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# Exploring Trends in Piano Education and Music Literacy Across China From 20th and 21st Century

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## Abstract:

Music, a pervasive form of communication, shapes culture and cognition. China saw major social, economic, and cultural transformations throughout the 20th and 21st centuries. Piano instruction and music literacy have been affected by the shift. Despite improvements in Chinese piano instruction, there is little research. This study examines piano education and music literacy in Guangdong, China, from the 20th to the 21st century. To explore the main factors and issues that have affected piano training and musical literacy in this region. Furthermore, it examines the challenges and opportunities of piano training and musical literacy in Guangdong, China. This study uses quantitative questionnaires to understand this ever-changing market. Guangdong educational institutions received 230 survey questionnaires. The data was examined using SPSS. The study suggests that music literacy education is essential to preserving and promoting Guangdong's cultural legacy, especially its historical music. Preserving and propagating Guangdong's rich cultural and musical tradition requires music education. It was also crucial to ensure that Guangdong's local government's creative development initiative targeted top art schools.

**Keywords:** Trends of Piano Education, Trends of Musical Literacy, 20th and 21st centuries, Guangdong Province of China, Quantitative Questionnaire

## Introduction

Piano instruction is a creative and skilled practice deeply influenced by regional and environmental factors. In the early 20th century, Chinese piano training was dominated by Western teaching theories, with many Chinese pianists pursuing Western instruction (Wei et al., 2023). Historically, Western missionary Matthieu Ricci introduced the piano to the Ming Emperor, and the instrument subsequently reached Guangdong via the Maritime Silk Road. This established Guangdong as a significant hub for piano manufacturing and trade, influenced by both its coastal location and government policies. China's economic development and technological advancements have since elevated the global recognition of Chinese piano art, resulting in widespread "piano fever."

Piano culture and interdisciplinary growth are closely linked to piano education, which traditionally contributes to personal and community development. Piano lessons blend cultural, academic, and social elements, potentially accelerating the spread of Chinese culture and fostering cultural understanding. The diverse cultural influences have led to unique forms of piano art, enriched by China's five-thousand-year-old heritage.

Over the past 40 years, China has prioritized modernization, institutionalization, and standardization in music education through reforms (Xing, 2020). Comprehensive development in China encompasses economic, cultural, and religious aspects, with political, social, economic, curricular, and value changes impacting musical education (Chen, 2021). Current generations aim to preserve and expand Chinese culture (Okasaki & Makino, 2021).

Guangdong Province, with its geographical advantages and rich resources, integrates ancient and modern elements to create a unique cultural landscape. The province's socio-political pressures and economic changes have significantly influenced piano instruction and music literacy from the 20th to the 21st century. Guangdong has become a center for local and international piano exchanges, attracting top players and fostering Chinese piano creativity.

Chinese piano education has focused on standardization and modernist approaches over the last four decades, despite being influenced by political, social, and economic factors. Traditional Chinese music, with its rich heritage, has significantly impacted Chinese piano music. China's economic and technological growth has brought Chinese piano art to global attention. Guangdong's socio-political and

economic changes have shaped piano study instructions across China, highlighting the intricate relationship between historical trends, social changes, and musical advancement.

## **Literature review**

### *2.1 History of piano education in China*

Chinese piano instruction began in the 19th century when Christian missionaries introduced the piano to China, particularly in Guangdong Province. In the early 20th century, formal piano instruction was established in music schools and conservatories. However, the Chinese Civil War and the Cultural Revolution interrupted this progress. After the Cultural Revolution, the government invested in music education, leading to a resurgence in piano instruction. Today, millions of Chinese children and adults play the piano, making it a popular instrument.

