Factors Analysis of Platform Teaching Management of Music Colleges in Sichuan Province

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ABSTRACT

The development of informatization and the outbreak of epidemic have brought unprecedented impact to the field of education. In order to solve the dilemma of network platform teaching and management in music colleges in China, this paper studies the factors of network platform teaching and management in music colleges in Sichuan Province, China.

The objectives of this research were: (1) To explore the components of platform teaching management in music colleges in Sichuan Province. (2) To study the factors affecting the platform teaching management of music colleges in Sichuan Province. The study adopts quantitative method. The population is 1,984 administrative staff, teaching staff, scientific research and experimental staff in 20 music colleges in Sichuan Province. The sample size was determined by the optimization design software and obtained by stratified random sampling, with a total of 385 participants. Instruments used: Questionnaire survey was the tool for data collection. A total of 426 valid questionnaires were received in this study. Descriptive statistics were used for data analysis.

The research findings revealed that: According to the needs of internal and external causes of platform teaching management in music colleges during the epidemic, It is determined that teaching demand, management, environment, technical support, Course Adaptability, Teaching Participation, assessment and evaluation are seven factors that affect the platform teaching management of Sichuan music colleges. Through the scale survey of

platform teaching administrators and participants in Sichuan music colleges, data collection and analysis were carried out to determine that each variable was correlated. Therefore, the coordination and cooperation of various factors of platform teaching management in Sichuan music colleges is an important way to enhance the satisfaction of platform teaching management and improve the management effect.

Keywords: Sichuan music colleges, The COVID-19 pandemic,Platform teaching management, influence factor,Course adaptability,Teaching Participation

1. Introduction

The outbreak of COVID-19 has promoted the pace of education reform. During the epidemic period, we need to change our educational ideology and concepts, establish new curriculum teaching and management models. (Chen Hongmin, 2020:44-45) During the epidemic, schools adopted the educational and teaching philosophy of "no suspension of classes", fully utilizing online platforms for online course teaching. (Chen Zhiqian, 2012:103) Under the situation where the old teaching and management models cannot adapt to the new situation, fully utilizing the teaching and management models implemented on online platforms has become an inevitable choice of the times. However, there are also certain drawbacks and shortcomings in using online platforms for teaching and management. Therefore, it is necessary to conduct research and develop corresponding strategies. (Huang Yong, 2020:3-8)

This article mainly focuses on the factors that affect the platform teaching management of music colleges in Sichuan Province, and through this study, makes a contemporary response to the platform teaching management of music colleges in China. Due to the unique characteristics of various music colleges, the previous "face-to-face" teaching mode in the classroom cannot adapt to the new environment. (Zhang Xiaoxia, 2006:197) Finding effective teaching methods and teaching management models to adapt to the new environment has urgent practical significance. The adoption of platform based curriculum teaching and management also faces a series of new problems, and the adjustment of platform based teaching management methods has become an urgent matter. Therefore, the significance of this study is to identify various factors that affect the teaching management of music academy platforms, explore how to solve the problems faced by music academy platform teaching management, and develop corresponding strategies. (Liang Zhen,2014:53-54) Therefore, the research on the factors that affect the teaching management of music academy platforms has excellent practical significance.

Sichuan Province, located in the west of China, is both a province with a large population and a strong education province. With the development of information technology and the outbreak of the epidemic, the platform teaching management of various music colleges in Sichuan Province has also been greatly affected. This paper mainly takes the influencing factors of platform teaching management of music colleges in Sichuan Province in the context of the COVID-19 as the research object, And conduct in-depth theoretical research and summary on the platform teaching management mode of music colleges in Sichuan Province, propose to establish and improve the platform teaching management mechanism of music colleges in crisis, which is beneficial for improving the organizational structure and optimizing the aesthetic education work of music colleges in China. (Li Fangzhi,2020:35-36) Through the research of this paper, it has certain theoretical and practical significance for music colleges to establish platform teaching management system and improve the effectiveness of education work. (Guo Jiao, 2021:16-26)

2. Research objectives

1. To explore the components of platform teaching management in music colleges in Sichuan Province.

2. To study the factors affecting the platform teaching management of music colleges in Sichuan Province.

3. Scope of research content

1. The current situation of the platform teaching management of music colleges in Sichuan Province during the COVID-19.

2. The factors affecting the platform teaching management.

3. The platform teaching management strategies suitable for crisis situations.

4. The relevant suggestions for platform teaching management.

5. Solutions to the relevant problems in platform teaching management of music colleges in China.

4. Research Methodology

1. Population and sampling

The author distributed 426 questionnaires to administrative personnel, teaching staff, as well as research and experimental personnel from 20 representative music colleges in

