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# The Role of Music Psychology Theory in Shaping Students' Ability to Express Emotions in Music Performance Education

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**SUMMARY:** *This study investigates the influence of music psychology theory on students' emotional expression abilities and identifies key theoretical principles that can enhance the effectiveness of music education in China. Employing a survey-based research design, the study analysed 298 valid questionnaires collected from undergraduate and graduate students enrolled in two major national music conservatories. The findings reveal that equipping students with foundational knowledge of psychology and developing their cognitive understanding significantly enhances their emotional expressiveness in musical performance. Students who received instruction grounded in music psychology theory demonstrated higher levels of emotional expression compared to those who did not. Moreover, the results highlight the mediating role of music performance education in the relationship between music psychology education and students' emotional expressiveness, as well as its direct impact on emotional performance outcomes. Additionally, student engagement was found to serve as a mediator influencing the connection between music psychology education and emotional expression ability. The study contributes to advancing pedagogical strategies in music education by integrating psychological theory to foster deeper emotional communication through performance.*

***KEYWORDS:*** *Music Psychology; Emotional Expression; Music Education in China; Student Engagement; Music Performance Education*

## 1 Introduction

Essentially, music as a discipline has been developed with the aim to better express emotions, thoughts and identities [1]. Although in the contemporary music, there are other core features that are observed for evaluating the quality and proficiency of a musician, the ability to communicate emotions in a faithful manner is still the most defining feature of a music artist [2]. As a result, [3] have stated that music is the language of emotions, as in this discipline the artists learnt to encode their thoughts and then use the expressive storytelling process to communicate their blisses, griefs and hopes. While engaging in the emotional expression process, musicians get an opportunity for a therapeutic outlet, as they could better exhaust their inner stress, anxiety and frustrations and realise better psychological balance through emotional healing [4].

As a result of the significance that emotions held in the music discipline, music psychology has emerged as a vital subject, thought in the music schools that not only enhanced the performance quality of professionals engaged in the field [5], but also [6] are of the view that music psychology has been playing a pivotal role in the emotional development and better self-

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awareness of the performer. In particular, [7] have pointed out that in the Western parts of the world, the pedagogical strategy usually placed greater emphasis on music psychology and cognitive development, as the core belief in such countries is that mastery in musical psychology could result in better cognitive development and greater confidence. Such developments are ensured along with technical mastery and precision. However, [8] are of the view that in countries like China, the pedagogical approach usually ensured repertoire standards, and greater significance is placed on technical mastery and precision. As a result of the globalisation drive, the emergence of multinational music conservatories in China, and the greater popularity that Western music has been gaining across China, the situations are, however, changing [9]. In the changing dynamics across the country, music conservatories are placing greater significance on emotional expressiveness, and music psychology has been emerging as a newly emerging discipline that has been assuming a central place in the pedagogical goals across the country [10].

Music psychology theory has been largely developed in the Western part of the world, which scientifically elaborates the process through which music influences human thoughts, emotions and ultimate behaviour [11]. It could be termed both an art and a science, as the discipline is an elaborate model woven in human experiences that also enjoys empirical backing [12]. Music psychology theory has attracted greater precedence, as it not only enhances students' motivation and creativity, but also the understanding of theoretical models helps students to engage in more effective emotional expression as a professional [13]. In particular, [14] are of the view that music psychology theory helped students develop capabilities that translate into better perceiving, processing and expressing emotions through musical sounds. However, at the national level, Chinese music education has been lacking the desired focus on music psychology theories, which in turn have been affecting students' cognitive development and emotional expression capabilities. As China has been pursuing a policy of educational modernisation, the inclusion of music psychological theory could play a pivotal role in music education, as such could ensure emotionally authentic performance.