Yang's (2007) study discusses Western classical piano culture in postwar Asia, highlighting the expansion of Western piano instruction in China in the 20th century. This growth was supported by economic, cultural, and technological advancements, as evidenced by the achievements of Asian contest winners and graduates from prestigious institutions. The study suggests strategies for Asia to establish itself as a prominent hub for piano tradition, examining educational programs, societal norms, and the representation of Asians in influential music organizations. The globalization of Chinese music has significantly impacted piano teaching in China. Lam (2008) explores how Western piano culture influenced Chinese music, noting the dominant position of Western sounds in China. Many Chinese individuals, having received music education, develop a strong appreciation for music and pursue further education or careers in music. Guangdong Province has emerged as a hub for Chinese music culture, although Lam's research does not specifically analyze piano education trends in the province. Huang and Thibodeaux (2016) examine Chinese piano instruction and its transcultural and transhistorical connections. They highlight the development of piano education in China and the importance of understanding cultural variations in music education. Their study sheds light on the challenges and prospects of piano instruction in Guangdong, which has a diverse population. Zhang (2022) discusses the cultural contradictions in post-colonial Chinese piano pedagogy, noting the influence of Western approaches and the challenges of translation and cultural competence. While Zhang's research does not focus on Guangdong specifically, it addresses broader issues in Chinese piano education.

In the current times, Guangdong remains a renowned center for piano education, supported by government initiatives and private sector growth. The province has embraced technological advancements, allowing for online learning and global connections. Key developments include early childhood music education, a focus on creativity and improvisation, and the rise of adult piano study. The China Shenzhen International Piano Concerto Competition exemplifies Guangdong's commitment to nurturing young talent and maintaining its leadership in piano education.

### *2.2 Trends in music literacy and piano education in China*

Digital technology has permeated our daily lives and music education in the 21st century. In piano education, technology seamlessly blends sophisticated melodies into the learning process, changing how students practice, play, and interact with the instrument. Chen and Zeng (2022) discuss digital physical education instruction using enhanced sensing technology. According to their research, smart sensor technologies improve physical education by giving youngsters rapid feedback and evaluation. While not about piano instruction, the piece examines how technology might enhance music education. Advanced sensors monitor piano students' development and give technique criticism. The system may track pupils' progress and highlight areas for improvement, revolutionizing piano training. Chen and Zeng (2022) study intelligent sensing technologies in physical education to forecast future trends. Even though their discoveries are not limited to pianos, they have great potential for piano instruction. Technology preserves and promotes Guangdong's piano tradition beyond individual study. Jia and Tsai (2023) note that Guangdong pianists shaped Chinese piano music. Technology helps preserve their work, tell their tales, and inspire future generations. Virtual performance, interactive archives, and online platforms may link students to past and present expertise. Jia and Tsai (2023) studied Guangdong piano players and music. Their research shows that Guangdong pianists are enhancing Chinese piano music via training and performance.

### *2.3 Trends in music literacy in China*

Recent shifts in piano instruction have prioritized music literacy over technical proficiency, with teachers incorporating sight-reading, ear-training, music games, and technology into their pedagogy. Gong

(2018) highlights the pivotal role of Japan in introducing Western music to China, influencing the development of music education and piano pedagogy. The Japanese emphasis on music literacy, exemplified by the Suzuki method, has significantly impacted Chinese piano instruction, leading to an increase in music literacy in the 21st century. Guan (2023) critiques the centralized management of Chinese college and university music education, arguing for decentralization to enhance local autonomy and promote music literacy. Guan suggests that institutional improvements and a focus on student learning and creativity are essential for music education reform. Meng and Goopy (2023) emphasize the importance of teacher training in music literacy, noting that current programs prioritize theory over practice, leaving early-career teachers unprepared. They advocate for a curriculum that integrates active learning, hands-on activities, and technology to better prepare music teachers. In contrast, pipa instruction in Guizhou Province has traditionally emphasized memorization over understanding, hindering music literacy. Yang and Karin (2021) propose a revised curriculum that prioritizes comprehension, aiming to improve music literacy. The evolution of piano teaching, influenced by historical factors, technological advancements, and pedagogical developments, holds significant potential. By reinventing pedagogy, training instructors, and adopting new approaches, piano teaching can achieve both technical excellence and student enjoyment. Fostering music literacy among young learners enables them to contribute to the global music tradition as talented pianists, enthusiasts, and lifelong learners.