Sichuan Province, and recovered 426 valid questionnaires. Data was collected using a seven component questionnaire, and the sample size was calculated using the G * Power program. The total population of administrative staff, teaching staff, scientific research and experimental staff in 20 music colleges and universities in Sichuan Province is 1,984 . The sample size was determined by the optimization design software and obtained by stratified random sampling.The number of people randomly selected for stratified sampling should be more than 385, consisting mainly of administrative personnel, teaching staff, as well as research and experimental personnel. Questionnaires will be used for data collection and Exploratory Factor Analysis (EFA) will be used to reduce irrelevant variables.

2. Research Instrument

The researchers combined literature to produce 105 variables, and based on this compiled a research tool as a five-point scale questionnaire. The quality of the tool is tested by content validity and reliability. Results A total of 426 questionnaires were found. Because the reliability of the questionnaire is a way to evaluate the quality of the survey. A measurement program used to collect data. The overall reliability of the questionnaire was 0.951. After the reliability test, 426 complete answers were collected and analysed. SPSS 27.0 statistical software was used to analyse the data, and exploratory factor analysis (EFA) was used to evaluate the accuracy and effectiveness of convergence. The mode fitting quantity was estimated through the comprehensive evaluation of the given data to ensure the effectiveness and reliability of the mode.

3. Data collection procedure

Data collection is done by researcher, who make contact with key informants and identify themselves. Send the questionnaire by email or other means. The steps of data collection are as follows:

Step1: Apply for a data collection and research permit from teachers at Sichuan Colleges of Music.

Step2: Request BTU faculty of Education to write a recommendation letter for the researcher.

Step3: Select a coordinating teacher to assist in coordinating the data collection work of various institutions. These will be used to understand the details of questionnaire management and data collection.

Step 4: After the validity and reliability of the questionnaire are fully controlled and thoroughly checked, data collection will be conducted on the selected samples. The

questionnaire will be sent to the coordinating teacher, who will assist in collecting the selected sample data at the selected music colleges in Sichuan Province.

4. Data Analysis

The software used for data management and analysis will be the SPSS software package, which will be used for descriptive statistics of categorical variables.

(1) Descriptive statistics are used to classify samples and understand their basic properties. Analyze platform teaching management variables using descriptive statistics, percentages, averages, standard deviations, and other methods. Use exploratory factor analysis (EFA) to analyze the elements of platform teaching management.

(2) Frequency and percentage of classified data, cumulative percentage.

(3) The average of trends in interval scale datasets.

(4) The standard deviation (S.D.) of data discretization.

(5) Statistical methods: Based on theoretical analysis, this article combined descriptive statistics, correlation analysis, regression analysis, one-way analysis of variance, structural equation model and other statistical methods, and carried out empirical analysis of the collected data with the help of SPSS statistical software to finally draw relevant conclusions.

5. Research Framework

The conceptual framework of this study is based on the analysis and modeling of factors affecting the effectiveness of platform teaching management in Sichuan music colleges during the period of the novel coronavirus pneumonia epidemic. (see Figure 1)

