 | 335.806 | 0.000 |
| Question 11 | 0.626 | 241.665 | 0.000 |
| Question 12 | 0.725 | 51.373 | 0.000 |
| Question 13 | 0.601 | 2934.995 | 0.000 |

Generally speaking, the KMO value is between [0,1]. When the KMO value is closer to 1, it means that the correlation between variables is stronger, and vice versa. According to the results of the above coefficient table, it is easy to know that the correlation coefficient between items under each scale is greater than 0.6, which shows that the questionnaire design is effective.

### 4.4 the Revision of the Topic

Through the pre-survey, the most authentic feedback from all kinds of social groups who participated in the pre-survey questionnaire was collected, such as the unreasonable logic, improper expression and individual typos in the questions, and the overall content, typesetting and topic distribution of the questionnaire were modified and optimized according to their feedback. The specific contents of the questionnaire are as follows:
[Question 1] Redundancy is expressed in the scale-the numbers 1-5 are used to express the degree from "very different" to "very agree" and "no influence" to "great influence", and the numbers 1-5 are very different, disagree, neutral, agree, very agree and have no influence, slight influence, medium influence, great influence and great influence respectively.
[Question 2] Multiple choice questions "What emotional and psychological reactions did you feel when watching Nezha 2?"
(Question 6) Some emotional options are too few (touching, hilarious, inspiring and thinking respectively), which fails to generally represent the audience's feelings of watching movies, and two iconic emotional options (suspense and shock) are added to it.

### 5  FORMAL INVESTIGATION

With the completion of the pre-survey, the collection results of 82 questionnaires were integrated, and all of them passed the reliability and validity test, and the questionnaire topics were revised reasonably. Therefore, according to the formula for calculating the sample size of simple random sampling in market research and considering the coverage of survey information, the final sample size required for formal survey is 430.

### 5.1 the Specific Distribution and Recycling of Questionnaires

**Table 4** Distribution Table of Questionnaires in Guangxi

| city | Number of questionnaires issued (copies) | Proportion (%) |
|------|------------------------------------------|----------------|
| Guilin | 118 | 27.4 |
| Nanning | 132 | 21.8 |
| Liuzhou | 94 | 30.6 |
| Qinzhou | 86 | 20.0 |

In the formal investigation table 4, we actually sent 528 questionnaires, and 430 valid questionnaires were recovered, with an effective recovery rate of 81.44%.

### 5.2 Reliability Test

According to the reliability test of 82 questionnaires collected in the pre-investigation, the actual situation of the formal investigation is analyzed the reliability of 430 valid questionnaires was tested again. By analyzing five scales, it is easy to know that the Cronbach coefficient of most scales is greater than 0.65, and it is considered that the internal reliability of the questionnaire is ideal. Cronbach coefficient of each scale is shown in Table 5:

**Table 5** Cronbach Coefficient Table of Formal Questionnaire

| Item | Cronbach coefficient | number of terms | Reliability evaluation |
|------|---------------------|-----------------|------------------------|
| Question 5 | 0.648 | five | better |
| Question 10 | 0.822 | five | good |
| Question 11 | 0.818 | five | good |
| Question 12 | 0.761 | four | good |
| Question 13 | 0.826 | five | good |

### *5.3 Validity Test*

Referring to the steps of pre-investigation, the validity of 430 valid questionnaires was tested again, and the questionnaires were tested Bartlett Sphere Test was carried out on questions 5, 10, 11, 12 and 13 in the questionnaire, and the KMO coefficient of most questions was greater than 0.65, and the P value was 0.000, which indicated that it was very suitable for factor analysis, so the questionnaire structure was well designed. The specific KMO and Bartlett test coefficients under each scale are shown in Table 6 below:

**Table 6** KMO and Bartlett Test Coefficients of Formal Questionnaire

| Item | KMO coefficient | Approximate chi-square | significance |
|------|-----------------|------------------------|--------------|
| Question 5 | 0.748 | 236.101 | 0.000 |
| Question 10 | 0.690 | 1737.888 | 0.000 |
| Question 11 | 0.685 | 1655.011 | 0.000 |
| Question 12 | 0.776 | 393.566 | 0.000 |
| Question 13 | 0.648 | 1324.072 | 0.000 |

### 5.4  Data processing

#### *5.4.1 Abnormal data processing*
(1)Logical conflict
According to the results of questionnaires filled by respondents from all social groups, the questionnaires with obviously inconsistent answers and contradictory logic before and after are excluded, including choosing a single answer and filling it at will. The items with directional answers can be designed in the questionnaire to identify the effectiveness of the questionnaire. Deal with the questionnaires that take a long time to fill in and have logical conflicts, export the data to Excel and use it to eliminate them. Therefore, through the overall screening of questionnaires, 430 valid questionnaires were finally recovered from 528 questionnaires, and the effective rate of questionnaire recovery reached 81.44%.
(2)Treatment of missing values
There are generally two reasons for the missing values in the questionnaire: one is that the interviewee should have filled in but did not; The other is the loss of some item data due to topic jump. This questionnaire is mainly distributed through the

quiz star network platform, and each question is set as a mandatory question. If you don't answer, you can't continue to answer the next question or submit the questionnaire. This questionnaire has set jump questions. According to the default export rules of the quiz star platform, the option values of the questions that respondents in all social groups jump (unnecessary to fill in) are marked as -3. On this basis, the marked values in the jump questions are checked by using the Data-SelectCases method in SPSS software, and it is found that the missing values of this questionnaire do not exist.

### *5.4.2 Investigate the overall situation*

The basic situation of the sample is as follows: the total number of social groups in the survey sample is 528, among which 98 people have abnormal values, and the actual number of effective surveys is 430. Among the 430 groups surveyed, 47.6% are men and 52.3% are women, and the ratio of men to women is relatively balanced; The age below 18 accounts for 18.1%, 18-25 accounts for 30.4%, 26-35 accounts for 23.4%, 36-45 accounts for 15.8%, and 46 and above accounts for 12.0%. The largest proportion is 18-25 years old; Guilin accounts for 27.4%, Nanning for 30.6%, Liuzhou for 21.8% and Qinzhou for 20.0%. Teenagers account for 16.5%, college students account for 13.9%, employees account for 41.3%, and anime lovers account for 17.2%. Others accounted for 10.9%. The specific distribution of basic information is shown in Table 7:

**Table 7** Distribution of Basic Information of Respondents

|  | classify | Response analysis | | Percentage of cases |
|---|---|---|---|---|
|  |  | Response number | Response percentage |  |
| Gender | Many | 205 | 11.92% | 47.6% |
|  | Woman | 225 | 13.08% | 52.3% |
| Age | Under 18 years old | 78 | 4.53% | 18.1% |
|  | 18-25 years old | 131 | 7.62% | 30.4% |
|  | 26-35 years old | 101 | 5.87% | 23.4% |
|  | 36-45 years old | 68 | 3.95% | 15.8% |
|  | 46 years old and above | 52 | 3.02% | 12.0% |
| Location | Guilin | 118 | 6.86% | 27.4% |
|  | Nanning | 132 | 7.67% | 30.6% |
|  | Liuzhou | 94 | 5.47% | 21.8% |
|  | Qinzhou | 86 | 5.00% | 20.0% |
| Belonging category | teenagers | 71 | 4.13% | 16.5% |
|  | college student | 60 | 3.49% | 13.9% |
|  | In-service personnel | 178 | 10.35% | 41.3% |
|  | Anime fan | 74 | 4.30% | 17.2% |
|  | Other | 47 | 2.73% | 10.9% |
| Total |  | 1720 | 100% | 400% |

## 6  DATA ANALYSIS OF SURVEY  RESULTS

### *6.1 Descriptive Statistical Analysis*
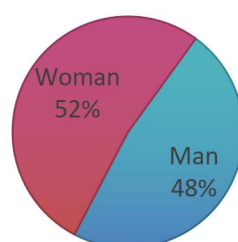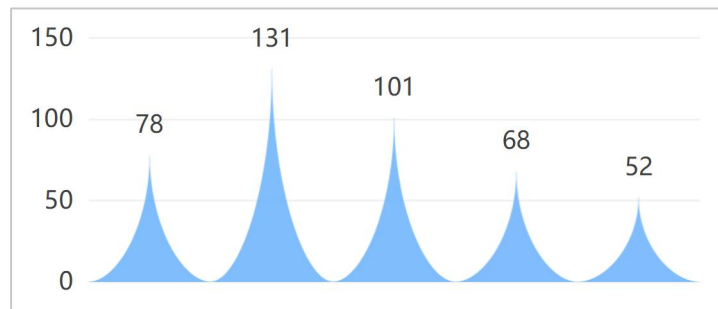
### *6.1.1 Gender distribution*
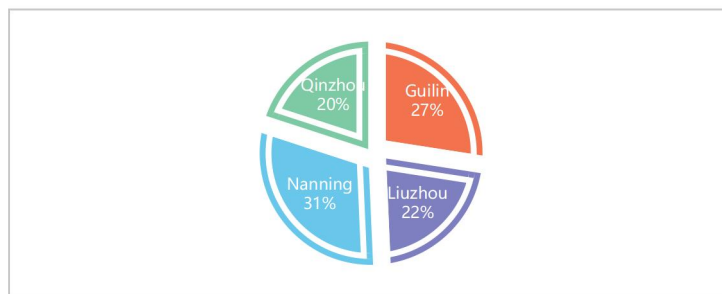
**Figure 1** Gender Distribution Map

As shown in Figure 1, Among the social groups surveyed, the number of men is 205, accounting for 47.7%, and the number of women is 225, accounting for 52.3%. The ratio of male to female is about 1:1.