## **Research Methodology**

### **3.1 Research Design**

The study used descriptive quantitative design for the research on the trajectory of the development of piano education and music literacy in Guangdong province, China from the 20th to 21st century. The design implemented both quantitative data collection approaches in order to reach a rich and fuller perception of the phenomenon. The quantitative aspect included the administration of questionnaires - to students, teachers or parents. The survey is entailed the collection of information including music lessons access, social economic adeptness and student experiences. Quantitative data enables drawing broad generalizations regarding piano learning or teaching in the region.

### **3.2 Participants**

A combination of simple random sampling and purposive sampling methods was employed. These sampling techniques sought to ensure the selection of representative academic institutions and participants. A simple random sample gave each member of the population within Guangdong an equal opportunity for choice, providing unbiased representation. Further, sample size determination procedures were used to broaden the sample size for statistical significance. Determining the sample size followed a systematic procedure to attain optimal and meaningful information. Simple random sampling guarantees everyone within the population has an equal opportunity to be selected. Hence, it is imperative that the sample accurately reflects the population. Purposive sampling is a method of participant selection that involves choosing individuals based on predetermined criteria. The research used purposive sampling to establish institutions involved in piano education and music literacy, piano institutions, music schools, and cultural centers. The participants in the study were eighty piano teachers and one hundred and fifty students in Guangdong province. The teachers were recruited from various settings, including public schools, private music schools, and conservatories. The students are recruited from a variety of ages and skill levels.

### **3.3 Instrument**

A questionnaire was created to gather quantitative data from fifty instructors and one hundred students. Participants' demographics, piano education experiences, and music literacy views were included in the questionnaire. The questionnaire was carefully orchestrated distribution to ensure that our research symphony appropriately represented Guangdong's piano education landscape's different voices. We targeted the proper audience, gave clear instructions, allowed flexibility, and stressed ethics. Due to this rigor and inclusion, our data analysis yielded valuable insights and informed our knowledge of piano teaching in this bustling Chinese region. Distribution involved the selected individuals received the expert-developed questionnaire. Contacting piano instructors and students in Guangdong province's public, private, and conservatories was necessary. Also, guidelines with clear instructions accompany the questionnaire to help individuals complete it. Procedures ensured response uniformity and standardization (Senados, 2023).

### **3.4 Data analysis**

Qualitative data analysis was conducted using (computer-assisted) content analysis, in which specific themes were assigned codes and inserted into SPSS version 28 to produce figures and accurate statistics. Inferential statistics focusing on correlation analysis and regression analysis are also presented (Gogtay et al., 2017). This chapter presents diagnostic test data with a focus on normality, multicollinearity, and homogeneity. This chapter also presents results based on statistical model fit, including regression analysis by variable and the general (standard) model. The results of the moderation effects analysis are also presented using moderated multivariate regression analysis, both with stepwise techniques and with the general (standard) model. Finally, the results of hypothesis testing are also captured and discussed.

**Research Findings**

**4.1 Response rate**

The study targeted piano teachers and students at educational institutions in Guangdong province, China. The response rate is the proportion of respondents whose questionnaires were completed and returned (Stedman et al., 2019). This was calculated as the number of respondents whose questionnaires were completed and returned divided by the total number of respondents in the sample, including non-respondents. Two hundred and thirty (230) study questionnaires were distributed to educational institutions across Guangdong province, China.

Two hundred mailed and self-completed questionnaires were completed correctly out of 230 distributed, resulting in a response rate of 86.95%. The reason was that some respondents refused to answer the questions. This is illustrated in Table 1. The response rate is representative and sufficient to allow conclusive analysis and generalization of research results. Stedman et al. (2019) state that a higher response rate indicates a more representative sample. This means the people who responded are similar to the population you were trying to reach. A low response rate can bias results in favor of those more likely to respond. For example, your overall impression will be skewed if you conduct a customer satisfaction survey and only get responses from highly dissatisfied customers.

This is also consistent with the postulate of Hendra and Hill (2019), who stated that a response rate of 50% or more in social sciences is considered satisfactory. According to Berk (2012), a response rate of 75% is sufficient to analyze and draw inferences and conclusions about a population. Similarly, according to Kothari (2012), a response rate of 50% should be considered normal, a 60 to 70% rate should be considered adequate, and a rate above 70% should be considered an exception.