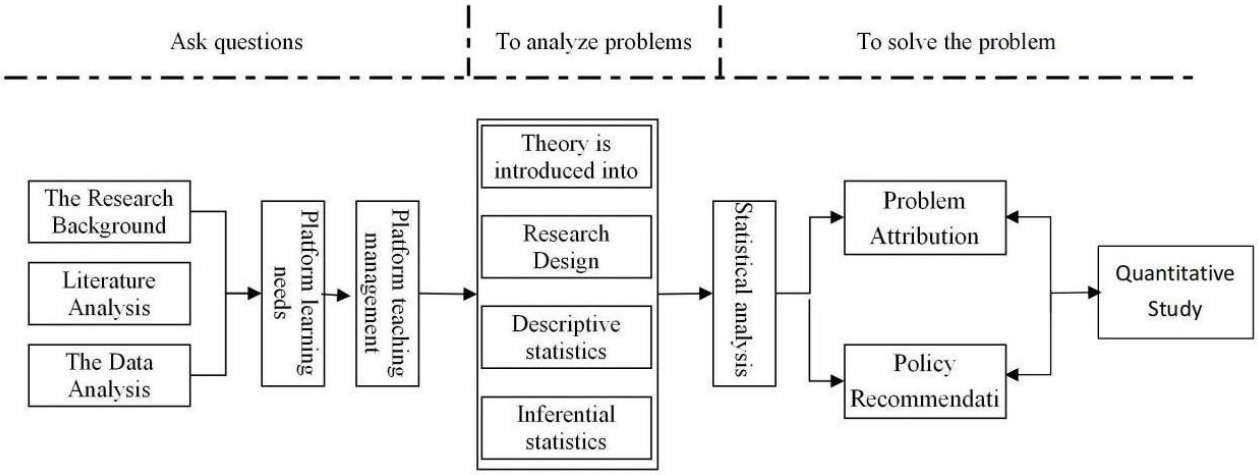

Figure 1 Research framework in the study

Teachers and students initially possess a clear understanding of teaching quality, specifically identifying the most accurate indicators that reflect teaching quality. Subsequently, they can assess and evaluate the overall teaching quality. Numerous factors influence the quality of teaching. However, to ensure practicality and comprehensibility in surveying subjects, this study focuses solely on seven core key factors pertaining to teachers, managers, and students. Based on the theory of education management and the existing research results, this study puts forward an analytical framework for the evaluation of teachers' teaching quality in music education platform and the factors affecting the platform teaching management. This study adopts quantitative research method and adopts questionnaire survey to collect relevant data for quantitative analysis.

6. Research Results

1. Demographic information

After data screening and cleaning, 426 valid samples were obtained, with a sample efficiency of 100%. Firstly, descriptive statistics were conducted on the 426 valid questionnaires collected based on the question items. The results are shown in the table. It can be seen that among the respondents who filled out the questionnaire, 183 were males, accounting for 43%, and 243 were females, accounting for 57%; 120 people under the age of 30, accounting for 28.2%, 115 people aged 31-40, 27%, 115 people aged 41-50, 27%, 70 people aged 51-60, 16.4%, and 6 people aged 60 and above, 1.4%. In terms of professional identity, there are 80 administrative personnel, accounting for 18.8%, 291 teaching personnel, accounting for 68.3%, 17 scientific research personnel, accounting for 4%, and 38 experimental personnel, accounting for 8.9%. The highest educational qualifications of the respondents in this survey were 157 individuals with a bachelor's degree, accounting for 36.9%, 178 individuals with a master's degree, accounting for 41.8%, 52 individuals with a doctoral degree, accounting for 12.2%, two individuals with a postdoctoral degree, accounting for 0.5%, and 37 others, accounting for 8.7%. Among all the interviewees, there were 68 people with professional titles as teaching assistants, accounting for 16%, 130 people with professional titles as lecturers, accounting for 30.5%, 93 people with professional titles as associate professors, accounting for 21.8%, 22 people with professional titles as professors, accounting for 5.2%, and 113 others, accounting for 26.5%.

2. Exploratory factor analysis EFA

(1). KMO-Meyer-Olkin and Bartlett's Table

Table 1: Spherical identification of KMO and Bartlett, and analysis of suitable factors for determining the item

KMO and Bartlett tests		
KMO sample appropriateness measure		0.972
Bartlett sphericity test	Approximate chi-square	43662.522
	Degree of Freedom	3403
	Conspicuousness	0.000

(2). Data Analysis Result on Questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance.

Table 4 analyses the situation of factor extraction and the information amount of factor extraction. It can be seen from Table 4-11 that: A total of 7 factors were extracted from factor analysis, all of which had characteristic root values greater than 1. The variance interpretation rates of these 7 factors after rotation were 17.704%,16.70%,9.702%,9.332%,7.318%,6.446% and 6.353%, respectively, and the cumulative variance interpretation rates after rotation were 73.566%.

Table 2 Shows Data Analysis Result on Questionnaire: Eigenvalues, Percentage of Variance, Percentage of Cumulative Variance

Variance interpretation rate table						
Factor	**Rotational front difference interpretation rate**			**Explanation rate of variance after rotation**		
	Characteristic root	**Variance interpretation rate %**	**Cumulative %**	**Characteristic root**	**Variance interpretation rate %**	**Cumulative %**
1	40.821	49.181	49.181	14.695	17.704	17.704
2	8.517	10.262	59.443	13.868	16.709	34.413
3	3.319	3.999	63.442	8.053	9.702	44.116
4	2.686	3.236	66.678	7.746	9.332	53.448
5	2.217	2.671	69.349	6.074	7.318	60.766
6	1.914	2.306	71.654	5.35	6.446	67.213
7	1.587	1.912	73.566	5.273	6.353	73.566

(3). The factor loading, variables described in each of the main components after rotating the axis.

