

# A Study on Chinese Students' Aesthetic Experience and Musical Creativity

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## Abstract

The inclusion of aesthetic experience as the independent variable, learning attitude and self-efficacy as mediating variables, and musical creativity as the dependent variable in the study of Chinese music majors is deemed critical as it sheds light on the intricate relationship between these factors. Aesthetic experience is considered a crucial factor in the development of musical creativity as it can shape one's learning attitudes and self-efficacy. By examining the mediating role of learning attitudes and self-efficacy in the relationship between aesthetic experience and musical creativity, this study provides valuable insights into the process by which musical creativity is fostered among music majors. The results of this study have the potential to contribute to the advancement of the current understanding of the interplay between aesthetic experience, learning attitudes, self-efficacy, and musical creativity in the development of musical talent.

This study employed the questionnaire survey method and analyzed the data from 778 valid samples. The findings of this study indicate a positive correlation between students' understanding of aesthetics and their complete aesthetic experience and learning attitude. Furthermore, students' aesthetic attitude, understanding of aesthetics, and overall experience were found to have a positive impact on their musical creativity, with learning attitude serving as a mediating factor between the three. Based on these findings, the following recommendations are proposed: 1) Cultivating students' aesthetic attitudes and understanding of aesthetics to enhance their belief in creative thinking; 2) improving students' creative intention to increase their aesthetic pleasure; 3) enhancing students' creative ability to promote a more complete aesthetic experience; 4) strengthening students' belief in their creative thinking and products to improve

their creative performance; and 5) encouraging teachers to foster positive learning attitudes among students.

**Keywords:** Aesthetic experience; Learning attitude; Self-efficacy; Musical creativity

## Introduction

Creativity is widely recognized as a valuable asset and resource for both a country and its people. According to Shahab et al. (2018), a nation without creativity may not be equipped to navigate future challenges. Creativity plays a crucial role in individuals' adaptation to the world and future development and is considered to be a core competency for today's youth (Guilford, 2017). As such, fostering creativity among students has become a focal point of future education initiatives, and the study of creativity education has emerged as a topic of significant interest among scholars (Henriksen et al., 2018). In the realm of art education, art is viewed as a means to an end, rather than an end in and of itself. The goal of art education is to enhance creativity in the creative process, regardless of its ultimate application (Camic et al., 2018). If children are able to gain a higher level of creativity through their aesthetic experiences and apply it to their lives and careers, then the purpose of art education has been achieved.

At present, there is no clear consensus within the academic community regarding the overall impact of musical creativity, and the factors that effectively enhance musical creativity have yet to be definitively established (Odena, 2018). The cultivation of musical creativity is approached from a variety of perspectives and methods by different scholars. Bačlija et al. (2022) prioritize student involvement in the creation of music, guiding students through a step-by-step process from experimentation to participation to continuously improve their musical creativity. Barrett and Limb (2019) emphasize the importance of student engagement, enjoyment, and musical creation. Louie (2018) found that high-quality music students tend to effectively link musical theory, knowledge, and creativity. This study posits that the most direct factor affecting musical creativity is the student's experience. Experienced individuals have the drive and mindset to control their behavior and interpret their experiences through their own perspectives, experience arises from the continuous practice and creation. This study suggests that aesthetic experience plays a significant role, based on the characteristics of art students.

Aesthetic experience is divided into two words: aesthetic and experiential. Aesthetics is the process of perception, appreciation, judgment and creation of aesthetics, experience is the process from existence to non-existence, from contact to practice to reflection. It's a complete re-engagement and re-practice process. Zhang (2015), Zhang and Xiao (2016) studied the influence of aesthetic experience and creativity in detail, but the relevant research is still very limited, and neither the scope of influence nor the mechanism of action has been clarified. Therefore, how to better improve the musical creativity of music majors is a problem that contemporary art colleges need to solve.

The authors Kim and Park (2021) analyzed the formation of learning attitudes through the lens of creativity and posited that learning attitudes are shaped by scientific value and applied science. They proposed a model of five stages: compliance, adaptation, identification, choice, and internalization, with the ultimate outcome being internalization of what has been learned and expression of it in innovative forms. It is suggested that learning attitudes represent a tendency towards exploration, evaluation, reflection, and improvement in the context of new things and environments. Chmelarova et al. (2020) studied the impact of school environment on students' learning attitudes from a motivational perspective, highlighting that different environments can lead to different cognitive experiences, which in turn shape students' learning attitudes. Finally, Ramdani et al. (2022) explored the cultivation of learning attitudes, proposing the stimulation of learning interest and guidance to foster correct understanding of the meaning of scientific learning. This article posits that a sense of achievement, both in comparison to others and in acquiring knowledge and solving problems independently, plays a crucial role in stimulating students' motivation to learn, improve, and create new knowledge. From the perspectives of creativity, influence, and self-cultivation, it is suggested that learning attitudes are elicited by certain events, experiences, or stimuli, leading to an enhancement of such attitudes. This, in turn, is reflected in substantive innovation and other behaviors. Therefore, the authors posit that aesthetic experience has a direct impact on learning attitudes, which can then lead to improved musical creativity through the path of self-efficacy.