### 6.1.2 Age distribution



**Figure 2** Age Distribution Map

As shown in Figure 2, From left to right, the horizontal axis of the above picture shows the people under 18, 18-25 years old, 26-35 years old, 36-45 years old and over 45 years old. Among the social groups surveyed, there are 78 people under the age of 18, accounting for 18.1%, 131 people aged 18-25, accounting for 30.4%, and 101 people aged 26-35. The proportion is 23.4%; There are 68 people aged 36-45, accounting for 15.8%; The number of people aged 46 and above is 52, accounting for 12.0%. Among the people who participated in the questionnaire survey, the number of people aged 18-25 was the highest, and the number of people aged 46 and above was the least.

### 6.1.3 Regional distribution



**Figure 3** Regional Distribution Map

As shown in Figure 3, Among the social groups surveyed, Qinzhou accounts for 20.0%, accounting for the least; The proportion of people in Guilin is 27.44%; The proportion of people in Nanning is 30.7%, accounting for the largest proportion; The proportion of people in Liuzhou is 21.86%.

### 6.1.4 Distribution of affiliated groups
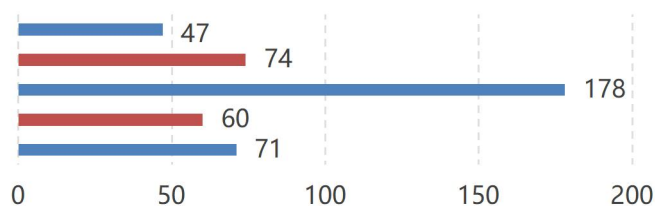


**Figure 4** Distribution Map of Belonging Groups

The vertical axis of the above figure 4 shows others, anime lovers, on-the-job personnel, college students and teenagers in turn from top to bottom. Among the social groups surveyed, the proportion of teenagers is 16.5%, the proportion of college students is 13.9%, the proportion of employees is 41.3%, the proportion of anime fans is 17.2%, the proportion of others is 10.9%, and the proportion of teenagers, college students, employees, anime fans and other groups is about 1: 1: 3: 1, among which the proportion of employees is 1: 1.

### 6.1.5 Distribution of Audience's Understanding of Nezha 2

4.1% of the audience have not heard of Nezha 2, and 52.3% of the audience know more about Nezha 2. 3.7% of the audience don't know the positioning of Nezha 2 in the market, and 54.8% of the audience know the positioning of Nezha 2 in the market. 4.4% of the audience don't understand "Where?" The competitiveness of Nezha 2 in the international market,

54.3% of the audience are relatively familiar with the competitiveness of 2 in the international market; 5.1% of the audience didn't know the influence of Nezha 2 on the development of Guoman, and 56.7% of the audience knew the influence of Nezha 2 on the development of Guoman. 3.4% of the audience didn't know the reason why Nezha 2 broke the circle, and 55.7% of the audience knew the reason why Nezha 2 broke the circle. On the whole, it can be seen that the audience has a certain understanding of Nezha 2 and pays more attention to Nezha 2.

### 6.1.6 The distribution of the number of times the audience watched Nezha 2



**Figure 5** Distribution of the Times of Audience Watching Nezha 2

From left to right, the horizontal axis in the above figure 5 shows 0 times, 1 time, 2 times, 3 times and above. Among the social groups surveyed, 11.3% of the respondents watched Nezha 2 three times or more, accounting for the least; 39.0% of the respondents watched Nezha 2 once, accounting for the largest proportion; 28.1% of the respondents watched Nezha 2 twice and 21.3% watched Nezha 2 0 times. It can be seen that most of the interviewees have seen Nezha 2.

### 6.1.7 The Distribution of Audience's Emotional Expression in Nezha 2
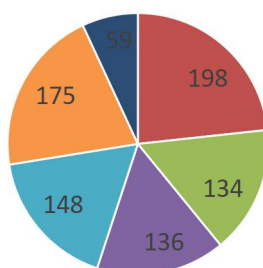


**Figure 6** Distribution Map of Audience's Emotional Expression when Watching Nezha 2.

In the above picture, orange, yellow, green, blue, red, and dark blue sequentially represent moving, hilarious, suspenseful, shocking, inspiring, and thinking. As can be seen from Figure 6, the emotional and psychological performance of the audience watching Nezha 2 is touching, hilarious, suspense, shock, motivation and thinking, among which moving, motivation and shock are the main reasons.

### 6.1.8 The distribution of audience's attitude towards the phenomenon of "Nezha 2" with 2 brushes, 3 brushes and even N brushes
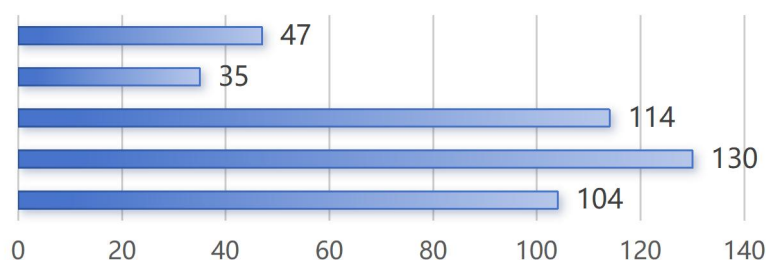


**Figure 7** Distribution map of audience's attitude towards the phenomenon of 2-brush, 3-brush or even N-brush "Nezha 2"

From top to bottom, the vertical axis of the above figure 7 shows that it is completely unsupported, not quite agreed, general, understandable and very supportive. When it comes to the audience's attitude towards the phenomenon of "Nezha 2", it can be seen from Figure 7 that 30.23% of the audience think that "it is understandable that the audience may want to know more about the details and connotation of the film", followed by "generally, it may be a follow-up behavior, but the personal choice is understandable", accounting for 26.51%, while very few viewers think it is not quite agreed.

### 6.1.9 The distribution of the influence of Nezha 2 on the country

What impact do you think Mezha 2 has had on the development of the country?
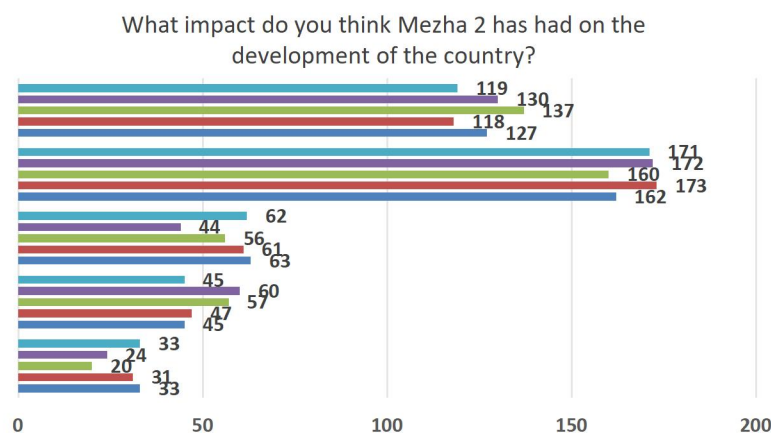


**Figure 8** Distribution Map of the Influence of Nezha 2 on the National Spread

From top to bottom, the vertical axis in the above figure 8 indicates strongly agree, agree, neutral, disagree and strongly disagree. The blue-green color, green color, yellow color, orange color and blue color in the picture indicate in turn that the creative enthusiasm inside and outside the industry is stimulated, the narrative style and visual expression of Guoman are innovated, a successful case is provided for Guoman, the audience's confidence in Guoman is enhanced, and the overall level of Guoman is improved. As can be seen from Figure 8, among the influences of Nezha 2 on Guoman, providing a successful case for Guoman to "break the circle" is the most supportive, followed by innovating the narrative style and visual expression of Guoman. But generally speaking, it has enhanced the audience's confidence in Guoman, stimulated the creative enthusiasm inside and outside the industry and improved the overall level of Guoman, which has also affected the development of Guoman to some extent.

*6.1.10 The Cause Distribution of "Broken Circle" in Nezha 2*

For "Nezha 2", the respondents gave some information about the degree of understanding of "Nezha 2"

The Reasons of "Breaking Circle" in Nezha 2. It contains content and emotional reasons; Technical reasons; Marketing reasons.

(1)The Reasons for the Content and Emotion of "Nezha 2" Breaking the Circle

What do you think is the reason why Nezha 2 resonates with the audience in content and emotion?
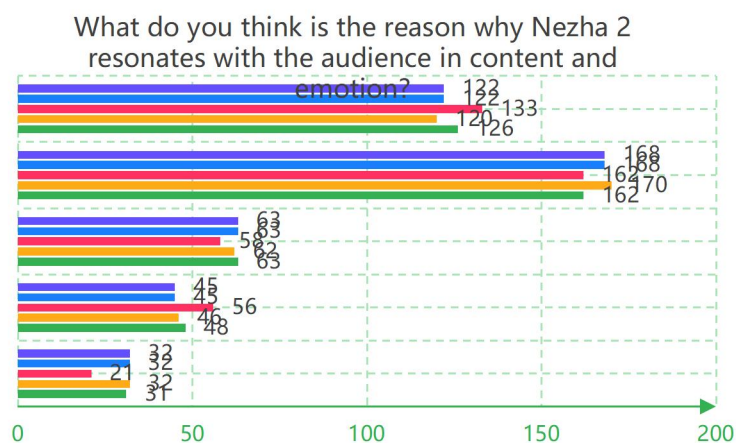


**Figure 9** Distribution Map of the Reasons for the Content and Emotion of "Nezha 2" Breaking the Circle

In the figure 9, the vertical axis goes from top to bottom, which means very much agree, agree, be neutral, disagree and disagree.