First, researchers test the applicability of data and models to see whether the models used are reasonable. Referring to the previous research results, the goodness of fit of the research model and data in this paper is tested, and several key indicators are in line with the recommended values, indicating that the overall goodness of fit of the theoretical model in this paper is good, and the model diagram is acceptable.

Table 3 Components of design major education management

Order	Assembly	Number of variables	Factor load	Factor name
1	Component 1	18	0.45-0.822	Course adaptability
2	Component 2	18	0.481-0.816	Examination and evaluation
3	Component 3	13	0.582-0.782	Need
4	Component 4	9	0.571-0.818	Environment
5	Component 5	10	0.475-0.667	Involvement
6	Component 6	7	0.585-0.744	Management
7	Component 7	8	0.555-0.701	Technical support
	All	83		

According to Table 3, there are 7 qualified parts as follows: Component 1 contains 18 variables that describe the component. The coefficient load is between 0.45 and 0.822; Component 2 contains 18 variables, and the load coefficient of the component is between 0.481 and 0.816. Component 3 contains 13 variables describing components with factor loads ranging from 0.582 to 0.782. Component 4 contains 9 variables, describing the load between components and factors ranging from 0.571-0.818; Component 5 contains 10 variables, describing the load between components and factors ranging from 0.475 to 0.665; Component 6 contains 7 variables, describing the load between components and factors ranging from 0.585 to 0.744; Component 7 contains 8 variables, describing the load between components and factors ranging from 0.555 to 0.701; the total number of variables describing these 5 variables is 83 variables, and the factor load ranges from 0.45-0.822.

On the basis of exploratory factor analysis (EFA), the variables were extracted and the key component variables were analyzed to get seven effective components of influencing

factors of platform education management in Sichuan province. Researchers then analyzed the corresponding relationship between variables and Components through the value of Factor load coefficient, excluding factor load below 0.45, and named each Component according to the corresponding relationship between variables and Components.

Table 4 Showed Component 1: Total 18 variables

Variable	Statement	Factor loading
53	The vocal music course has a performance nature that is suitable for the chosen teaching platform	0.822
54	The piano course has a performance nature that is suitable for the chosen teaching platform	0.818
55	The musical instrument course has a performance nature that is suitable for the chosen teaching platform	0.817
45	The course content of the platform is adapted to the needs of music students	0.778
41	The platform teaching model is adapted to the music curriculum	0.77
50	The teaching platform software is suitable for music major course teaching	0.763
57	Through the platform teaching students can truly feel the emotion expressed by music	0.762
48	The selected teaching platform is suitable for music professional courses	0.724
42	The teaching objectives of platform courses are targeted	0.692
46	The content of the curriculum is designed to match the cognitive basis of the students	0.685
44	Your platform teaching skills are suitable for platform courses	0.675
40	Fully understand the situation of students in the teaching design of platform courses	0.653
49	The selected teaching platform is compatible with the number of students attending classes	0.643
43	Your knowledge of the Internet is compatible with the teaching of platform courses	0.638
52	The results-oriented teaching model can be adopted for music students	0.634

Variable	Statement	Factor loading
94	The existing platform teaching software can satisfy the platform teaching of music major courses	0.607
56	The music theory course is adapted to the chosen teaching platform	0.524
47	Students have a sense of loss on the platform teaching of professional courses, thus losing their learning motivation	0.45

Table 5 Showed Component 2: Total 18 variables

Variable	Statement	Factor loading
78	Take the psychological needs of students as the starting point, and actively create a good classroom atmosphere	0.816
77	Do everything from the students, to the development and needs of students	0.812
71	The teaching design conforms to the cognitive law and is innovative	0.809
74	The use of text, charts, images, audio, video and other media forms is appropriate	0.798
75	Using audio and video in line with technical standards, sound and picture synchronization, clear sound	0.79
73	The course teaching ideas are clear, the focus is prominent, the speaking speed is appropriate, and the appeal is strong	0.771
76	Carry out effective online guidance and assessment for students	0.761
72	The teaching mode is suitable for the types of music major courses	0.758
79	Develop an incentive mechanism for students	0.742
80	The teaching management department regularly checks and evaluates the quality of teachers' platform teaching	0.723
81	Eaching management departments organize and carry out platform teaching observation activities to promote the improvement of teachers' platform teaching ability	0.706
82	The teaching management department establishes the evaluation standard of the network platform, and changes the teaching platform which is not suitable for the music major course	0.7

