Analysis of Influencing Factors and Future Development of Main Theme Film Market Based on Structural Equation Model

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Abstract: The theme film is an indispensable type of Chinese film market in the 21st century, and studying its influencing factors is an important way to promote the further development of the theme film market in the future. Therefore, based on literature review and field investigation, this paper establishes structural equation model from three dimensions: individual, industry and society. Thirdly, this paper selects college students as the investigation object, distributes and collects 4240 questionnaires, tests the reliability and validity of the sample data, and further fits and corrects the model. Finally, the optimization model and path coefficient are calculated, and the relationship between influencing factors is explored, so as to make suggestions for the future development of the main melody film market.

1. Introduction

Since 2021, a series of activities to celebrate the centennial of the founding of the Party carried out by various institutions and organizations across the country have pushed the development of the main melody film market to the climax. The main melody works are an important position to improve the national cultural soft power and an effective channel to shape the national image. In recent years, Wolf Warriors, The Eight Hundred, The Battle at Lake Changjin and other main melody films have flooded into the eyes of the masses, and they have been warmly welcomed by audiences of different ages. Their forms, modes of communication and influence are different from those of the past, and the box office occupied by the main melody films is steadily increasing.

2. Research Significance

Film and television works are the frontier phalanx among the literary and art teams in China, and they have unique perception, penetration and mirror effect on social development. Therefore, they can provide spiritual illumination, experience reference and thinking radial for the current social development in the typical writing of the chronological stories. Excellent film works can integrate the spirit of the times into it and pass it on, which has a strong appeal to the current audience. The research significance of this paper is mainly as follows:

2.1 Strengthen the Public's Further Understanding and Understanding of the Main Melody Film.

This survey selects the main melody film market as the research object, which can arouse the public's curiosity and concern to a certain extent. At the same time, this study publicizes the educational function of the main melody movie market, which can make the country, government, schools, parents and other themes understand its deep meaning and promote the potential demand for watching the main melody movie.

2.2 Help to Solve the Potential Problems and Resistance of the Main Melody Film Market.

By investigating the current situation of the main melody film market, this survey can find out

the public's cognition of the main melody film, and find out the factors that restrict the development of the film market at present. Aiming at the factors that restrict the development of the main melody film, this survey gives some thoughts from three aspects: country, industry and individual.

2.3 Help to Further Promote the State's Correction and Standardization of Public Thoughts and Behaviors.

Nowadays, with the improvement of people's living conditions, our country puts emphasis on ideological and political education, and the main melody film, as one of the effective tools of "great ideological and political education", should play its educational role. This survey responds to the national policy and promotes the implementation of the national policy through in-depth study of the main theme film market.

3. Literature Review

Looking up the previous literature, this paper finds that the main melody film is not classified into genre films or other film categories, and it is a unique film genre in China. Therefore, there is almost no research and discussion on "main melody film" and similar themes by foreign scholars, and most of them are studies on ideological films. Comparatively speaking, domestic scholars have made a deeper and more thorough research on "main melody film". On this premise, this paper will focus on the analysis of domestic scholars' research on the "main melody market" and draw the following main conclusions.

3.1 Analysis of the Current Situation of the Main Theme Film Market

Zhang Ningyu [1] pointed out in "Changing with the Times", An Analysis of the Times Value of Main Melody Movies Telling Chinese Stories "that the film market has gone through many stages of times changes. After entering the 21st century, the film market has undergone industrialization reform, achieving a win-win situation at the box office and word of mouth, and the" main melody "films have firmly" secured "the high position of the film market. Wang Xianping [2]' s Industry and Type: Transformation Strategy of Main Melody Movies holds that it is open to question that the mainstream movies in China's film market are mainly main melody movies, commercial movies and art movies, and with the commercialization progress of the film industry, the main melody movie industry is in urgent need of transformation and upgrading.