The attitudes towards learning are influenced by the competitive pressures from the surrounding environment. This relationship arises from the comparison with others, competition, and the continuous improvement of self-pursuit of goals. The sense of achievement elicits students' eagerness for success, augments their successful experience, and enhances their confidence for the next step. Consequently, experience, as one of the fundamental abilities, is of

utmost importance. The research objective of this paper is to investigate the relationship between students' aesthetic experience and musical creativity, as well as the relationship between students' aesthetic experience and learning attitudes. The study aims to examine if the continuous accumulation and linear growth of aesthetic experience can effectively enhance students' mastery of their abilities and prompt them to strive for higher levels, and whether the accumulation of aesthetic experience can enhance the enthusiasm and accuracy of learning attitudes.

The relationship between aesthetic experience and self-efficacy is another focus of this study. As individuals continuously accumulate and enhance their aesthetic experience, it leads to the formation of a personal and unique aesthetic experience. This in turn increases an individual's confidence in the control of their behavior, thereby increasing the success rate of their actions. Thus, the objective of the third research aim is to examine the relationship between students' aesthetic experience and self-efficacy.

The enhancement of one's ability to comprehend the success of behavior can be attributed to the impact of aesthetic experience on both learning attitude and self-efficacy. The fourth objective of this study is to examine the correlation between students' self-efficacy and musical creativity. Additionally, the fifth aim of this research is to investigate the relationship between students' learning attitude and musical creativity. It is postulated that an increase in aesthetic experience may result in an emergence of musical creativity through the cultivation of self-efficacy.

In conclusion, this study highlights the importance of aesthetic experience in promoting a positive learning attitude and enhancing self-efficacy. The cumulative effect of these three factors leads to a qualitative shift in musical creativity, which is a more orderly and sustained improvement as opposed to a mere temporary surge. This research aimed to investigate the mediating role of learning attitudes and self-efficacy between aesthetic experience and musical creativity. The results support the hypotheses that both learning attitudes and self-efficacy play a mediating role between aesthetic experience and musical creativity.

## Literature Review

### **The influence of aesthetic experience on musical creativity**

The concept of musical creativity encompasses the capability to produce original, distinctive, relevant, and valuable musical compositions within the realm of music. Polymeropoulou

(2018) defines musical creativity as such. According to Schiller and Snell (2004), aesthetic education in schools provides students with opportunities to immerse themselves in aesthetic experiences. Furthermore, Dewey and Authentic (1938) assert in their book “Experience and Education” that direct experiences form the foundation of all educational methods, and education should provide students with tangible and purposeful situations. Experience is deemed to be the most valuable aspect of education, with aesthetic experience playing a crucial role in the release of creativity.

The study of aesthetics pertains to the examination of the intricacies, wealth, and immediacy of human experiences. According to Fenner (2003), aesthetics is deeply entwined with the everyday life of individuals, and the act of appreciating art involves the establishment of connections that originate from creativity. The appreciation of art is an internal process that involves the assimilation of what is being observed into one’s self, thereby transforming the individual through the exposure to works of art. Savaş et al. (2021) posit that this transformation takes place both in the creation and viewing of works of art and that it stimulates everyday creativity through the engagement of one's curiosity, vigilance, and contemplation of multiple possibilities (Hagman, 2010). These lived experiences in conjunction with everyday creativity contribute to the enjoyment of art, making it a creatively rich and meaningful experience.

It has been postulated that an individual's appreciation for aesthetics and their attraction to the carriers of aesthetic understanding can evoke feelings of happiness and result in a profound impact on the objects of appreciation, thereby fostering creativity. The enjoyment of such experiences can have a positive impact on one’s aesthetic appreciation (Runco & Beghetto, 2019). Acceptance of diverse cultures and ideas, as well as the ability to identify the positive aspects and value in negative experiences, can broaden one’s perspective and stimulate personal creativity (Runco & Beghetto, 2019). According to Schiller and Snell (2004), school aesthetic education, which is often infused with aesthetic experiences, is an educational activity that teaches students and enables them to share and discuss beauty with others. Recalling past experiences with beauty can also deepen one’s appreciation and foster related images in the mind during the creative process (Schiller & Snell, 2004). The acquisition of students’ aesthetic experience has been noted to have a positive impact on their creativity as well (Redies, 2015). Thus, it is inferred that the acquisition and accumulation of students’ aesthetic experiences has a positive effect on their creativity. This forms the underlying assumption for the following research:

H1: Aesthetic experience positively affects musical creativity

### **The influence of aesthetic experience on learning attitude**

The concept of music learning attitude refers to the disposition of the learner towards music appreciation education, which can either be positive or negative and can influence their learning behavior towards music. The stability of this attitude is maintained over time. However, the utilization of diverse teaching methods and techniques by educators can foster a positive attitude towards music learning in students, thereby impacting their lifelong love for music. In recent years, researchers have been exploring the correlation between changes in music learning attitude and other variables by utilizing various teaching concepts and methods.