Although music psychology theory and its inclusion in music education offered a range of advantages, there are significant sociocultural and contextual differences between China and other parts of the world. Most of the theories and models thought in the discipline have been developed in diverse Western countries that could have a limited relevance with the Chinese context. Furthermore, music psychology is closely linked with appreciation of aesthetics, while, unlike other parts of the world, Chinese aesthetics are deeply rooted in the Confucian, Daoist, and Buddhist philosophies. This in turn may warrant significant adaptation and localisation of the music psychology theories so that the Chinese music performers are better able to express their inner feelings and thoughts.

This study aims to analyse the educational potential of music psychology theory in enhancing the emotional expressiveness of Chinese music students. The research thus helped in examining the impact of music psychology theory on students' abilities to express emotion while also identifying the most important principles of music psychology theories that could be included in music education in China.

# 2 Material and Methods

## 2.1 Research Design

The findings regarding the educational potential of music psychology theory in enhancing the emotional expressiveness of Chinese music students are based on quantitative correlational analysis. A range of psychological theories and models in the areas of emotional intelligence,

empathy and affective awareness have been considered in this study to analyse how development of students' knowledge base in such theories could enhance Chinese students' ability to express their music emotions in a clearer and more coherent manner. The research design has been adopted in the current research, as it could help in presenting empirical evidence regarding psychological and emotional performance variables through the application of a range of statistical methods. As the research design permitted the use of quantitative tools and techniques, the findings of the study are more objective in nature, ensuring a high degree of validity, reliability and generalisation. For this purpose, the following research framework has been constructed for the study.

## 2.2 Research Framework

A research framework has been established that could be used to analyse the range of independent, mediating and dependent variables. In the present study, the key mediating variable is student engagement that affects the relationships between the dependent and independent variables. Two key independent variables that affect the emotional expression abilities of students in the present study are music psychology theory and music performance education. The major dependent variable in the present study is the emotional expression ability of students in music. Different variables of this study and their interrelations have been graphically presented in the following Figure 1:

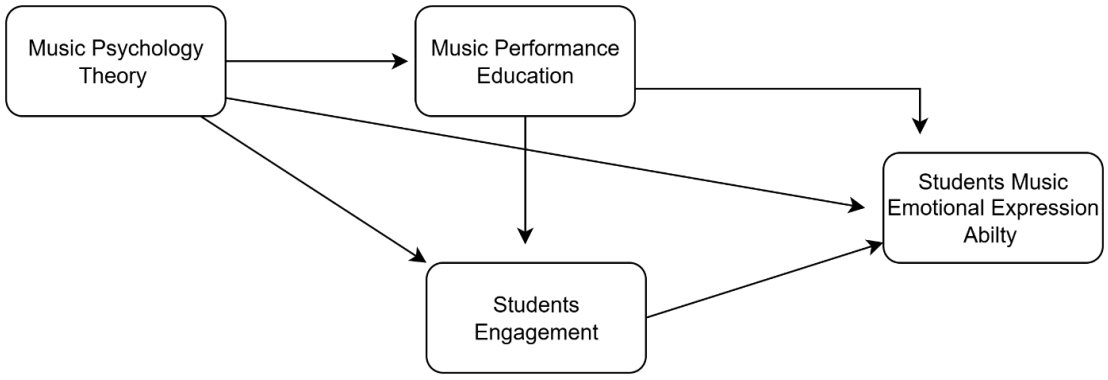


*Figure 1: Research Framework*

## 2.3 Survey Research

A structured questionnaire has been designed in this study, which helped in the collection of a range of information from the participants of the study. The questionnaire had different sections, whereas the first section of the questionnaire aimed to collect demographic data from the participants of the study. The second part of the study collected emotional expressiveness in music, for which the scale developed by [15] has been used, which was based on the Geneva Emotional Music Scale (GEMS-25), slightly modified to suit the Chinese context [16]. Furthermore, the study also used an emotional intelligence scale developed by [17] that contains 20 Likert scale items.