The dark blue, blue, red, orange and green in the picture respectively indicate that the theme is profound and evocative, the music is beautiful and the atmosphere is set off, the picture is exquisite and the special effects are shocking, the characters are distinctive and the personality is outstanding, and the plot is wonderful and fascinating. As can be seen from Figure 9, 66.98% of the audience strongly agree and agree that "the plot is wonderful and fascinating"; The proportion of viewers who strongly agree and agree with "exquisite pictures and shocking special effects" is 68.60%; 67.44% of the audience strongly agree with and agree with "vivid characters and outstanding personality"; 67.44% of the audience strongly agreed and agreed that "the music is beautiful and sets off the atmosphere"; 67.44% of the audience strongly agree and agree that "the theme is profound and causes thinking test". Among them, "the picture is exquisite and the special effects are shocking" accounts for the most, and "the plot is wonderful and fascinating" accounts for the least.

(2)On the technical level, the reasons that prompted Nezha 2 to "break the circle"
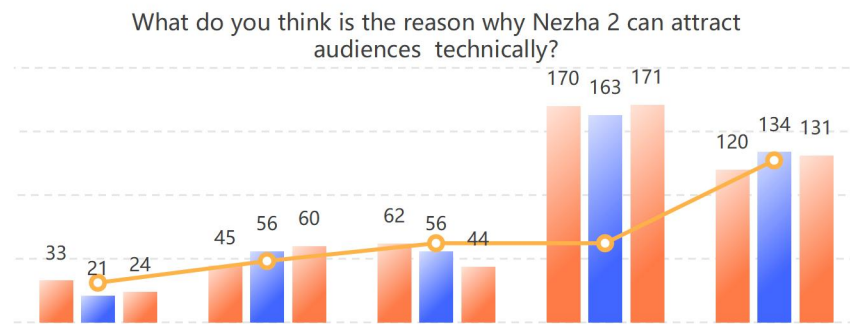
**Figure 10** Distribution Map of the Reasons for the "Broken Circle" of Nezha 2 at the Technical Level

In the figure, the horizontal axis goes from left to right to indicate very different opinions, disagreement, neutrality, agreement and strong agreement. The orange, blue, dark orange and broken lines in the picture represent excellent production level, advanced special effects technology, well-designed animation scenes and innovative adaptation of classic IP respectively. As can be seen from Figure 10, the audiences who strongly agree and agree that "the innovative adaptation of classic IP has given new vitality to traditional stories", "excellent production level, including high-level animation rendering and tin character design", "advanced special effects technology has brought shocking visual experience to the audience" and "well-designed animation scenes are smooth and creative" account for 67.21% and 67.44% respectively. Among them, "well-designed animation scenes are smooth and creative" accounts for the most, and "innovative adaptation of classic IP gives new vitality to traditional stories" accounts for the least.

(3) Reasons for the "Breaking Circle" of Nezha 2 in Marketing
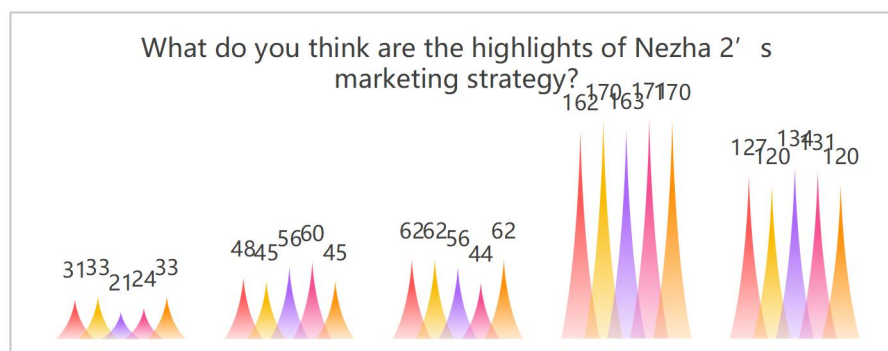


**Figure 11** Distribution Diagram of the Reasons for the "Broken Circle" of Nezha 2 in Marketing.

In the figure, the horizontal axis goes from left to right to indicate very different opinions, disagreement, neutrality, agreement and strong agreement. Red, yellow, blue, pink and orange in the picture represent online and offline joint promotion, social media topic marketing, cross-border cooperation promotion, launching special promotional materials and activities, and IP derivative development in turn. As can be seen from Figure 11, 67.21% of the audience strongly agree and agree with "online and offline linkage publicity"; The audience of "social media topic marketing" accounted for 67.44%; The proportion of "cross-border cooperation and promotion" audience is70.23%; The audience proportion of "customized content marketing, launching special promotional materials and activities" is 69.07%; The audience proportion of "Mr IP product development" is 70.23%. Among them, "customized content marketing, launching special promotional materials and activities" accounts for the most, and "online and offline linkage publicity" accounts for the least.

**6.2 Difference Analysis**

*6.2.1 Analysis on the Difference of Audience's Watching Times of Nezha 2*

(1)Analysis on the Difference of the Times of Different Gender Audiences Watching Nezha 2

In order to explore the gender difference in the number of times the audience watched Nezha 2, the data were tested by independent sample t, and the test results are shown in the following table 8.

**Table 8** Difference Analysis Table of the Times of Watching Nezha 2 by Different Gender Audiences

|  | N (sample size) | M (average) | SD (standard deviation) | t | P |
|---|---|---|---|---|---|
| man | 205 | 2.33 | 0.93 | -0.669 | 0.504 |
| woman | 225 | 2.27 | 0.94 |  |  |

From the above table 8, it can be seen that P=0.504>0.05, that is, there is no statistical difference in the number of times the audience of different sexes watched Nezha 2, and it is considered that the number of times the audience of boys and girls watched Nezha 2 is almost the same.

(2)Analysis on the Difference of the Times of Watching Nezha 2 by Audiences of Different Ages

In order to explore the differences in the times of watching Nezha 2 by different age groups, the data were analyzed by one-way ANOVA, and the test results are shown in the following table 9.

**Table 9** Difference Analysis Table of the Times of Watching Nezha 2 by Audiences of Different Ages

| | N (sample size) | M (average) | SD (standard deviation) | F | P |
|---|---|---|---|---|---|
| Under 18 years old | seventy-eight | 2.33 | 0.91 | 1.265 | 0.283 |
| 18-25 years old | 131 | 2.36 | 0.96 | | |
| 26-35 years old | 101 | 2.23 | 0.93 | | |
| 36-45 years old | sixty-eight | 2.12 | 0.86 | | |
| 46 years old and above | fifty-two | 2.44 | 0.98 | | |

From the above table 9, it can be seen that P=0.283>0.05, that is, there is no statistical difference in the times of watching Nezha 2 by audiences of different ages, and it is considered that the times of watching Nezha 2 by audiences of different ages are almost similar.

*6.2.2 Analysis on the Difference of Audience's Understanding of Nezha 2*

As the audience's understanding of "Nezha 2" is a scale question, it is measured by five dimensions. In order to explore the differences of audience's understanding of "Nezha 2" in terms of gender, region, age and group, pearson chi-square test is conducted on the data respectively, and the specific test results are shown in the following tables.

（1）Analysis on the Difference of Understanding Degree of Different Gender Audiences to Nezha 2

**Table 10** Difference Analysis Table of Different Gender Audiences' Understanding of Nezha 2

| Dimension | Degree of understanding | Gender | | $X^2$ | P |
|---|---|---|---|---|---|
| | | Woman | Man | | |
| Have you heard about Nezha 2 since it was released? | not familiar with | 9 | 9 | 1.717 | 0.788 |
| | know little about | 10 | 14 | | |
| | General understanding | 42 | 32 | | |
| | Know better | 79 | 72 | | |
| | Know very well | 85 | 78 | | |
| Do you know the positioning of Nezha 2 in the market? | not familiar with | 11 | 5 | 1.970 | 0.741 |
| | know little about | 11 | 11 | | |
| | General understanding | 41 | 41 | | |
| | Know better | 81 | 73 | | |
| | Know very well | 81 | 75 | | |
| Do you know the competitiveness of Nezha 2 in the international market? | not familiar with | 11 | 8 | 2.643 | 0.619 |
| | know little about | 12 | 16 | | |
| | General understanding | 38 | 31 | | |
| | Know better | 91 | 74 | | |
| | Know very well | 73 | 76 | | |
| Do you know the influence of | not familiar with | 10 | 12 | 2.452 | 0.653 |

| | | | |
|---|---|---|---|
| Nezha 2 on the development of the country? | know little about | 12 | 10 |
| | General understanding | 32 | 36 |
| | Know better | 99 | 77 |
| | Know very well | 72 | 70 |
| Have you ever understood the reason why Nezha 2 can "break the circle"? | not familiar with | 3 | 12 |
| | know little about | 12 | 16 |
| | General understanding | 41 | 35 |
| | Know better | 90 | 74 |
| | Know very well | 79 | 68 |

(with $X^2 = 7.916$, $P = 0.095$ shown for the second dimension)

From the above table 10, it can be seen that there is no statistical difference in the understanding of Nezha 2 by audiences of different sexes in the five dimensions, that is, there is no difference in the understanding of Nezha 2 by audiences of different sexes.