Variable	Statement	Factor loading
70	Platform teaching appearance appropriate appearance, dress code	0.662
69	Go to and from class on time according to class schedule	0.621
68	Enforce strict attendance rules for students	0.584
67	Complete class hours as required	0.571
101	Actively choose the most suitable teaching platform for music professional courses	0.482
102	Subject selection and development of professional courses are carried out for music college students	0.481

Table 6 Showed Component 3: Total 13 variables

Variable	Statement	Factor loading
9	Platform teaching meets the teaching needs of teachers during the epidemic period	0.782
10	Platform teaching can meet the interactive teaching needs between teachers and students	0.744
7	During the epidemic period, platform teaching can solve the dilemma of offline teaching	0.703
8	Platform teaching meets the student-centered demand during the epidemic	0.697
11	Platform teaching during the epidemic is suitable for students majoring in music	0.692
14	During the epidemic period, platform teaching can meet the teaching needs of musical instrument classes	0.673
13	During the epidemic period, platform teaching can meet the teaching needs of piano lessons	0.667
12	During the epidemic period, platform teaching can meet the teaching demand of vocal music class	0.657
16	Platform teaching can meet the personalized learning needs of music majors	0.634
17	Platform teaching can meet the personalized teaching needs of music teachers	0.608
19	Platform teaching provides great convenience for professional music course teaching	0.603
18	Platform teaching can complete the corresponding teaching tasks and teaching plans	0.59

Variable	Statement	Factor loading
15	During the epidemic period, platform teaching can meet the teaching demand of music theory course	0.582

Table 7 Showed Component 4: Total 9 variables

Variable	Statement	Factor loading
61	Facing electronic devices or computer screens for a long time will produce visual fatigue, which will affect the platform teaching management	0.818
60	The stability of the teaching platform and software function will affect the teaching management of the platform	0.808
64	The network delay results in the non-synchronization of sound and picture, pixel blur and timbre distortion, which have an impact on the platform teaching management	0.804
62	The use of electronic equipment and platform software is not skilled enough, which affects the platform teaching management	0.796
63	Platform teaching can not well present the content of some music courses, thus affecting the teaching management	0.778
58	Poor network signal, slow network speed or poor network stability will affect the platform teaching management	0.775
59	Backward network equipment and uneven electronic equipment will affect the platform teaching management	0.739
65	In the platform classroom teaching, the positive classroom environment directly affects the teaching management	0.696
66	In the classroom environment, the number of students attending the class has an impact on the platform teaching management	0.571

Table 8 Showed Component 5: Total 10 variables

Variable	Statement	Factor loading
111	You have adopted online interactive answer anytime	0.667
113	You show patience, care and enthusiasm for students in the platform teaching	0.661
112	You have shown a good degree of openness and openness to students in the platform teaching	0.636

Variable	Statement	Factor loading
108	You attach great importance to the real-time delivery of your courses	0.626
109	You organize online quizzes for students	0.613
110	You can communicate effectively and timely with students in the platform teaching	0.6
114	Students will actively participate in answering your class questions	0.599
105	You will make full use of platform functions to implement platform teaching management	0.52
107	In your platform teaching, you mainly use lecturing + recording and broadcasting	0.492
106	You mainly use lecturing in platform teaching	0.475

Table 9 Showed Component 6: Total 7 variables

Variable	Statement	Factor loading
22	The teaching management department establishes the feedback mechanism of students to the teaching	0.744
20	Your university's teaching management department attaches great importance to platform teaching management	0.701
21	There are teaching supervisors or administrative staff who enter the platform to listen to the teacher	0.69
23	The teaching management department shall establish the feedback mechanism of teachers to the teaching situation	0.668
24	The management responsibilities of the teaching management department are clear	0.658
25	Coordination between management is good	0.597
27	The teaching management department has a clear teaching supervision mechanism	0.585

Table 10 Showed Component 7: Total 8 variables

Variable	Statement	Factor loading
86	You have experience and skills in using online learning platforms	0.701
85	You have attended a special training in the application of information technology	0.698
83	Your institution offers web-based training	0.695
84	Your university has organized a pilot teaching operation of the teacher platform	0.679
87	Your university offers different online teaching platforms for teachers to choose from	0.629
88	In the teaching and training of network platform, you can effectively improve your information technology application ability	0.6
89	In the teaching process of the platform, there are technical personnel to provide timely help and guidance when encountering problems	0.596
90	You can smoothly operate and use the network teaching platform for teaching	0.555

Based on the Exploratory Factor Analysis extract variables to key component variables by analyzing the most likely conditions. The researcher summarized the 7 components as shown in Figure 2.