**Table 1: Instrument Response Rate**

| Item                                | Frequency | Percentage |
|-------------------------------------|-----------|------------|
| Distributed Questionnaires          | 230       | 100.00     |
| Completed & Returned Questionnaires | 200       | 86.95      |
| Unreturned Questionnaires           | 30        | 13.05      |

**4.2 Basic information of participants**

The study targeted piano teachers and students at educational institutions in Guangdong province, China. The response rate is the proportion of respondents whose questionnaires were completed and returned (Stedman et al., 2019). This was calculated as the number of respondents whose questionnaires were completed and returned divided by the total number of respondents in the sample, including non-respondents. Two hundred and thirty (230) study questionnaires were distributed to educational institutions across Guangdong province, China.

Two hundred mailed and self-completed questionnaires were completed correctly out of 230 distributed, resulting in a response rate of 86.95%. The reason was that some respondents refused to answer the

questions. This is illustrated in Table 2. The response rate is representative and sufficient to allow conclusive analysis and generalization of research results. Stedman et al. (2019) state that a higher response rate indicates a more representative sample. This means the people who responded are similar to the population you were trying to reach. A low response rate can bias results in favor of those more likely to respond. For example, your overall impression will be skewed if you conduct a customer satisfaction survey and only get responses from highly dissatisfied customers.

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**Table 2: Instrument Response Rate**

| Item                                | Frequency | Percentage |
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**4.3 Correlation Analysis**

According to Schober et al. (2018), correlation coefficients allow a researcher to evaluate the strength of a linear link between two or more variables. The degree of relatedness between variables is measured by correlation (Gogtay et al., 2017). The measure of how closely two variables is related is called correlation. The Pearson Correlation (the Pearson Product Moment Correlation or PPMC) is the most commonly used statistical measure of correlation, depicting the linear relationship between two variables. There are several correlation measures to choose from, and the one you choose is mostly determined by the amount of data you're looking at. Spearman's rank correlation (r) can be used to examine the degree of relationship between two continuous variables for ordinal-level or ranked data. The Pearson product-moment correlation coefficient r necessitates at least an interval level of data observation (Gogtay et al., 2017).

According to Daoud (2017), correlation is utilized to investigate the link between variables, which aids in multicollinearity testing. When the correlation coefficients are not near 1 or -1, the components involved do not adequately measure the different variables (Daoud, 2017). The direction and strength of a linear association (relationship) between two variables are summarized numerically by correlation coefficients. The range of Pearson correlation coefficients (r) is -1 to +1. The symbol at the front specifies whether the association (relationship) is positive or negative. The magnitude of the absolute value gives insight into the relationship's strength. A rating of 0 indicates that the variables are independent, meaning there is no relationship between them.

In contrast, a value of +1 indicates a perfect positive correlation, and a value of -1 indicates a perfect negative correlation (Schober et al., 2018). As poised by Rubin and Babbie (2008), the value [size] of the absolute value indicates the degree [strength] of correlation whereby (r = .1 to .29 Low; r = .30 to .49 Moderate; r = .5 to 1.0 Large). For this investigation, Pearson product-moment correlation was used to determine the strength and direction of the linear relationship between the independent and dependent variables, and the results are summarized in Table 4.49.

The first correlation was done to determine whether historical evolution significantly impacted piano education in Guangdong, China. The results in Table 3 show a significant relationship (r = 0.345, p<0.05) between the variables. Therefore, the Pearson product correlation of historical evolution and the impact of piano education was found to be low positive and statistically significant. This shows that an increase in historical evolution practices would lead to a high impact on piano education. The study also sought to determine the influence of cultural, political, and economic factors on the effect of piano education in Guangdong, China. The correlation results in Table 3 indicate a significant relationship (r = 0.362, p ≤ 0.05) between the variables. The Pearson product correlation of cultural, political, and

economic factors and their impact on piano education was also low, positive, and statistically significant. This shows that increased artistic, political, and economic factors would greatly impact piano education in Guangdong, China.