(2) Analysis on the Difference of Audiences' Understanding of Nezha 2 in Different Regions

**Table 11** Difference Analysis Table of Audiences' Understanding of Nezha 2 in Different Regions

| Dimension | Degree of understanding | Location | | | | $X^2$ | P |
|---|---|---|---|---|---|---|---|
| | | Nanning | Liuzhou | Guilin | Qinzhou | | |
| Have you heard about Nezha 2 since it was released? | not familiar with | 4 | 4 | 7 | 3 | 10.427 | 0.579 |
| | know little about | 4 | 6 | 5 | 9 | | |
| | General understanding | 26 | 15 | 23 | 10 | | |
| | Know better | 46 | 33 | 43 | 29 | | |
| | Know very well | 52 | 36 | 40 | 35 | | |
| Do you know the positioning of Nezha 2 in the market? | not familiar with | 3 | 7 | 3 | 3 | 27.334 | 0.007 |
| | know little about | 5 | 7 | 1 | 9 | | |
| | General understanding | 19 | 15 | 33 | 15 | | |
| | Know better | 49 | 28 | 47 | 30 | | |
| | Know very well | 56 | 37 | 34 | 29 | | |
| Do you know the competitiveness of Nezha 2 in the international market? | not familiar with | 7 | 4 | 3 | 5 | 23.673 | 0.023 |
| | know little about | 4 | 8 | 10 | 6 | | |
| | General understanding | 12 | 13 | 31 | 13 | | |
| | Know better | 53 | 33 | 44 | 35 | | |
| | Know very well | 56 | 36 | 30 | 27 | | |
| Do you know the influence of Nezha 2 on the development of the country? | not familiar with | 5 | 8 | 6 | 3 | 15.678 | 0.206 |
| | know little about | 6 | 3 | 6 | 7 | | |
| | General understanding | 16 | 12 | 27 | 13 | | |
| | Know better | 55 | 36 | 51 | 34 | | |
| | Know very well | 50 | 35 | 28 | 29 | | |
| Have you ever understood the reason why Nezha 2 can "break the circle"? | not familiar with | 4 | 6 | 2 | 3 | 40.896 | 0.000 |
| | know little about | 8 | 9 | 8 | 3 | | |
| | General understanding | 17 | 11 | 29 | 19 | | |

| | | | | |
|---|---|---|---|---|
| Know better | 65 | 23 | 53 | 23 |
| Know very well | 38 | 45 | 26 | 38 |

From the above table 11, it can be seen that in three of the five dimensions to measure the audience's understanding of Nezha 2, the test p value of the audience's understanding of Nezha 2 in different regions is less than 0.05, but there are still two dimensions in which the test p value of the audience's understanding of Nezha 2 in different regions is greater than 0.05, so it can be considered that the audience's understanding of Nezha 2 in different regions is slightly different.

(3) Analysis on the Difference of Different Groups of Audiences' Understanding of Nezha 2

**Table 12** Difference Analysis Table of Different Groups of Audiences' Understanding of Nezha 2

| Dimension | Degree of understanding | Group | | | | | $X^2$ | P |
|---|---|---|---|---|---|---|---|---|
| | | other | Anime fan | In-service personnel | college student | teenagers | | |
| Have you heard about Nezha 2 since it was released? | not familiar with | 0 | 0 | 13 | 1 | 4 | 38.786 | 0.001 |
| | know little about | 8 | 0 | 6 | 3 | 7 | | |
| | General understanding | 11 | 11 | 32 | 7 | 13 | | |
| | Know better | 15 | 30 | 61 | 27 | 18 | | |
| | Know very well | 13 | 33 | 66 | 22 | 29 | | |
| Do you know the positioning of Nezha 2 in the market? | not familiar with | 2 | 0 | 9 | 2 | 3 | 32.184 | 0.009 |
| | know little about | 7 | 0 | 11 | 1 | 3 | | |
| | General understanding | 11 | 7 | 37 | 15 | 12 | | |
| | Know better | 15 | 36 | 55 | 24 | 24 | | |
| | Know very well | 12 | 31 | 66 | 18 | 29 | | |
| Do you know the competitiveness of Nezha 2 in the international market? | not familiar with | 6 | 0 | 9 | 1 | 3 | 27.548 | 0.036 |
| | know little about | 5 | 0 | 14 | 4 | 5 | | |
| | General understanding | 10 | 10 | 27 | 9 | 13 | | |
| | Know better | 18 | 36 | 63 | 24 | 24 | | |
| | Know very well | 8 | 28 | 65 | 22 | 26 | | |
| Do you know the influence of Nezha 2 on the development of the country? | not familiar with | 5 | 0 | 14 | 0 | 3 | 39.654 | 0.001 |
| | know little about | 7 | 0 | 8 | 3 | 4 | | |
| | General understanding | 7 | 8 | 30 | 10 | 13 | | |
| | Know better | 14 | 35 | 64 | 35 | 28 | | |
| | Know very well | 14 | 31 | 62 | 12 | 23 | | |
| Have you ever understood the reason why Nezha 2 can "break the circle"? | not familiar with | 6 | 0 | 4 | 1 | 4 | 43.146 | 0.000 |
| | know little about | 6 | 0 | 16 | 1 | 5 | | |
| | General understanding | 9 | 7 | 33 | 9 | 18 | | |
| | Know better | 16 | 36 | 62 | 29 | 21 | | |
| | Know very | 10 | 31 | 63 | 20 | 23 | | |

well

From the above table 12, it can be seen that the test P value of the audience's understanding of Nezha 2 in different groups is less than 0.05, so it is considered that there is a statistical difference in general, that is, there is a significant difference in the understanding of Nezha 2 in different groups.

(4) Analysis on the Difference of Understanding of Nezha 2 by Audiences of Different Ages

**Table 13** Difference Analysis Table of Audiences' Understanding of Nezha 2 at Different Ages

| Dimension | Degree of understanding | Group | | | | | X² | P |
|---|---|---|---|---|---|---|---|---|
| | | Under 18 years old | 18-25 years old | 26-35 years old | 36-45 years old | 46 years old and above | | |
| Have you heard about Nezha 2 since it was released? | not familiar with | 4 | 5 | 5 | 3 | 1 | 14.804 | 0.539 |
| | know little about | 8 | 4 | 2 | 7 | 3 | | |
| | General understanding | 20 | 17 | 15 | 14 | 8 | | |
| | Know better | 46 | 24 | 41 | 25 | 15 | | |
| | Know very well | 53 | 28 | 38 | 19 | 25 | | |
| Do you know the positioning of Nezha 2 in the market? | not familiar with | 4 | 3 | 5 | 3 | 1 | 7.881 | 0.952 |
| | know little about | 7 | 3 | 3 | 4 | 5 | | |
| | General understanding | 23 | 14 | 21 | 12 | 12 | | |
| | Know better | 47 | 28 | 34 | 29 | 16 | | |
| | Know very well | 50 | 30 | 38 | 20 | 18 | | |
| Do you know the competitiveness of Nezha 2 in the international market? | not familiar with | 3 | 5 | 1 | 6 | 4 | 27.548 | 0.036 |
| | know little about | 9 | 5 | 6 | 7 | 1 | | |
| | General understanding | 24 | 14 | 15 | 7 | 9 | | |
| | Know better | 49 | 27 | 46 | 23 | 20 | | |
| | Know very well | 46 | 27 | 33 | 25 | 18 | | |
| Do you know the influence of Nezha 2 on the development of the country? | not familiar with | 2 | 3 | 6 | 7 | 4 | 16.058 | 0.449 |
| | know little about | 6 | 5 | 5 | 3 | 3 | | |
| | General understanding | 23 | 14 | 13 | 14 | 4 | | |
| | Know better | 57 | 29 | 47 | 23 | 20 | | |
| | Know very well | 43 | 27 | 30 | 21 | 21 | | |
| Have you ever understood the reason why Nezha 2 can "break the circle"? | not familiar with | 7 | 4 | 0 | 2 | 2 | 27.395 | 0.037 |
| | know little about | 7 | 3 | 6 | 8 | 4 | | |
| | General understanding | 19 | 21 | 12 | 19 | 5 | | |
| | Know better | 52 | 24 | 46 | 20 | 22 | | |
| | Know very well | 46 | 26 | 37 | 19 | 19 | | |

From the above table 13, it can be seen that the test P values of the audience's understanding of Nezha 2 at different ages are almost all greater than 0.05, and the P value is less than 0.05 in only one dimension, so it is considered that there is no

statistical difference in the whole, that is, there is no difference in the understanding of Nezha 2 among the audience at different ages.