Structural equation models are widely recognized as important tools for studying observable and latent variables, as well as the relationship between latent variables. Therefore, SPSS PRO was used to analyze and construct a structural equation model for the seven factors in this study.

Table 12: Table of model path coefficients

Factor (latent variable)	→	Analysis item (Manifest Variable)	Nonnormalized coefficient	Standardization coefficient	standard error	Z	P
Technical support	→	Degree of participation	0.479	0.503	0.048	9.916	0.000***
Environment	→	Degree of participation	0.251	0.234	0.039	6.386	0.000***
Course Adaptability	→	Degree of participation	0.216	0.248	0.037	5.812	0.000***

Factor (latent variable)	→	Analysis item (Manifest Variable)	Nonnormalized coefficient	Standardization coefficient	standard error	Z	P
Demand	→	Course Adaptability	0.609	0.535	0.055	11.113	0.000***
Management	→	Course Adaptability	0.215	0.203	0.046	4.664	0.000***
Technical support	→	Course Adaptability	0.328	0.3	0.042	7.83	0.000***
Degree of participation	→	inspection appraisal	0.367	0.438	0.046	8.059	0.000***
Environment	→	inspection appraisal	0.174	0.193	0.031	5.638	0.000***
Management	→	inspection appraisal	0.136	0.175	0.03	4.493	0.000***
Technical support	→	inspection appraisal	0.168	0.209	0.041	4.08	0.000***
Demand	→	Management	0.678	0.629	0.061	11.031	0.000***
Management	→	Technical support	0.667	0.689	0.046	14.457	0.000***
Technical support	→	Environment	0.437	0.492	0.044	10.014	0.000***
Note: ***, ** and * represent significance levels of 1%, 5% and 10% respectively							

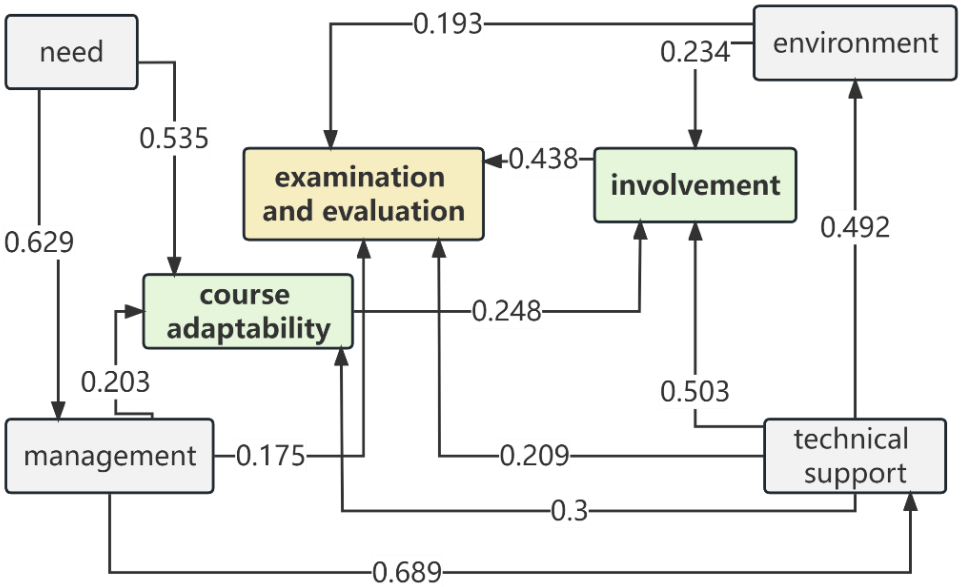

Figure 2 Results of structural equation model

7. Conclusion

1. There are significant differences in the evaluation of platform teaching by music colleges in Sichuan Province among education managers of different genders, ages, and professional identities.

2. There are significant differences in the demand for platform teaching in music colleges in Sichuan Province among education managers of different ages, professional identities, and highest educational qualifications.

3. There are significant differences in the management of platform teaching in music colleges in Sichuan Province among education managers with different professional identities.

4. There is a significant difference in the adaptability of platform teaching in music colleges in Sichuan Province among education managers with different professional identities and the highest academic qualifications.

5. There are significant differences in the environmental factors of platform teaching among education managers of different ages and professional identities in music colleges in Sichuan Province.

6. There are significant differences in the technical support for platform teaching among education managers with different professional identities in music colleges in Sichuan Province.

6. There are significant differences in the participation of music colleges in platform teaching among education managers of different ages and professional identities in Sichuan Province.

8. There is a significant pairwise correlation between the platform teaching needs, management status, platform environment, and technical support of music colleges in Sichuan Province.