3.2 The Educational Function of the Main Melody Film Industry

Du Fang[3] mentioned in the article "Research on the Mainstream Ideology of Chinese Main Melody TV Play" that "the ideological function of the main melody can organize public opinion, win the right to speak in the country, and help to construct public cognition. The main theme of the film makes it easier for people to open to the concrete manifestation of a country's soft power, which has ideological function ". Lian Na [4]' s Research on the Ideological and Political Education Function of Main Melody Movies shows that the main melody movies have the functions of cognitive orientation, cultivation and development, regulation and control, and cohesion and integration. Liu Limin [5] pointed out in "Analysis of College Students' Moral Education from the Perspective of Film and Television Culture" that "excellent film and television works are all examples of harmonious unity of educational function and entertainment function, and the content of education is displayed in a more lively form and has entertainment function". Su Tingting [6], in his paper "Research on the Educational Function of Main Melody Movies to College Students' Socialist Core Values", thinks that as a new educational resource, main melody movies have an educational function that can't be underestimated for college students' core values.
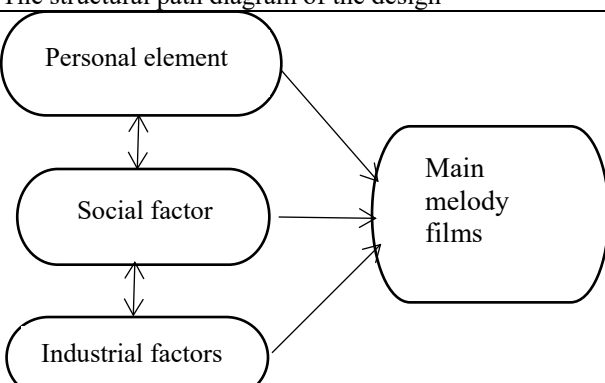
3.3 Problems Existing in the Main Melody Film Market

Regarding the problems of the main melody film itself, Zhou Xing [7] pointed out that "at present, the main melody film market has the phenomenon of false emptiness. The characterization in the film does not conform to the current social reality, and over-exaggerates personal achievements ".

Wang Zhen[8]'s "Research on Rhetoric Orientation of Main Theme" shows that the movies in western countries have more new attraction than the domestic main theme market because of their high requirements and standards, etc., because they have invested so much time and made elaborate films. Regarding the audience's own problems, Lu Chunyan [9] also pointed out that the subjective factors are mainly the weak ability of college students to independently identify dominant films and the lack of motivation in watching the main melody movies. The main reason is that although there are many main melody film industries, many works always tell the same role model, which will bring aesthetic fatigue to the audience and lose the advantages of the main melody film.

4. Selection of Variables and Model Assumptions

Structural equation model is a model to study the relationship between latent variables, so based on literature review, relevant theories and field investigation, this paper concludes that personal, industrial and social factors are the main factors that affect the development of the main melody film industry, and they are latent variables in the model. According to the above three kinds of potential variables, this paper designs a structural path diagram and basic path assumptions. Measurable variables are indicators used to measure potential variables, which can be directly observed or measured. What should be fully considered is a comprehensive reflection of the meaning of variables. Therefore, this paper designs measurable variables for three kinds of potential variables, and designs a questionnaire for measurable variables. The specific results are shown in Table 1 below.

Table 1 Assumption Path Diagram and Basic Path Assumption

The structural path diagram of the design	Basic path hypothesis
	H1:Personal factors have a path impact on the development of the main melody film industry; H2:Social factors have a path impact on the development of the main melody film industry; H3:Industrial factors have a path impact on the development of the main melody film industry; H4:Personal factors, social factors and industrial factors will also influence each other.

5. Data Source and Sample Characteristics

The survey object of this paper is Chinese residents in mainland China. When selecting the scope of investigation, control the geographical areas divided by the announcement of the seventh national census. At the same time, this paper collected 1961 valid questionnaires from Questionnaires software through the Internet.

Table 2 the Determined Sample Size of Each Area

Region	Sampling number
East China	624
South China	274
North China	249
Central China	327
Northeast China	241
Northwest China	252
Southwest China	312

The larger the sample size, the better. The determination of the sample size needs to take into account both accuracy and cost. In view of this, this paper focuses on quota sampling. Because the

number of people in different geographical areas is quite different, in order to follow the universal rules and reduce the difficulty of sampling, we determined the sample size of each area according to the statistics of the number of people in each area in the announcement of the seventh census. The specific results are shown in Table 2.

6. Structural Equation Research Method and Modeling

6.1 Model Setting

Structural equation model (SEM) is a statistical method to analyze the relationship between variables based on the covariance matrix of variables, which can consider and deal with multiple dependent variables at the same time. The structural equation model, based on the study of causality, is an all-encompassing quantitative and theoretical test tool, including measurement model and structural model. The former reflects the relationship between indicators and latent variables, while the latter reflects the relationship between latent variables. The analysis of the influencing factors of the market demand of the main melody film studied in this paper is a problem that cannot be directly observed but needs to be studied and discussed, so this paper uses this model to analyze the factors affecting the market development of the main melody film[10].

6.2 Scientific Inspection of Samples

This paper mainly uses internal consistency index to measure the reliability of data. The data based on the questionnaire survey is analyzed by SPSS23.0 statistical software, and Cronbach's Alpha coefficient method is adopted, which is more scientific in estimating the internal consistency of the scale. The reliability test of the sample data table shows that Cronbach's Alpha value is 0.847 and the number of items is 11. The reliability of each latent variable in the questionnaire is tested separately, as shown in Table 3.