### 6.2.3 Analysis on the difference of audience's attitude towards the phenomenon of "Nezha 2" with 2 brushes, 3 brushes or even N brushes

(1)Difference Analysis of Different Gender Audiences' Attitudes to the Phenomenon of 2 Brush, 3 Brush or even N Brush Nezha 2

**Table 14** Difference Analysis Table of Different Gender Audiences' Attitudes to the Phenomenon of N Brush Nezha

| Gender | Very supportive, indicating that the film is rich in content and worth tasting many times. | Understandably, the audience may want to know more about the details and connotation of the film. | Generally speaking, it may be a follow-up behavior, but personal choice is understandable. | I don't quite agree. I think this kind of behavior is a waste of time and money | I don't support it at all. I think we should spend our time on more meaningful things. | Total |
|---|---|---|---|---|---|---|
| Man | 45 | 55 | 61 | 19 | 25 | 205 |
| Woman | 59 | 75 | 53 | 16 | 22 | 225 |
| Total | 104 | 130 | 114 | 35 | 47 | 430 |

As can be seen from Table 14, the data is subject to independent sample t-test. The results show that P=0.151>0.05. There is no statistical difference in the attitudes of different gender audiences towards the phenomenon of "Nezha 2", which means that the attitudes of different gender audiences towards the phenomenon of "Nezha 2" are basically the same.

(2) An Analysis of the Different Attitudes of Audiences in Different Regions towards the Phenomenon of "Nezha 2"

**Table 15** Analysis Table of Differences in Attitudes of Audiences in Different Regions towards the Phenomenon of "Nezha 2"

| region | Very supportive, indicating that the film is rich in content and worth tasting many times. | Understandably, the audience may want to know more about the details and connotation of the film. | Generally speaking, it may follow the fashion, but there is no personal choice. undue blame | I don't quite agree. I think this kind of behavior is a waste of time and money | I don't support it at all, and think that time should be spent more meaningfully. On the matter | Total |
|---|---|---|---|---|---|---|
| Guilin | 30 | 33 | 299 | | 17 | 118 |
| Qinzhou | 23 | 31 | 205 | | 7 | 86 |
| Liuzhou | 21 | 34 | 238 | | 8 | 94 |
| Nanning | 30 | 32 | 4213 | | 15 | 132 |
| Total | 104 | 130 | 11435 | | 47 | 430 |

As can be seen from Table 15, the data is analyzed by one-way ANOVA. P=0.50>0.05. There is no statistical difference in the attitudes of audiences in different regions towards the phenomenon of "Nezha 2", "2" or "Nezha 2". That is to say, the attitudes of audiences in different regions towards the phenomenon of "2" are generally the same.

(3) An Analysis of the Different Attitudes of Different Groups of Audiences to the Phenomenon of "Nezha 2"

**Table 16** Difference Analysis Table of Different Groups of Audiences' Attitudes to the Phenomenon of N Brush Nezha 2

| Group | Very supportive, indicating that the film is rich in content and worth tasting many times. | Understandably, the audience may want to know more about the details and connotation of the film. | Generally speaking, it may follow the fashion, but there is no personal choice.undue blame | I don't quite agree. I think this kind of behavior is a waste of time and money | I don't support it at all, and think that time should be spent more meaningfully.On the matter | Total |
|---|---|---|---|---|---|---|
| teenagers | 14 | 18 | 23 | 7 | 9 | 71 |
| college student | 17 | 24 | 9 | 3 | 7 | 60 |
| Inservice personnel | 47 | 50 | 52 | 13 | 16 | 178 |
| Anime fan | 16 | 21 | 18 | 7 | 12 | 74 |

| Other | 10 | 17 | 12 | 5 | 3 | 47 |
| Total | 104 | 130 | 114 | 35 | 47 | 430 |

As can be seen from Table 16, the data is analyzed by one-way ANOVA. P=0.285>0.05. There is no statistical difference in the attitudes of different groups of audiences towards the phenomenon of "Nezha 2", "2" or "Nezha 2", which means that the attitudes of different groups of audiences towards the phenomenon of "2" are almost the same.
(4) An Analysis of the Different Attitudes of Audiences of Different Ages towards the Phenomenon of "Nezha 2"

**Table 17** Analysis Table of Differences in Attitudes of Audiences of Different Ages towards the Phenomenon of "Nezha 2"

| Age | Very supportive, indicating that the film is rich in content and worth tasting many times. | Understandably, the audience may want to know more about the details and connotation of the film. | Generally speaking, it may be a follow-up behavior, but personal choice is understandable. | I don't quite agree. I think this kind of behavior is a waste of time and money | I don't support it at all. I think we should spend our time on more meaningful things. | Total |
|---|---|---|---|---|---|---|
| Under 18 years old | 10 | 26 | 23 | 9 | 10 | 78 |
| 18-25 years old | 38 | 46 | 28 | 7 | 12 | 131 |
| 26-35 years old | 33 | 30 | 21 | 7 | 10 | 101 |
| 36-45 years old | 9 | 18 | 23 | 10 | 8 | 68 |
| 46 years old and above | 14 | 10 | 19 | 2 | 7 | 52 |
| Total | 104 | 130 | 114 | 35 | 47 | 430 |

As can be seen from Table 17, the data is analyzed by one-way ANOVA. The results show that P=0.004<0.05. There are statistical differences in the attitudes of different age groups towards the phenomenon of "Nezha 2", that is to say, the attitudes of different age groups towards the phenomenon of "Nezha 2" are different, and the frequency ratio of "Nezha 2", "2" and "2" is strongly supported by the audience aged 18-25 and 26-35.

## 6.3 Multiple response analysis

In the questionnaire, the audience's views on the measures that domestic animation can attract more audiences and enhance international competitiveness are investigated in the form of two multiple-choice questions from the aspects of content, emotion, technology and international competition. Therefore, when using SPSS to analyze the multiple-choice questions in the questionnaire, this paper adopts the method of frequency and crosstab in multiple response analysis.

**Table 18** The audience's views on the measures to promote the development of the country in terms of content and so on

| Measures to promote the development of the country in terms of content, emotion and technology | n | Response rate |
|---|---|---|
| Lower the viewing threshold and increase the interest. | 131 | 15.29% |
| Incorporate more local cultural elements. | 242 | 28.24% |
| Strengthen cross-border cooperation with other cultures. | 241 | 28.12% |
| Improve picture quality and visual effect. | 243 | 28.35% |

As can be seen from the above table 18, the goodness-of-fit test is significant $\chi^2 =161.056$, p=0.068>0.05, which means that there is no obvious difference in the selection ratio of each item, and the differences can be specifically compared by response rate or penetration rate.
At the same time, the data shows that the proportion of improving the picture quality and visual effect is 28.35%, which is higher than other measures. This reflects an active advocacy and practice, that is, to improve the overall texture of the film by improving the quality and visual effects of the film. The proportion of incorporating more local cultural elements is 28.24%, which is also an aspect worthy of attention. In addition, 28.12% and 15.29% increase the interest by strengthening cross-border cooperation with other cultures and lowering the viewing threshold. This shows that in the development of Guoman industry, cross-border cooperation, interesting content and the threshold of viewing are also highly valued by many viewers.

In short, the steady development of Guoman industry in the future needs various efforts and measures. In addition to improving the picture quality and visual effect, it is also necessary to integrate more local cultural elements, strengthen cross-border cooperation with other fields of culture, lower the viewing threshold and increase interest. Only by comprehensively applying all kinds of measures can we effectively contribute to various industries such as national culture, film industry, cultural tourism and so on.

The content, technology and other aspects to promote the development of the country's views and the basic information of the audience (gender, age, group), and get the proportion of the audience's views on content, technology and other measures to promote the development of the country.

First of all, the cross table of measures to promote the development of the country from different ages, contents and technologies is as follows as shown in table 19.

**Table 19** Cross-table of Views of Different Ages on Measures to Promote the Development of the Country in Terms of Content and Technology

| Measures to promote the development of the country in terms of content, emotion and technology | Age | | | | | Total （n=430） |
| --- | --- | --- | --- | --- | --- | --- |
| | Under 18 years old | 18-25 years old | 26-35 years old | 36-45 years old | 46 years old and above | |
| Lower the viewing threshold and increase the interest | 21.79% | 35.11% | 33.66% | 27.94% | 28.85% | 30.47% |
| Incorporate more local cultural elements. | 52.56% | 54.96% | 56.44% | 58.82% | 61.54% | 56.28% |
| Strengthen cross-border cooperation with other cultures. | 57.69% | 54.96% | 56.44% | 61.76% | 48.08% | 56.05% |
| Improve picture quality and visual effect. | 60.26% | 57.25% | 56.44% | 48.53% | 59.62% | 56.51% |

chi-square test：$\chi 2=5.803$   $p=0.926$

Secondly, the cross table of different gender, content and technology to promote the development of the country is shown in the following table 20.

**Table 20** Cross-table of Measures to Promote the Development of the Country by Gender, Content and Technology

| Measures to promote the development of the country in terms of content, emotion and technology | Gender | | Total （n=430） |
| --- | --- | --- | --- |
| | Man （n=205） | Woman （n=225） | |
| Lower the viewing threshold and increase the interest. | 33.66% | 27.56% | 30.47% |
| Incorporate more local cultural elements. | 53.66% | 58.67% | 56.28% |
| Strengthen cross-border cooperation with other cultures. | 58.05% | 54.22% | 56.05% |
| Improve picture quality and visual effect. | 51.71% | 60.89% | 56.51% |

Finally, the cross table of different groups and measures to promote the development of the country in terms of content and technology is shown in the following table 21.