8. Discussion

1. Basic characteristics of influencing factors on platform teaching management of music colleges in Sichuan Province.

The study conducted a survey and analysis on factors such as platform teaching needs, management status, platform environment, technical support, course adaptation, and teaching participation, using a self-designed questionnaire that affected the teaching management of music universities in Sichuan Province during the epidemic period. The survey includes information on various dimensions related to assessment and evaluation.

Therefore, this study constructed a model consisting of seven variables: teaching needs, management status, platform environment, technical support, course adaptation, teaching participation, and assessment evaluation for music colleges in Sichuan Province.

2. Analysis of Demographic Statistical Differences in Platform Teaching of Music Colleges in Sichuan Province.

This study compares the differences in platform teaching needs, management status, platform environment, technical support, course adaptation, and teaching participation among educators with different genders, ages, professional identities, and highest professional qualifications in music colleges in Sichuan Province. There is a certain degree of significant difference in gender, age, professional identity, and highest professional education among various dimensions, which indicates the research significance and value of platform teaching needs, management status, platform environment, technical support, course adaptation, and teaching participation in music colleges in Sichuan Province.

There are significant differences in the assessment and evaluation of platform teaching among education managers of different genders in music colleges in Sichuan Province. Women's identification and scores in the assessment and evaluation are significantly higher than those of men; There are significant differences in the assessment and evaluation of platform teaching among education managers of different ages in music colleges in Sichuan Province. The assessment and evaluation scores of respondents under the age of 30 are significantly higher than those of those over the age of 50. There is a significant difference in the assessment and evaluation of platform teaching among educators with different professional identities in music colleges in Sichuan Province, and administrative personnel have a higher recognition of the assessment and evaluation compared to teaching personnel. However, there was no significant difference in the assessment and evaluation of platform teaching among different highest educational qualifications, indicating that educational qualifications had no impact on the assessment and evaluation of platform teaching.

There are significant differences in the demand for platform teaching among educators of different ages in music colleges in Sichuan Province. The demand for platform teaching among respondents under the age of 30 is significantly higher than that of those aged 31 to 40; There are significant differences in the demand for platform teaching in music colleges in Sichuan Province among educators with different professional identities, and administrative personnel have a higher estimate of the demand than teaching personnel; There is a significant difference in the demand for platform teaching in music colleges in Sichuan Province among educators with different highest educational qualifications, and other personnel have a higher

estimate of the demand than those with master's or doctoral degrees. There is no significant gender difference in the demand for platform teaching in music colleges in Sichuan Province.

There are significant differences in the management of platform teaching in music colleges in Sichuan Province among education managers with different professional identities, and administrative personnel have higher requirements for management than teaching personnel. There is no significant difference in the management of platform teaching in music colleges in Sichuan Province in terms of gender, age, and highest education level.

There is no significant difference in the demand for platform teaching among educators of different ages in Sichuan Conservatory of Music; There are significant differences in the teaching needs of music colleges in Sichuan Province among educators with different professional identities, and administrative personnel have a higher estimate of course suitability than teaching personnel; There is a significant difference in the adaptability of courses taught on the platform of music colleges in Sichuan Province among educators with different highest educational qualifications, and undergraduate students have a higher estimation of demand than master's and doctoral students. There is no significant gender difference in the adaptability of platform teaching courses in music colleges in Sichuan Province.

There is no significant difference in the assessment and evaluation of platform teaching among education managers of different genders in music colleges in Sichuan Province. There are significant differences in the environmental factors of platform teaching among education managers of different ages in music colleges in Sichuan Province. The assessment and evaluation scores of respondents under the age of 50 are significantly higher than those of those over the age of 60. There is no significant difference in the evaluation of platform teaching by music colleges in Sichuan Province among educators with different professional identities and highest educational qualifications, indicating that gender, educational background, and professional identity are not related to platform teaching environment factors.

There are significant differences in the technical support for platform teaching among education managers with different professional identities in music colleges in Sichuan Province, and the technical support level of administrative personnel is significantly higher than that of teaching personnel. There was no significant difference between gender, age, and highest education level.

There are significant differences in the participation of music colleges in platform teaching among education managers of different ages and professional identities in Sichuan Province. The participation of people under 30 years old in platform teaching is significantly higher than that of people over 50 years old, and administrative personnel estimate the

participation of platform teaching higher than teaching personnel.

3. Analysis of the influencing factors of platform teaching needs, management status, platform environment, technical support, courseadaptation, teaching participation, and assessment evaluation in music colleges in Sichuan Province.