Table 3 Reliability Test Of Latent Variables

Latent variable	Cronbach,s Alpha	Number Of measurable variables
Personal Cognitive factors	0.797	3
Social factor	0.733	3
Industrial factors	0.775	5

The prerequisite of the questionnaire is that the reliability coefficient of the total table is better than the coefficient of 0.7, and the value of 0.6-0.7 is acceptable. If it is below 0.6, we should consider re-compiling the questionnaire. The reliability statistics of the total table show that Cronbach's Alpha coefficient is 0.847, and the Alpha coefficients of the sub-tables are all above 0.7, which indicates that the questionnaire has good reliability, high reliability of sample data, reasonable questionnaire design, and applicable initial hypothesis path, so it is assumed that the initial model includes 3 latent variables and 11 measurable variables.

6.3 Validity Test of Data

The latent variable path conception and question setting of this questionnaire are the results of comprehensive consideration based on relevant theories, literature review, expert review and revision, etc., which ensure that the dimensions and questions of the questionnaire can cover the factors that affect the development of the main melody film, and are comprehensive, typical and representative, so the questionnaire has good content validity and criterion validity. Aiming at the structural validity of the questionnaire, this paper tests the validity of the questionnaire by factor analysis. The specific results are shown in Table 4 below:

Table 4 Kmo and Bartlett Test under Structural Equation Model

Statistic	Coefficient
Sampling enough Kaiser-Meyer-Olkin metrics	0.882
Bartlett's sphericity test is approximately chi-square.	6943.406
df	5

KMO is one of the validity test indexes of principal component analysis. When KMO>0.9, it is

very suitable for factor analysis; 0.8 < KMO < 0.9 is suitable; More than 0.7 is acceptable, 0.6 is poor, and less than 0.5 is not suitable for factor analysis. As can be seen from the table, the KMO value of the scale questionnaire is 0.882, which is greater than 0.8. Therefore, this research questionnaire has high structural validity and can be used for factor analysis.

6.4 Model Fitting

Combined with the hypothetical path and sample data of latent variables of the main melody movie market, the structural equation model is fitted by using Amos22.0 software, and the fitting value of the initial model is measured from the complexity, sample size, relative and absolute theoretical models of the model through different types of model fitting indexes. Using Amos22.0, the initial model fitting results and evaluation criteria are shown in Table 5.

Table 5 Evaluation Index System and Fitting Results of the Overall Fitness of Structural Equation

Fitting index	CMIN	DF	CMIN/DF	GFI	AGFI	RMR	RMSEA
Suggested value	-	-	<8	>0.9	>0.9	<0.05	<0.05
Fitting result	504.973	49	10.306	0.935	0.931	0.030	0.070
Model adaptation judgment	-	-	No	Yes	Yes	Yes	No

According to the test value of the fitting degree of the hypothetical model of the factors influencing the development of the main melody film, it can be found that although the hypothetical model fits the data well, the absolute fitting indexes CMIN/DF and RMSEA are large, so the initial model needs to be further revised.

6.5 Model Modification and Optimal Results

6.5.1 Adjustment of Model

Because of the poor fitting effect of the initial model, we should improve the goodness of the fitting of the model and revise the initial model of the factors that influence the development of the main melody film market. Because the sample data has been scientifically tested, the reliability of the questionnaire is very good, so the measurable variable index of latent variables is not modified, only the covariance correction index MI is modified, and the hypothesis model is modified one by one according to the principle of releasing one parameter each time until the optimal model is obtained. See Table 6 for the fitting index of the model obtained after three revisions.

Table 6 The Modified Model Fits the Calculation Result of Index.

Fitting index	CMIN	DF	CMIN/DF	GFI	AGFI	RMR	RMSEA
Suggested value	-	-	<8	>0.9	>0.9	<0.05	<0.05
Fitting result	269.042	46	5.231	0.977	0.961	0.023	0.041
Model adaptation judgment	-	-	Yes	Yes	Yes	Yes	Yes

As can be seen from Table 6, the revised CMIN/DF=5.213<8, and the approximate root mean square error RMSEA=0.041<0.05, all of which meet the recommended values, and all of them have passed the significance test, indicating that the model has good fitness and good fitting, so the revised model meets the requirements.