**Table 21** Cross Table of Different Groups and Measures to Promote the Development of the Country in Terms of Content and Technology

| Measures to promote the development of the country in terms of content, emotion and technology | Group | | | | | Total （n=430） |
| --- | --- | --- | --- | --- | --- | --- |
| | Teenagers | college student | In-service personnel | Anime fan | Other | |
| Lower the viewing threshold and increase the interest. | 30.99% | 38.33% | 28.65% | 27.03% | 31.91% | 30.47% |

| | | | | | |
|---|---|---|---|---|---|
| Incorporate more local cultural elements. | 47.89% | 60.00% | 63.48% | 48.65% | 48.94% | 56.28% |
| Strengthen cross-border cooperation with other cultures. | 61.97% | 55.00% | 53.37% | 58.11% | 55.32% | 56.05% |
| Improve picture quality and visual effect. | 52.11% | 61.67% | 57.30% | 54.05% | 57.45% | 56.51% |

As can be seen from the following table 22, the goodness-of-fit test is significant $\chi^2 =276.053$, p=0.000<0.05, which means that the selection ratio of each item is obviously different, and the differences can be specifically compared by response rate or penetration rate.

**Table 22** The Audience's Views on the Measures to Promote the Development of the Country at the Level of International Competitiveness

| Measures to promote the development of the country in terms of international competitiveness | n | Response rate |
|---|---|---|
| Learn from the experience of foreign excellent works | 183 | 18.83% |
| Create a story with more China characteristics | 266 | 27.37% |
| Strengthen international cooperation and improve the production level. | 318 | 32.72% |
| Launch a multilingual version to attract the world. | 205 | 21.09% |

At the same time, the data shows that the proportion of strengthening international cooperation and improving production level is 32.72%, which is higher than other measures. This reflects a positive advocacy and practice, that is, by strengthening international cooperation and improving the production level, the overall texture of the film can be improved. The proportion of stories with more China characteristics is 27.37%, which is also an aspect worthy of attention. In addition, 21.09% and 18.83% respectively launched multilingual versions, attracted the world and learned from the experience of foreign excellent works. This shows that in the development process of Guoman industry, multilingual is introduced. The Chinese version is also highly valued by many viewers.

Cross-table analysis is made on the views of the measures to promote the development of the country at the level of international competitiveness and the basic information (gender, age and group) of the audience, and the proportion of the views of the audience with different basic conditions on the measures to promote the development of the country at the international level is obtained.

First of all, the cross table of measures to promote the development of the country from different ages and international levels is shown in the following table 23.

**Table 23** Cross Table of Views on Measures to Promote the Development of the Country at Different Ages and at the International Level

| Measures to promote the development of the country at the international level | Age | | | | | Total （n=430） |
|---|---|---|---|---|---|---|
| | Under 18 years old | 18-25 years old | 26-35 years old | 36-45 years old | 46 years old and above | |
| Learn from the experience of foreign excellent works | 48.72% | 48.09% | 38.61% | 35.29% | 36.54% | 42.56% |
| Create a story with more China characteristics | 51.28% | 62.60% | 62.38% | 66.18% | 67.31% | 61.63% |
| Strengthen international cooperation and improve the production level. | 78.21% | 76.34% | 73.27% | 77.94% | 57.69% | 73.95% |
| Launch a multilingual version to attract the world. | 46.15% | 42.75% | 51.49% | 41.18% | 63.46% | 47.67% |
| chi-square test：$\chi^2=11.679$  p=0.472 | | | | | | |

Secondly, the cross table of different gender and international measures to promote the development of the country is shown in the following table 24.

**Table 24** Cross Table of Gender and International Measures to Promote National Development

| Measures to promote the development of the country at the international level | Gender | | Total（n=430） |
| --- | --- | --- | --- |
| | Man（n=205） | Woman（n=225） | |
| Learn from the experience of foreign excellent works | 41.46% | 43.56% | 42.56% |
| Create a story with more China characteristics | 60.00% | 63.11% | 61.63% |
| Strengthen international cooperation and improve the production level. | 69.76% | 77.78% | 73.95% |
| Launch a multilingual version to attract the world. | 54.15% | 41.78% | 47.67% |

Finally, the cross table of different groups and international measures to promote the development of the country is shown in Table 25 below.

**Table 25** Cross Table of Measures for Promoting National Development by Different Groups and International Level

| Measures to promote the development of the country at the international level | Group | | | | | Total（n=430） |
| --- | --- | --- | --- | --- | --- | --- |
| | Teenagers | college student | In-service personnel | Anime fan | Other | |
| Learn from the experience of foreign excellent works | 46.48% | 53.33% | 38.76% | 43.24% | 36.17% | 42.56% |
| Create a story with more China characteristics | 53.52% | 61.67% | 66.85% | 55.41% | 63.83% | 61.63% |
| Strengthen international cooperation and improve the production level. | 76.06% | 80.00% | 69.10% | 72.97% | 82.98% | 73.95% |
| Launch a multilingual version to attract the world. | 49.30% | 40.00% | 54.49% | 50.00% | 25.53% | 47.67% |

## 7 COGNITION AND INFLUENCE ANALYSIS OF NEZHA 2 BASED ON STRUCTURAL EQUATION MODEL

In this survey, the reliability of 430 valid data collected was tested, and the representative core factors were extracted by exploratory factor analysis, so as to build a structural equation model. Considering the relationship among the representative factors, the respondents in four places in Guangxi (Guilin, Nanning, Liuzhou and Qinzhou) were analyzed for their cognition of Nezha 2 and the influence of Nezha 2 on the future development of the country.

### 7.1 Brief Introduction of Structural Equation Model

#### 7.1.1 Concept of structural equation model
Structural equation model (SEM) is a method to establish, estimate and test causality model. The model contains both observable obvious variables and potential variables that cannot be directly observed. Structural equation model can replace multiple regression, path analysis, factor analysis, covariance analysis and other methods to clearly analyze the role of individual indicators on the population and the relationship between individual indicators. Compared with traditional analysis methods, structural equation model can explain as many variations of variables as possible while understanding the covariant relationship between variables. When you want to study the causal relationship between complex variables, it is most appropriate to use structural equation model.

The construction of structural equation model is usually divided into four main parts, including model hypothesis, reliability and validity test, model establishment and model revision. Generally speaking, the establishment of structural equation model first needs to determine the design of external latent variable factors and internal latent variable factors. If the established structural equation model has a good fitting effect, that is, it passes the evaluation criteria of model fitting, there is no need to modify the model.

#### 7.1.2 Basic form of structural equation model
Structural equation model usually has two definitions: ① structural equation model = factor analysis+path analysis; ②

Structural equation model = measurement model+structural model, and there is no difference in essence.
(1)Measurement model
The measurement model is confirmatory factor analysis (CFA), which describes the relationship between the observed variable and the latent variable, and measures the measurement effect of the explicit variable (that is, the measuring tool) on the latent variable (the magnitude and significance of the load of the observed variable on the latent variable). When doing validity analysis, what we usually expect is to find that the observed variables are significantly loaded on theoretically related latent variables, but not on unrelated latent variables by confirmatory factor analysis. The specific model expression is:

$$\begin{cases} x = \Lambda_x + \delta \\ y = \Lambda_y + \varepsilon \end{cases} \qquad (3)$$

Where x is a vector composed of exogenous indicators, y is a vector composed of endogenous indicators, $\Lambda_x$ and $\Lambda_y$ are factor load matrices, $\varepsilon$ and $\delta$ are error terms.
(2)structural model

$$\eta = B\eta + \Gamma\xi + \zeta \qquad （4）$$

Where B is the coefficient matrix of sum for $\eta$ and $\eta$, which also becomes the path coefficient; $\Gamma$ represents the coefficient matrix between $\eta$ and $\eta$, and $\zeta$ represents the error term.