## 2.4 Population and Sample

Data collection for the present study has been executed from a representative sample of the target population. For this purpose, the core sample for the present study has been chosen, which includes graduate and undergraduate students who are majoring in music. Students from two major music universities have been selected for the study, which include Beijing Central

Conservatory of Music and Wuhan Conservatory of Music. The participants of the study have been chosen using a stratified sampling procedure, as a total of 350 questionnaires in total were distributed. Through the stratified sampling procedure, the research ensured that equal representation of students specialising in piano, string, wind, and vocal could be ensured. However, considering the validity and reliability dynamics, those questionnaires that were filled in full were considered for the analysis in this study. Thus, the findings of the study are based on the 298 valid responses that were complete in all aspects. Before conducting the survey, prior permission had been obtained from the relevant authorities of the ethical committees of the two institutions. The questionnaires were distributed physically, whereas full anonymity and confidentiality of the participants have been ensured throughout the research.

## 2.5 Data Analysis Process

For analysing the educational potential of music psychology theory in enhancing the emotional expressiveness of Chinese music students, a range of different statistical tools and techniques were considered. This includes descriptive statistics, as some of the data in the study have been analysed using mean, frequency distribution, and standard deviation. Furthermore, a range of inferential statistical tools have been utilised in the study. This includes Pearson's correlation analysis that helped in analysing the bivariate correlation between key variables. In addition, the study also used multiple regression analysis for testing and establishing the predictive powers of expressive abilities of students. The following formula has been adopted for finding out the Pearson correlation coefficient.

$$r = \frac{\sum_{i=1}^{n}(X_i - \bar{X})(Y_i - \bar{Y})}{\sqrt{\sum_{i=1}^{n}(X_i - \bar{X})^2 \sum_{i=1}^{n}(Y_i - \bar{Y})^2}}$$

In the above formula, Xi and Yi are paired data points, and $\bar{X}$ and $\bar{Y}$ are means of X and Y. Situations where r = +1 denote perfect positive correlations, where r = -1 denotes perfect negative correlations, while r = 0 denotes no linear correlations.

Furthermore, the study also adopted the 'one-way ANOVA' statistical analysis with the aim of examining group differences. For the sake of study, gender differences have been examined through the 'one-way ANOVA' analysis model to analyse how gender differences affect emotional expressiveness. The following formula has been adopted for the sake of one-way ANOVA calculation:

$$F = \frac{MS_{between}}{MS_{within}}$$

where:

- $MS_{between} = \frac{SS_{between}}{k-1}$
- $MS_{within} = \frac{SS_{within}}{N-k}$

and:

- $SS_{between} = \sum_{i=1}^{k} n_i(\bar{X}_i - \bar{X})^2$
- $SS_{within} = \sum_{i=1}^{k} \sum_{j=1}^{n_i}(X_{ij} - \bar{X}_i)^2$

In the above formula, k is the number of groups in the models, n is the sample size in the group, n is the total sample size, Xi is the mean of group i, and X is the overall mean, while Xij is the j-th observation of group i.

# 3 Results

## 3.1 Descriptive Analysis of Demographic Factors

The following Table 1 summarises the key demographic factors of the participants of the current study:

*Table 1: Summary of the Key Demographics of the Study*

| Description | Sub-Category | Frequency | Percentage |
|---|---|---|---|
| Gender | Male | 152 | 51% |
| | Female | 146 | 49% |
| Age Group | 18 to 20 | 138 | 46.3% |
| | 21 to 25 | 102 | 34.2% |
| | 26 Plus | 58 | 19.5% |
| Academic Level | Undergraduate | 178 | 59.74% |
| | Graduate | 120 | 40.26% |

Using the stratified sampling strategy, this research study ensured almost equal representation of different groups, who shared diverse demographic characteristics. This is evident from the analysis of Table 1, which demonstrates that almost half of the representation is shared by male and female. On the other hand, in terms of age group, participants in the age bracket 18 to 20 years emerged as the largest group, as 46% of the participants of the study belong to this age group. On the other hand, 34% of the participants of the study were in the age bracket 21 to 25 years, while 19.5% of the participants of the study were 26 years or older. Furthermore, in terms of education, about 60% of the participants were undergraduate students, while 40% of the participants of the study were graduate students. The equal representation of the participants sharing diverse demographic backgrounds denotes sample adequacy and improved inferential statistical analysis, which in turn could contribute to better validity and reliability of this research.