6.5.2 Optimal Result of Modified Model

Structural equation model mainly reveals the relationship between variables, including the structural relationship between latent variables and measurable variables, and the relationship between these variables is represented by path coefficient in the model. The path coefficient between latent variables illustrates the relationship, function and influence of various factors that influence the development of the main melody film market. After three revisions to the initial model, the optimized model is obtained, and the revised path model optimization diagram of the main melody film market development influencing factors is made by using Amos22.0 software, as shown in Figure 1.
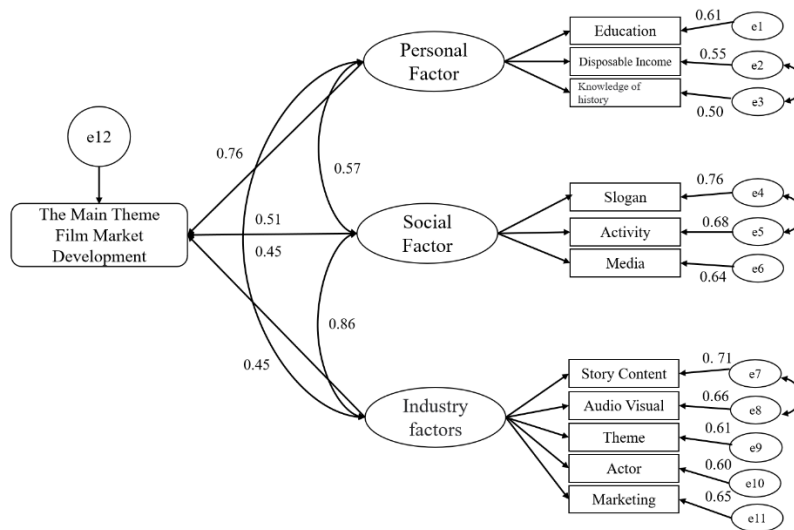
Fig.1 Optimizing the Path Fitting Diagram of Influencing Factors of Main Theme Film Market

Then standardize the sample data to obtain the path coefficients of the optimal model. See Table 7. From Table 7, we can see the path relationship among individual factors, social factors and industrial factors.

Table 7 Optimize the Estimation of Each Path Coefficient of the Model

			Estimate
academic degree	<---	Personal element	.612
disposable income	<---	Personal element	.549
Knowledge of history	<---	Personal element	.503
Slogan propaganda	<---	Social element	.759
organize activities	<---	Social element	.681
mainstream media	<---	Social element	.637
Story content	<---	Industrial factors	.707
Audiovisual effect	<---	Industrial factors	.662
Selection of topics	<---	Industrial factors	.607
Actor selection	<---	Industrial factors	.596
marketing promotion	<---	Industrial factors	.652
Development of main melody film market	<---	Personal element	.761
Development of main melody film market	<---	Social element	.512
Development of main melody film market	<---	Industrial factors	.454

6.6 Explanation and Analysis of the Model

After modifying the path, we get a model with good fitting degree. Each path has its own meaning. According to the above results, the following conclusions can be drawn.

6.6.1 The Relationship between Personal Credit Rating and Potential Variables

As can be seen from the above table, the influence coefficient of personal factors on the development of the main melody film industry is 0.761, which is the highest among the three factors, indicating that the personal factors of consumers have a great influence on the development of the main melody film market. Then, the influence coefficient of social factors on the main melody film industry is 0.512, indicating that the social environment also has a great influence on the development of this kind of film industry.

6.6.2 The Relationship between Personal Factors and Observable Variables

Among the personal factors and observable variables, the coefficient of educational background is the largest, which is 0.612, reflecting that the level of educational background can greatly affect the identity of the main melody movies. The lowest coefficient is the degree of understanding of

history, but the coefficient has reached 0.503. Generally speaking, these three variables have a great influence on personal factors, and personal factors will have a great influence on the development of the main melody film market.

6.6.3 Relationship between Social Factors and Observable Variables

Among the social factors and observable variables, the influence path coefficient of publicity slogans in public places is 0.759, and the influence path coefficients of organizing related activities and mainstream media propaganda are all above 0.6, which are 0.681 and 0.637 respectively. All the observed variables have great influence on social factors, so it is extremely necessary to strengthen social online and offline propaganda and organize related activities vigorously.

6.6.4 The Relationship between Industrial Factors and Observable Variables

Among industrial factors and observable variables, each observed variable has a great influence on industrial factors. Among them, the influence coefficient of story content is the largest 0.707, which reflects that story content with high quality has a significant impact on industrial factors. At the same time, audio-visual effects and marketing methods also have a significant impact on industrial factors, and then affect the development of the whole main melody film industry.

7. Conclusion

This paper analyzes the influencing factors and prospects of the development of Chinese main melody film market by statistical means through the statistical arrangement of the relevant information of the survey samples. First of all, according to previous scholars, this paper explores the relevant categories and definitions of the main melody film, and based on this, establishes a three-dimensional structural equation model to further explore the relevant factors that influence the development of the main melody film. In the research, we found that individual factors have a significant impact on the development of the main melody film industry, and social and industrial factors have a certain impact on its development. Therefore, how to create high-quality main melody films and create greater economic benefits is still a topic that needs to be discussed.

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