## 7.2 the Establishment of Structural Equation Model

### 7.2.1 Factorial analysis
Before establishing the structural equation model, we need to use SPSSAU online software to make exploratory factor analysis of all the valid data to be investigated, so as to explore the audience's understanding of Nezha 2, the factors that Nezha 2 has influenced the development of Guoman and the reasons for its success, find out the potential variables in the theory, reduce the number of questions, and get better variables.
First of all, KMO test and Bartlett spherical test are needed. The KMO value in the test results is 0.822, and the P value is less than 0.05. The output four factors explain that the cumulative percentage of 24 variables is 87.194%, so it can be considered that there is a certain correlation between the items. The specific KMO and Bartlett spherical test analysis results are shown in the following table 26:

**Table 26** KMO and Bartlett Spherical Test Analysis Results

| project | numerical value |
|---|---|
| KMO sampling suitability quantity | 0.822 |
| Approximate chi-square of Bartlett spherical test | 19848.67 |
| freedom | 276 |
| significance | 0.000 |

### 7.2.2 Setting of observation variables
According to the rotated factor load matrix, three factors are defined, which are: the audience's understanding of Nezha 2, the reasons for the success of Nezha 2, and the influence of Nezha 2 on the development of Guoman. These three factors as a latent variable, the corresponding observed variables are shown in the following table 27:

**Table 27** System index of structural equation model

| Latent variable | Observed variable | Item |
|---|---|---|
| The audience's understanding of Nezha 2. | Have you heard about Nezha 2 since it was released? | A1 |
| | Do you know the positioning of Nezha 2 in the market? Do you know the competitiveness of Nezha 2 in the international market? | A2 |
| | Do you know the influence of Nezha 2 on the development of the country? | A3 |
| | Have you ever known the reason why Nezha 2 was successful? | A4 |
| The Reasons for the Success of | The plot is wonderful and fascinating. | B1 |

| | | |
|---|---|---|
| Nezha 2 | The characters are vivid and have outstanding personalities. | B2 |
| | The picture is exquisite and the special effects are shocking. | B3 |
| | The music is beautiful and sets off the atmosphere. | B4 |
| | The innovative adaptation of classic IP has given new vitality to traditional stories. | B5 |
| | Excellent production level, including high-level animation rendering and detailed character design. | B6 |
| | Advanced special effects technology has brought a shocking visual experience to the audience. | B7 |
| | Well-designed animation scenes are smooth and creative. | B8 |
| The Influence of Nezha 2 on the Development of Guoman | Improve the overall level of the country. | C1 |
| | Enhance the audience's confidence in Guoman. | C2 |
| | It provides a successful case for Guo Man's "breaking the circle" | C3 |
| | Innovating the narrative style and visual expression of Guo Man. | C4 |
| | Inspired creative enthusiasm inside and outside the industry. | C5 |
| | Online and offline linkage publicity | C6 |
| | Social media topic marketing | C7 |
| | Cross-border cooperation and promotion | C8 |
| | Customize content marketing, and launch featured promotional materials and activities. | C9 |

### 7.2.3 Reliability and validity test of data

After the statistics of dimensionality reduction, the total number of variables finally included can be explained by three common factors, and then the reliability of these three common factors is tested by SPSSAU, and the results are as follows: Table 28:

**Table 28** Reliability Test Table of Latent Variables

| Aspect | Cronbach's α | Number of terms |
|---|---|---|
| The audience's understanding of Nezha 2 | 0.648 | 5 |
| The Reasons for the Success of Nezha 2 | 0.908 | 8 |
| The Influence of Nezha 2 on the Development of Guoman | 0.922 | 9 |

According to Table 28, Cronbach's Alpha coefficient values of all latent variables are above 0.60, indicating that latent variables are reliable and can be included in the path diagram of structural equation model.

### 7.2.4 Model setting

After setting the relationship between latent variables, the online software SPSSAU is used to set up the causality path d iagram as required, and the specific results are as follows figure 12:

**Figure 12** Road Map of Research Theory Model

### 7.2.5 Fitting degree analysis and hypothesis test of the model

(1)Fitting degree analysis of the model

Estimating the set model parameters with sample data is the primary task to test the structural equation model, but it is the goal of parameter estimation to generate another covariance matrix of the observed variables, so as to make the covariance matrix of the observed variables as close as possible. When the two covariance matrices are very close, we think that the model fits the data.

In this paper, the specific results of fitting index calculated by SPSSAU online software are as follows:

**Table 29** Fitting Index of Structural Equation Model

| Fitting index | CMIN/DF | GFI | RMSEA | RMR | CFI | NFI | NNFI |
|---------------|---------|-----|-------|-----|-----|-----|------|
| numerical value | 1.225 | 0.919 | 0.017 | 0.046 | 0.936 | 0.928 | 0.928 |

According to Table 29, the value of chi-square/degree of freedom, that is, CMIN/DF, is 1.225, which is less than the criterion 3, so the data of this model is well fitted. The GFI value is 0.919, which is greater than the criterion of 0.9, indicating that the fitting degree is good. The RMSEA value is 0.017, which is less than the criterion of 0.1, indicating that the fitting degree is good. RMR value is 0.046, which is less than the criterion of 0.05. The CFI value is 0.936, which is greater than the criterion of 0.9, indicating that the fitting degree is good. The NFI value is 0.928, which is greater than the criterion of 0.9, indicating that the model fits well. The value of NNFI is 0.928, which is greater than the criterion of 0.9, indicating that the model has a good fitting degree. To sum up, most of the evaluation indexes of this model have reached the standard.

(2)Hypothesis test of model

In this paper, the test results of each path obtained by AMOS26.0 software are shown in the following table 30:

**Table 30** Test Results of Path Hypothesis

| null hypothesis | path | | | P value | result |
|---|---|---|---|---|---|
| H4 | The Reasons for the Success of Nezha 2 | ← | The Influence of Nezha 2 on the Development of Guoman | *** | found |
| H5 | The Influence of Nezha 2 on the Development of Guoman | ← | The audience's understanding of Nezha 2. | 0.232 | Not found |
| H6 | The Influence of Nezha 2 on the Development of Guoman | ← | Have you ever understood the reason why Nezha 2 can "break the circle"? | *** | found |
| | | | (The following 22 paths are thus omitted) | | |

According to the above table, we can find that there is a significant relationship between the audience's understanding of Nezha 2 and the reason for the success of Nezha 2, and the reason for the success of Nezha 2 is the audience's

understanding of Nezha 2.

Nezha 2 has a significant impact on the development of the country, and Nezha 2 has a significant impact on the development of the country and the audience's understanding of Nezha 2. However, there is no significant relationship between the audience's understanding of Nezha 2 and the impact of Nezha 2 on the development of the country, with a p value of 0.232>0.05. The relationship between the observed variables and the latent variables is very significant, so the latent variables are incomplete. Therefore, it can be considered that most hypotheses have been tested, but there is still one hypothesis that failed to pass the test.

### 7.2.6 Modification of model

(1)Fitting degree analysis of the modified model

As shown in Figure 13, According to the modified index, the model structure is more reasonable by releasing paths or adding new paths. In order to improve the fitting degree of the mold structure, the modified goodness of fit is shown in the following table after being modified by AMOS26.0 software:
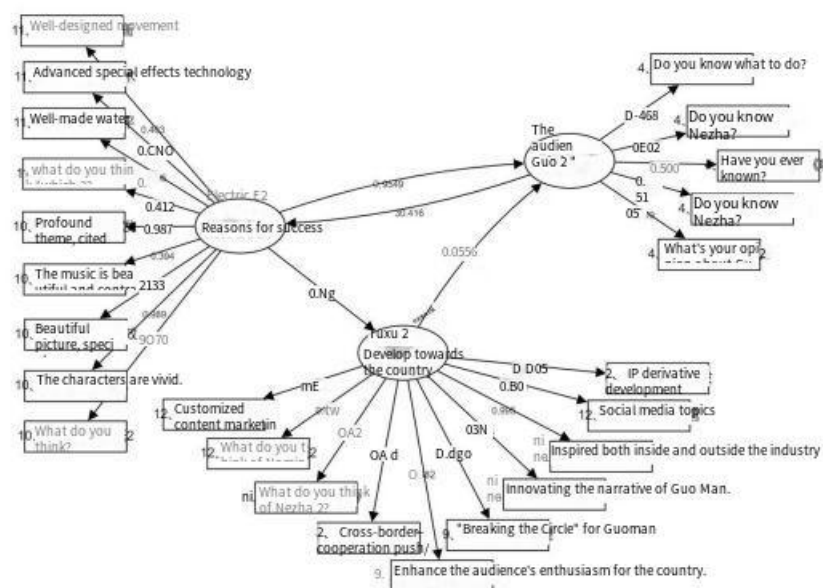


**Figure 13** The road map of the revised research theory model

The modified goodness of fit is shown in the following table 31:

**Table 31** Fitting Index of Modified Structural Equation Model

| Fitting index | CMIN/DF | GFI | RMSEA | RMR | CFI | NFI | NNFI |
|---|---|---|---|---|---|---|---|
| numerical value | 1.226 | 0.969 | 0.017 | 0.044 | 0.998 | 0.988 | 0.998 |

As can be seen from Table 31, the value of chi-square/degree of freedom, that is, CMIN/DF, is 1.226, which is less than the criterion 3, so the data of this model is well fitted. The GFI value is 0.969, which is greater than the criterion of 0.9, indicating that the fitting degree is good. The RMSEA value is 0.017, which is less than the criterion of 0.1, indicating that the fitting degree is good. RMR value is 0.044, which is less than the criterion of 0.05. The CFI value is 0.998, which is greater than the criterion of 0.9, indicating that the fitting degree is good. The NFI value is 0.988, which is greater than the criterion of 0.9, indicating that the model fits well. The value of NNFI is 0.998, which is greater than the criterion of 0.9, indicating that the model has a good fitting degree. To sum up, most of the evaluation indexes of the model have reached the standard, which shows that the modified model has a good fitting degree.

(2) Hypothesis test of the modified model

**Table 32** Test Results of Revised Path Hypothesis

| null hypothesis | Path | | | P value | results |
|---|---|---|---|---|---|
| H4 | The Reasons for the Success of Nezha 2 | <— | The Influence of Nezha 2 on the Development of Guoman | *** | found |
| H5 | The Influence of Nezha 2 on the Development of Guoman | <— | The audience's understanding of Nezha 2. | *** | found |
| H6 | The Influence of Nezha 2 on the Development of Guoman | <— | Have you ever understood the reason why Nezha 2 can "break the circle"? | *** | found |

(The following 22 paths are thus
omitted)

According to the above table 32, we can find that there is a significant relationship between the audience's understanding of Nezha 2 and the reason for the success of Nezha 2, and the reason for the success of Nezha 2 is the audience's understanding of Nezha 2.