It was also essential to determine whether there was a relationship between challenges and opportunities and the impact of piano education. The correlation analysis in Table 3 indicates that there was indeed a significant relationship ( $r = 0.582, p \leq 0.05$ ) between the variables. The Pearson product correlation of challenges and opportunities and the impact of piano education were also found to be medium positive and statistically significant. Therefore, this also shows that increasing challenges and opportunities for practice would have a medium impact on piano education in Guangdong, China. Lastly, a correlation was done to determine the influence of recommendations on the effects of piano education in Guangdong, China. The results in Table 3 show a significant relationship ( $r = 0.364, p < 0.05$ ) between the variables. Therefore, the Pearson product correlation of recommendations and the impact of piano education was very low, positive, and statistically significant. This shows that increased recommendation practices would positively impact piano education in Guangdong, China.

**Table 3: Pearson Product-Moment Correlations Between Study Variables**

|                              | Historical Evolution | Cultural, and Factors | Political, Economic | Challenges and Opportunities | Recommendations | Impact of Piano Education |
|------------------------------|----------------------|-----------------------|---------------------|------------------------------|-----------------|---------------------------|
| Historical Evolution         | Pearson Correlation  |                       |                     |                              |                 |                           |
|                              | Sig. (2-tailed)      |                       |                     |                              |                 |                           |
|                              | N                    |                       |                     |                              |                 |                           |
| Cultural, and Factors        | Political, Economic  | Pearson Correlation   | .393**              | 1                            |                 |                           |
|                              |                      | Sig. (2-tailed)       | .000                |                              |                 |                           |
|                              |                      | N                     | 200                 | 200                          |                 |                           |
| Challenges and Opportunities |                      | Pearson Correlation   | .214**              | .235**                       | 1               |                           |
|                              |                      | Sig. (2-tailed)       | .002                | .001                         |                 |                           |
|                              |                      | N                     | 200                 | 200                          | 200             |                           |
| Recommendations              |                      | Pearson Correlation   | .124                | .174*                        | .201**          | 1                         |
|                              |                      | Sig. (2-tailed)       | .080                | .014                         | .004            |                           |
|                              |                      | N                     | 200                 | 200                          | 200             | 200                       |
| Impact of Piano Education    |                      | Pearson Correlation   | .345**              | .362**                       | .582**          | .364**                    |
|                              |                      | Sig. (2-tailed)       | .000                | .000                         | .000            | .000                      |
|                              |                      | N                     | 200                 | 200                          | 200             | 200                       |

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
 \* . Correlation is significant at the 0.05 level (2-tailed).

4.4 Regression Analysis

The study used multiple regression analysis to determine the significance of the relationship between the pooled dependent and independent variables. This analysis explained how the independent variables influenced the dependent. The results are presented in Table 4. The results in Table 4 suggested that the value obtained for Pearson’s Model Correlation Coefficient (R) is  $r = 0.780a$  was high. This indicated that the model improved when variables were added to determine the determinants of the impacts of piano education in Guangdong, China. The adjusted r-square value of  $r = 0.562$  also suggests that the regression model could explain approximately 56% of the changes in the dependent variable. The ANOVA test results on the dependent and independent variables are summarized in Table 4.

**Table 4: Multiple Linear Regression Analysis Model Summary**

| Model | R     | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------|----------|-------------------|----------------------------|
| 1     | .780a | .562     | .551              | .879                       |

a. Predictors: (Constant), Recommendations, Historical Evolution, Challenges and Opportunities, Cultural, Political and Economic Factors

The results of Table 5 indicated a significant relationship between the independent variables and the dependent variable ( $F = 41.911$ ;  $df = 4, 195, 199$ ;  $p = 0.000$ ). These findings validated the one suggested in Table 5, thus implying that historical evolution, cultural, political, and economic factors, challenges and opportunities, and recommendation practices were significant in determining the impact of piano education in Guangdong, China. The beta value was used to assess the importance of the independent variables used in the model, and the results are summarized in Table 5.