The correlation coefficients between platform teaching needs, management status, platform environment, and technical support are all positive, and the positive correlation is significant. There is a significant pairwise correlation between the platform teaching needs, management status, platform environment, and technical support of music colleges in Sichuan Province. The demand, management status, and technical support are positively correlated with course adaptation, respectively; Technical support, platform environment, and course adaptation are positively correlated with teaching participation, respectively; The platform environment, management status, technical support, teaching participation are positively correlated with assessment and evaluation;

The demand for platform teaching indirectly affects teaching participation and assessment and evaluation by influencing the current management status and course adaptation. The current management status, technical support, and platform environment have a direct impact on assessment and evaluation, as well as an indirect impact through course adaptation and teaching participation. In summary, the more urgent the demand, the higher the adaptability and participation, the better the environment, the more effective technical support and management, the better the final assessment and evaluation.

This study focuses on the influencing factors of platform teaching in music colleges in Sichuan Province, and believes that platform teaching needs, management status, platform environment, technical support, and course adaptation and teaching participation have important impacts. Course adaptation and teaching participation are related to platform teaching assessment and evaluation.

9. Suggestions

1. Understanding and Exploring the Practical Needs of Music Colleges using Platform Teaching in the Context of the Epidemic.

2. Improving the level of platform teaching management.

3. Technical support for ensuring platform teaching.

4. Creating a Good Platform Teaching Environment.

5. Establish a reasonable platform for teaching assessment and evaluation mechanism.

6. Improving Teaching Participation and Adaptability by Promoting comprehensive Management of Platform Teaching.

10. Limitations and Further Research

Through this study, we can improve the understanding of platform teaching management of music colleges in Sichuan province, formulate measures to evaluate the quality of paltform teaching, and promote the development of platform teaching management in Sichuan province.Honestly, there are still some limitations as follows.

In terms of subject selection, considering human resources, financial resources, and feasibility, it is mainly concentrated in music colleges in Sichuan. The results and conclusions of this study are limited. If further research and comparative studies are conducted in other provinces, it will better understand the effectiveness and satisfaction of professional platform teaching in music colleges.

Secondly, this study mainly focuses on the factors that affect the platform teaching of music colleges in Sichuan Province, and only seven main factors have been extracted. However, there are many factors that affect the satisfaction and effectiveness of platform teaching, and they cannot be fully included in this study. This study only analyzed the relationship between demand, management, environment, technical support, adaptability, participation, and evaluation. In future research, more extensive and in-depth exploration should be conducted on the influencing factors and mechanisms of action.

The purpose of this study is to provide a constructive analysis of the influencing factors of platform teaching in music colleges in Sichuan Province, and to provide a model of influencing factors and relevant suggestions. However, the research results are still relatively limited and can only provide a theoretical basis. This suggestion has not been validated in practical applications.

For further suggestions, Sichuan Music colleges can take the following management suggestions to better use the network platform for teaching and improve the teaching effect:

1. Provide comprehensive technical support: ensure that students and teachers do not encounter technical problems when using the network platform. Provide training and technical support to teachers to ensure that they are proficient in using online teaching tools and platforms.

2. Make a detailed teaching plan: Make a clear teaching plan, including the teaching objectives, teaching content, teaching methods and evaluation methods of each class. Make sure that both teachers and students are clear about the schedule and requirements of each class.

3. Choose the right online teaching tools: Choose the right online tools and platforms for music teaching, such as video conferencing tools, online homework submission systems, and music production software. Ensure that the tools meet the needs of music instruction and are easy to use and operate.

4. Provide diverse teaching resources: establish an online library of teaching resources, including music textbooks, music scores, audio and video resources, etc. Ensure that students can easily access and use these resources to support their learning.

5. Encourage interaction and collaboration: Encourage interaction and collaboration among students through online discussions, group assignments, and collaborative projects. Promote communication and learning among students and improve their learning outcomes.

6. Regular evaluation and feedback: regularly evaluate the teaching effect and collect feedback from students and teachers. According to the evaluation results and feedback, adjust and improve the teaching methods and content in time to improve the teaching effect.

7. Strengthen student management: establish an online student management system, including student information management, course arrangement and score management. Ensure that students can easily view and manage their learning progress and grades.

8. Strengthen communication with parents: Strengthen communication and cooperation with parents through online parent meetings, parent information platforms and parent feedback systems. Inform the parents of the students' learning situation and performance in a timely manner, and solicit their opinions and suggestions.

Through the above management suggestions, Sichuan music colleges can make better use of the network platform for teaching, improve the teaching effect, and provide better music education services.

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