Nezha 2 has a significant impact on the development of the country, and Nezha 2 has a significant impact on the development of the country and the audience's understanding of Nezha 2. The relationship between observed variables and latent variables is very significant, so the original hypothesis is rejected among latent variables and between latent variables and observed variables. Therefore, it can be considered that all hypotheses have been tested.

### 7.2.7 Interpretation and analysis of structural equation model results

(1)Relationship between latent variables

The coefficient between latent variables indicates the degree to which the change of one variable causes the change of other variables. Because the estimated value of residual term is relatively small and usually meaningless, its influence can be directly ignored, so this paper has not conducted in-depth and detailed research and discussion on the error term.

It is easy to see the path coefficient between latent variables from the path diagram of structural equation model, and the relationship between most of the latent variables has a significant positive correlation. Among them, there is a significant positive correlation between the audience's understanding of Nezha 2 and the reasons for the success of Nezha 2, and its path coefficient is greater than 0, showing a significance of 0.01 level. At the same time, there is a significant positive correlation between the influence of Nezha 2 on the development of the country, the reasons for the success of Nezha 2, and the audience's understanding of Nezha 2. The path coefficients between them are all greater than 0, and they all show a significance of 0.01 level. There is a significant positive correlation between the influence of Nezha 2 on the development of the country and the audience's understanding of Nezha 2, and its path coefficient is also greater than 0, which also shows the significance of 0.01 level. From the above analysis results, we can see that there is a causal relationship between the reasons for the success of Nezha 2, the influence of Nezha 2 on the development of the country and the audience's understanding of Nezha 2.

The regression coefficient between the reasons for Nezha 2' s success and the audience's understanding of Nezha 2 is 0.9549, which indicates that if the reason for Nezha 2' s success is increased by one percentage point, the audience's understanding of Nezha 2 will be increased by 0.9549 percentage point. It can be seen that when Nezha 2 performed well in elaborate animation, advanced special effects technology, excellent production level, profound theme, moving music, exquisite pictures and vivid characters, the audience understood Nezha 2. The degree will be significantly improved, thus enhancing the audience's awareness and interest in the country.

The regression coefficient between the reasons for the success of Nezha 2 and the influence of Nezha 2 on the development of the country is 0.199, which shows that the influence of Nezha 2 on the development of the country will increase by 0.199 percentage points for every percentage point increase in the reasons for the success of Nezha 2. It can also be seen that when Nezha 2 performs well in all aspects, its successful experience will have a positive impact on Guoman industry, such as promoting the development of IP derivatives, strengthening the topic marketing of social media, and stimulating the innovation vitality inside and outside the industry.

The regression coefficient between the audience's understanding of Nezha 2 and the influence of Nezha 2 on the development of the country is 0.9550, which shows that the influence of Nezha 2 on the development of the country will increase by 0.9550 percentage points for every percentage point increase in the audience's understanding of Nezha 2. That is, when the audience has a deeper understanding of Nezha 2, they are more likely to realize the positive impact of Nezha 2 on the development of Guoman, thus further promoting the development of Guoman industry.

(2)The relationship between observed variables and latent variables

In the audience's understanding of Nezha 2, the path coefficients of the observation variable "Do you know Nezha 2" are 0.468, 0.602, 0.509, 0.515 and 0.509 respectively. This shows that these observation variables have obvious influence on the audience's understanding of Nezha 2, among which the observation variable "Do you know Nezha 2" has the most significant influence. This shows that, compared with other options, the audience's basic knowledge of Nezha 2 plays a key role in their overall understanding.

In the influence of Nezha 2 on the development of Guoman, the path coefficients of IP derivative development, social media topic marketing, stimulating innovation inside and outside the industry, innovating the narrative style of Guoman, providing new ideas for "breaking the circle" of Guoman and enhancing the audience's attention and love for Guoman are all 0.995. This shows that these observation variables have a very obvious influence on the development of Nezha II, and each observation variable can be regarded as the most important influence. This shows that the success of Nezha 2 lies not only in the film itself, but also in its positive role in industrial chain extension, market promotion and industry innovation.

Among the reasons for the success of Nezha 2, the well-designed animation, advanced special effects technology, excellent production level, profound theme resonance, beautiful music, exquisite pictures and excellent special effects, vivid characters, and the path coefficients of the audience's overall evaluation of Nezha 2 are 0.403, 0.449, 0.995, 0.412, 0.394 and 0.44 respectively. This shows that these observed variables have obvious influence on the success of Nezha 2, among which the audience has the most significant influence on the overall evaluation of Nezha 2. This shows that the success of Nezha 2 is the result of many factors, but it ultimately comes down to the recognition and love of the audience.

# 8 SUMMARY AND SUGGESTIONS

## 8.1 Research Conclusions

Based on the data of online questionnaire survey, this paper tested the reliability and validity of the questionnaire, and then analyzed the data of the questionnaire by using the frequency and cross-table method and structural equation model in difference analysis and multiple response analysis, and analyzed the audience's understanding of Nezha 2, the reasons why Nezha 2 broke the circle, and put forward some suggestions on the future development direction of Guoman. The purpose of this paper is to explore the understanding of Nezha 2 by groups in four places in Guangxi. The relationship between the ways to break the circle in Nezha 2, and understand the mutual influence mechanism between them.

1.Based on the investigation of the audience's cognition of Nezha 2 in four regions of Guangxi, this study found that the audience did have cognitive bias towards Nezha 2. At the same time, we conducted independent sample T-tests on the number of times the audience watched Nezha 2, their understanding of Nezha 2, and their attitudes towards the phenomenon of brushing Nezha 2, brushing 2 3 or even brushing 2 n, respectively, with respect to gender, region, age and group. The results show that the number of times that boys and girls watch Nezha 2 is almost the same; There is little difference in the number of times viewers watch Nezha 2 in different regions; Audiences of different ages watch Nezha 2 almost the same times; There is no statistical difference in the number of times the audience of different groups watched Nezha 2; There is no difference in the understanding of Nezha 2 between audiences of different sexes; There are some statistical differences in the audience's understanding of Nezha 2 in different regions; There are significant differences in the understanding of Nezha 2 among different groups of audiences; There is no significant difference in the understanding of Nezha 2 among audiences of different ages; Different gender audiences have basically the same attitude towards the phenomenon of 2-brush, 3-brush or even N-brush "Nezha 2"; Audiences in different regions generally have the same attitude towards the phenomenon of "Nezha 2". Different groups of audiences have almost the same attitude towards the phenomenon of N-brushing Nezha 2; There are statistical differences in the attitudes of different age groups towards the phenomenon of "Nezha 2", "Nezha 2" and "Nezha 2". That is to say, different age groups have different attitudes towards the phenomenon of "2". Among them, the 18-25-year-old and 26-35-year-old audiences are very supportive of the phenomenon of "2, 3-year-old or even N-brush", which is higher than that of other age groups.

2.The research results of structural equation model reveal that when Nezha 2 performs well in well-designed animation, advanced special effects technology, excellent production level, profound theme, moving music, exquisite pictures and vivid characters, the audience's understanding of Nezha 2 will be significantly improved, thus enhancing the audience's cognition and interest in the country. When Nezha 2 performs well in all aspects, its successful experience will have a positive impact on Guoman industry, such as promoting the development of IP derivatives, strengthening the topic marketing of social media, stimulating the innovation vitality inside and outside the industry, innovating the narrative style of Guoman, providing new ideas for Guoman to "break the circle" and enhancing the audience's attention and love for Guoman. When the audience has a deeper understanding of Nezha 2, they are more likely to realize the positive impact of Nezha 2 on the development of Guoman, thus further promoting the development of Guoman industry.

## 8.2 Deficiencies

1.Due to the limitation of objective factors. The respondents in this study are only distributed in four cities in Guangxi, and the scope of the respondents is relatively small, which may have a certain impact on the overall understanding of Nezha 2 by the research audience, and may not represent the specific understanding of Nezha 2 by the national audience.

2.This study only makes a preliminary investigation on the reasons for the "broken circle" of Nezha 2 and its influence on the future development of the country, and further investigation is needed to see whether there will be potential influences among the factors in the later period.

3.For some reasons, all the questionnaires collected are from online questionnaires, and they are not distributed face to face offline, which may have a certain impact on the quality of the questionnaires.

## 8.3 Suggestions

In view of the reasons for the success of Nezha 2 and its influence on the development of the country, the relevant suggestions can be put forward from two aspects: content, emotion, technology, marketing and international competitiveness.

### 8.3.1 Suggestions on content, emotion, technology and marketing
(1)Lower the viewing threshold and increase the interest of the film;
(2)Incorporate more local cultural elements;
(3)Strengthen cross-border cooperation with other fields of culture;
(4)Improve the picture quality and visual effect.

### 8.3.2 Suggestions on international competitiveness
(1)Learn from the experience of foreign excellent works;
(2)Create a story with more China characteristics;
(3)Strengthen international cooperation and improve the production level;
(4)Launch a multilingual version to attract the world.

## COMPETING INTERESTS

The authors have no relevant financial or non-financial interests to disclose.

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