**Table 5: Summary of ANOVA Results**

| Model |            | Sum of Squares | df  | Mean Square | F      | Sig.  |
|-------|------------|----------------|-----|-------------|--------|-------|
| 1     | Regression | 101.700        | 4   | 25.425      | 41.911 | .000b |
|       | Residual   | 118.295        | 195 | .607        |        |       |
|       | Total      | 219.995        | 199 |             |        |       |

a. Dependent Variable: Impact of Piano Education  
 b. Predictors: (Constant), Recommendations, Historical Evolution, Challenges and Opportunities, Cultural, Political and Economic Factors

The results in Table 6 indicated that challenges and opportunities were the model's most important variable ( $\beta = 0.467$ ). This was followed by recommendations ( $\beta = 0.224$ ), then historical evolution ( $\beta = 0.157$ ), and cultural, political, and economic factors ( $\beta = 0.152$ ) respectively. These beta values indicated that the dependent variable, that is, the impact of piano education in Guangdong, China, would change by a corresponding number of standard deviations as a result of changes in the standard deviations of the respective variables. Thus, the resulting linear regression model was:  $Y$  (Impact of Piano Education)  $= 0.652$  (Constant)  $+ (0.209)$  (Historical Evolution)  $+ 0.167$  (Cultural, Political and Economic Factors)  $+ 0.628$  (Challenges and Opportunities)  $+ 0.187$  (Recommendations).

**Table 6: Overall Significance of Test Results**

| Model | Unstandardized Coefficients |            | t | Sig. |
|-------|-----------------------------|------------|---|------|
|       | B                           | Std. Error |   |      |
|       | Standardized Coefficients   |            |   |      |
|       | Beta                        |            |   |      |

|   |   |       |      |      |        |      |
|---|---|-------|------|------|--------|------|
| 1 | (Constant)                                | -.652 | .399 |      | -1.633 | .104 |
|   | Historical Evolution                      | .209  | .077 | .157 | 2.725  | .007 |
|   | Cultural, Political, and Economic Factors | .167  | .064 | .152 | 2.607  | .010 |
|   | Challenges and Opportunities              | .628  | .074 | .467 | 8.456  | .000 |
|   | Recommendations                           | .187  | .045 | .224 | 4.133  | .000 |

Dependent Variable: Impact of Piano Education

**Discussion**

The research uncovers substantial historical development in piano teaching in Guangdong during the 20th century, reflecting wider patterns in Chinese piano education (Collado, 2023). Although there have been improvements in piano production and an increase in the market, the emphasis in teaching techniques and goals still on technical skill rather than musical expression and cultural growth which is in accordance with the findings of Wang et al. (2023) . The evolution of piano music in Guangdong has been shaped by cultural and political reasons, resulting in its emergence as a prominent hub for piano study and instruction which has also been emphasized by Atherton et al. (2018). The results are consistent with Guo et al. (2020) which highlights that music literacy education is essential for the preservation and propagation of Guangdong's cultural legacy encompassing its musical traditions. The piano music in Guangxi and Guangdong has similarities that highlight the region's national cultural connections and modern attributes. Integrating indigenous musical themes into piano works highlights the significance of presenting the distinct cultural character of the location. The implementation of government programs and initiatives, such as the "China Reform and Development Program," has strengthened piano instruction in Guangdong, resulting in a significant rise in the number of piano students throughout the country.

**Conclusion**

The report emphasizes that although there have been improvements in piano production and the market, teaching approaches continue to prioritize technical skill, disregarding the importance of musicality and cultural enrichment. Training programs that focus on exams and technology promote certificates and rewards above the appreciation of aesthetics. The growth of Chinese piano schools was greatly impacted by Western traditions. The implementation of economic reforms in Guangdong has expedited the expansion of piano instruction, resulting in increased affordability of pianos. Contemporary Chinese music education places a strong emphasis on traditional and ethnic cultural elements. The inclusion of Western classical music in piano training is of utmost importance for the preservation and development of cultural identity. In Guangdong, piano instructors place a high emphasis on fostering creativity, originality, and improvisation, prioritizing these aspects above technical proficiency. Additionally, they include the practice of memorizing into their instructional methods.

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