## 3.2 Descriptive Analysis of the Core Variables

The descriptive analysis of the core variables identified in Figure 1 has been elaborated in the following Table 2:

*Table 2: Descriptive Analysis of the Key Variables*

| Variable | Mean | Standard Deviation | Description |
|---|---|---|---|
| Music Performance Education | 3.94 | 0.59 | High |
| Students Engagement | 4.10 | 0.61 | High |
| Music Psychology Theory | 4.18 | 0.58 | High |
| Emotional Express Ability | 4.05 | 0.62 | High |

From the analysis of Table 2, it is very evident that the mean value of all four variables has been not only very consistent, but also the major variables' mean, except music performance education, has been calculated above 4.0. This in turn demonstrates that all four variables are

well integrated. Student emotional expression abilities are positively influenced by music performance theory, student performance education and student engagement. Table 2 data has been graphically analysed in the following Figure 2:

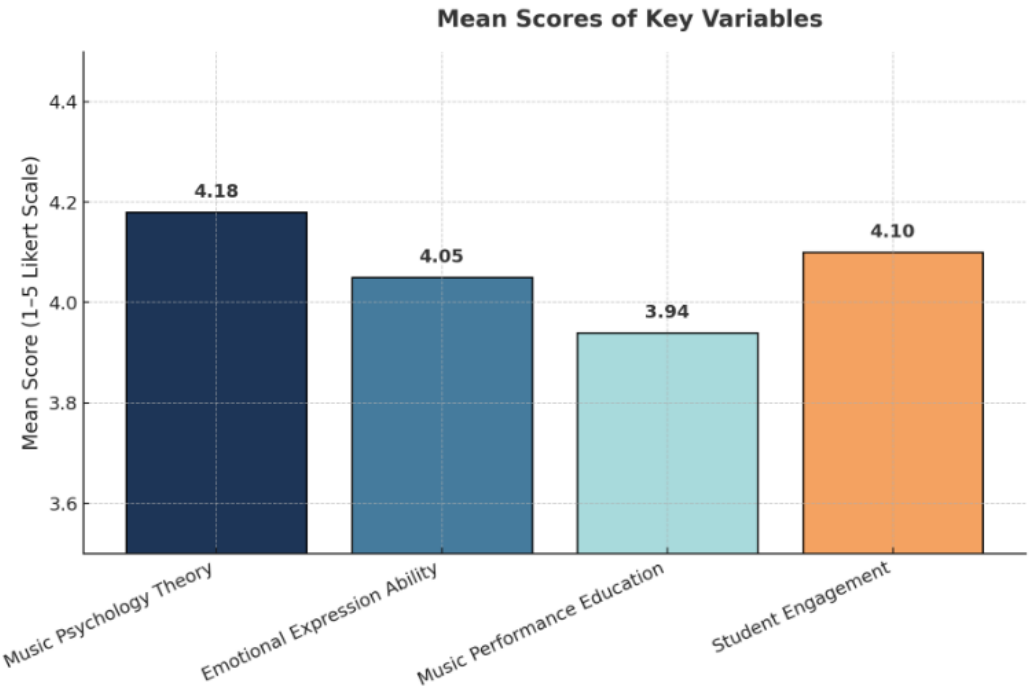


*Figure 2: Mean Score of Key Variables*

As exhibited in Figure 2, in situations where the desired focus in the pedagogical approach is placed on the music performance theory, student performance education and student engagement, students in such institutions could develop positive attitudes and capabilities to express their emotions while performing different music skills. A closer relational analysis between the four key constructs of the current study could, however, be ascertained through Pearson correlation analysis, which has been conducted in the following:

## 3.3 Pearson Correlations Analysis

The Pearson correlation coefficients have been calculated with the aim to analyse the relationship between different variables that have been presented in Figure 1 above. The analysis in this regard has been summarised in the following Table 3:

*Table 3: Pearson Correlations Analysis*

| Description | Music Psychology Theory | Emotional Expression Ability | Music Performance Education | Students Engagement |
|---|---|---|---|---|
| Music Psychology Theory | 1 | 0.622** | 0.552** | 0.598** |
| Emotional Expression Ability | 0.622** | 1 | 0.679** | 0.641** |
| Music Performance Education | 0.552** | 0.679** | 1 | 0.623** |
| Students Engagement | 0.598** | 0.641** | 0.623** | 1 |

The careful analysis of Table 3 could reveal that all four variables analysed as part of the research framework in the current study are significantly and positively correlated. Although

significant positive correlations could be witnessed in the case of all four variables, of particular significance in this regard are knowledge and development in terms of music psychology theory. The participants of the study who have studied music psychological theory have been showing a positive relationship with the emotional expression ability. This is evident from the coefficient r, which in this case is 0.622, while the p-value is <0.01.

## 3.4 Regression Analysis

Regression analysis has been conducted in this study with the aim of analysing the extent to which music psychology theory and music performance education could be used to predict changes in the emotional expression abilities of students. For this sake multiple regression analysis has been conducted, the results of which have been summarised in the following Table 4:

*Table 4: Regression Analysis*

| Predictive Variable | B | Std Error | B | t | Sig. |
|---|---|---|---|---|---|
| Constant | 1.213 | 0.182 | - | 6.52 | 0.000 |
| Music Psychology Theory | 0.351 | 0.061 | 0.396 | 5.91 | 0.000 |
| Music Performance Education | 0.281 | 0.058 | 0.339 | 4.69 | 0.000 |
| Student Engagement | 0.211 | 0.052 | 0.259 | 3.94 | 0.001 |
| **$R^2 = 0.624$, Adjusted $R^2 = 0.618$, $F(3,294) = 53.21$, $p < 0.001$** | | | | | |

From the multiple regression analysis summarised in the above Table 3, it is very evident that the core construct, including music psychology theory, music performance education and student engagement, are the collective predictors of changes in the students' emotional expression abilities. From the $R^2$ value, calculated and exhibited in the above Table 4, it is evident that about 62.4% of the variance in the emotional expression capabilities of students is due to the three stated variables. Although the three key variables have an influence in this regard, music psychology theory has the strongest impact in this regard, which is evident from the $\beta = 0.392$, $p < 0.001$.

## 3.5 One-Way ANOVA: Gender Differences in Emotional Expressivity

As there could be gender differences that could affect students' emotional expression ability while performing music, one-way ANOVA could be computed. In this regard, in the following Table 5, first the analysis of emotional expression ability scores amongst males and females has been analysed.

*Table 5: Gender Differences in Emotional Expressivity*

| Gender | N | Mean | Standard Deviation |
|---|---|---|---|
| Male | 152 | 3.98 | 0.62 |
| Female | 146 | 4.22 | 0.55 |

From the analysis of the above table, one could see that, unlike their male counterparts, the female participants of the study have reported a relatively higher degree of emotional expressivity. This is evident from the mean score, which is 3.98 for males; however, this mean average for female participants of the study is 4.22. Thus, gender-based variation could be found in terms of emotional expression. A more detailed view regarding the gender differences could, however, be established through computation of ANOVA, which has been presented in the following Table 6:

*Table 6: One-Way ANOVA: Gender Differences in Emotional Expressivity*

| Description | Sum of Square | Df | Mean Square | F | Significance |
|---|---|---|---|---|---|
| Between Group | 2.582 | 2 | 1.093 | 3.177 | 0.41* |
| Within Groups | 138.78 | 409 | 0.340 | | |
| Total | 141.62 | 411 | | | |

From the analysis of the above table, one could see that the ANOVA results are F = 0.177, p = 0.043, which denotes that the results have significant statistical differences on the basis of gender groups. The findings of the current study thus stressed that gender has been playing a moderating role in shaping the emotional expressivity of the Chinese music students.

# 4 Discussions

As per the core findings of this study, development of the student's knowledge capabilities and equipping students with basic knowledge and understanding of psychology could significantly boost the student's emotional expression abilities in Chinese music education at the graduate and undergraduate levels. This study found that Chinese students who have gone through the music psychology theory have been able to more effectively express their emotions than the students who have not witnessed the pedagogies in this regard. Although the study also found that there are two other variables that are accounting for the changes in the emotional expression capabilities of the Chinese students, as a total of 62.40% of the total changes in the emotional expression abilities have been noted due to the three variables; however, in this regard, music psychology theory has resulted as the strongest factor that explains the major changes in the expressive performance outcomes.

From the findings of the study, one could thus establish a viewpoint that the psychological insights that the Chinese music students are developing by undertaking music psychology theory are able to establish the desired foundation that could help them in their professional music performance, as they could more effectively express their feelings and emotional state.

In addition, the findings of the current study also stressed the mediating role of music performance education in mediating the relations between music psychology education and emotional expression abilities, besides also having a direct impact on the emotional expression abilities of students. As per the questionnaire used in this study, there are three key areas that account for the music performance education of Chinese music students, which include emotional intelligence, expressive skills, and empathy.

In Chinese music education, these three core skills are developed as part of the music performance skills. Students who master these skills are better able to express their emotions in a clearer and more consistent manner. Emotional development is the most essential aspect of student performance education, as students who are better able to regulate their emotions are able to ensure the desired emotional expression capabilities. Similarly, empathy is the second most important affective enabler of student performance in education, where the desired emotions are effectively encoded and projected towards the audience. Additionally, student expressive skills are the other important variable of student performance education that ensure the desired behaviour modification. In a situation where the technical capabilities of music students are properly backed by expressive skills, this could lead towards greater control over dynamics and effective articulation that accounts for better emotional expression abilities of students. The findings if the study are in line with the findings of [18] who have also stressed the role of these variables in affecting emotional expression abilities.

Furthermore, this study also found that student engagement plays a mediating role in affecting the relations between music psychology theory and the Chinese student emotional expression ability. Considering the findings of the study, it is thus vital that the teachers who are designing and executing pedagogies for the music education in the country pay closer attention to student engagement, as the students who are more engaged could truly witness the blessings and cognitive development associated with music psychology theory and in turn witness the development in terms of better emotional expression abilities. The findings of the study underscore the vital role of student engagement, as student engagement assumed the role of a psychological bridge that connects theoretical knowledge with practical expression abilities. Additionally, from the findings of the study, it is also very clear that students who are emotionally engaged could more effectively internalise the core theories and models that they acquire in the music psychology discipline. The findings of the current study are thus in line with the flow theory of [19], as the flow theory stressed that optimal learning took place when students had deeper emotional engagement and greater concentration on artistic activities .

# 5 Conclusion

This research analysed the impact of music psychology theory on students' abilities to express emotion, while the research also identifies the most important principles of music psychology theories that could be stressed in ensuring music education in China's effectiveness. The findings within the research are based on the survey research, where 298 valid questionnaires have been analysed in the study. The core participants of the study are the graduate and undergraduate music students, who are studying in the two major music conservatories of the country. As per the core findings of the study, development of the student's knowledge capabilities and equipping students with basic knowledge and understanding of psychology could significantly boost student emotional expression abilities of the student enrolled in the Chinese music education at the graduate and undergraduate levels. This study found that Chinese students who have gone through the music psychology theory have been able to more effectively express their emotions than the students who have not witnessed the pedagogies in this regard. In addition, the findings of the current study also stressed the mediating role of music performance education in mediating the relations between music psychology education and emotional expression abilities, besides also having a direct impact on the emotional expression abilities of students. Furthermore, this study also found that student engagement plays a mediating role in affecting the relations between music psychology theory and the Chinese student emotional expression ability.

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# Author's Profile

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