The Stimulus–Organism–Response (SOR) theory suggests that S stimuli, or the individual's response to aesthetic perception, can be considered as varying experiences among students. These stimuli originate both internally within the individual and externally. The O in the theory represents the psychological structure and processes within the organism, and the formation of attitudes occurs in this stage. In this light, the present study posits that aesthetic experience has a normative impact on the learning attitude of students. This forms the underlying assumption for the following research:

H2: Students' aesthetic experience has a positive impact on students' learning attitude.

### **The influence of students' aesthetic experience on self-efficacy**

Civitarese (2017) presented a cognitive model interpretation of aesthetic experience in his book, "Aesthetic Experience". According to Civitarese, aesthetic experience is the outcome of a psychologically prepared viewer's encounter with an aesthetically appealing object. The contemplation of the object in question acts as an integrated mode of consciousness, facilitating distinction through analysis and cognitive processes. This contemplation and interest in the object leads to an absorption and internalization of beauty, resulting in a unique aesthetic experience. The past visual arts experiences, memories of other experiences, and contemplative skills developed by the individual serve as the foundation for the aesthetic experience. These elements allow the individual to access and express a part of the infinite potential of the object, fostering confidence in the subconscious. Ultimately, aesthetic experience exists in the perception of the viewer.

The researchers Van de Cruys et al. (2021) investigated the relationship between aesthetic experience and learning outcomes, and discovered that aesthetic experience not only affects learning outcomes but also impacts learners' self-efficacy beliefs related to further exploration. They found that appreciation of aesthetically pleasing objects, absorption through meditation, and the confidence gained from the experience contributes to self-efficacy. Additionally, exposure to diverse cultures and ideas with a positive attitude towards beauty can broaden the vision and experiences of students, leading to enhanced creative beliefs. Furthermore, understanding the concepts expressed by aesthetically pleasing objects and being able to recognize subtle elements boosts students' confidence in their understanding and creativity. Finally, recall of past beautiful experiences or frequent contemplation of related beautiful things while creating can increase confidence in the creation process.

From a self-efficacy perspective, Bandura (1994) and Foster et al. (2015) posit that a wealth of experiences and self-confidence are crucial determinants of self-efficacy. They emphasize that experience precedes self-efficacy, and highlight that an individual's self-efficacy is positively correlated with the extent of their personal experience within a specific domain. The accumulation of aesthetic experience, as evidenced by the academic research of Chang and Jaisook (2020), is posited to have a positive impact on an individual's self-efficacy. Thus, this study infers that students' aesthetic experience has a positive effect on their self-efficacy. This forms the underlying assumption for the following research:

H3: Students' aesthetic experience has a positive impact on self-efficacy

### **The influence of learning attitude on musical creativity**

The capacity for music majors in colleges and universities to foster creativity in music composition is contingent on the quality of their music knowledge and skills. A sound knowledge structure is crucial and must possess the attributes of practicality, distinctiveness, and stability. The greater the cumulative quantity of knowledge, the more propitious it becomes to quickly generate novel concepts and ideas, nonetheless, the rationality of the structure (quality) of knowledge and skills is deemed to be of equal significance to the absolute quantity (quantity). Creativity in music composition is often elicited by connections or similarities between musical elements and interdisciplinary fields, which necessitates a substantial and diverse pool of knowledge and skills.

The SOR theory posits that the internal psychological structure and process of the organism, referred to as O, influences the formation of attitude. In the context of music learning,

the student's learning attitude is a result of this internal structure and process, and thus has an impact on the student's response, represented by R. Consequently, this study postulates that the learning attitude plays a role in shaping musical creativity. This forms the underlying assumption for the following research:

H4: Students' learning attitude has a positive impact on musical creativity.

### **The influence of students' self-efficacy on creativity**

Haase, et al. (2018) conducted a study that utilized Bandura's (1986) self-efficacy theory to investigate the relationship between self-efficacy and organizational innovation behavior. They integrated Amabile's (1983) creativity theory, positing that self-efficacy refers to an individual's self-perception and assessment of their ability to produce outcomes. The findings of the study indicated that self-efficacy had a stronger explanatory power for employees' creative performance compared to work self-efficacy.

According to the theories of self-affirmation and creative affirmation, psychologists propose that self-affirmation and creative affirmation exercises are highly effective in promoting individual well-being and creativity. As posited by Amabile (1996), the most important predictor of success is not one's inherent ability, but rather one's belief in their ability to succeed. In order to increase self-affirmation, individuals should reflect on their past successes, positive traits and characteristics. By believing in their own creativity, individuals can begin to value their own creative abilities and make efforts to actualize them. Furthermore, to enhance their beliefs about creativity, individuals should understand that creativity is the result of both motivation and hard work, and that it requires significant investment to be substantial. The idea that beliefs can become self-fulfilling prophecies further supports the importance of cultivating a positive and self-affirming mindset (Bandura, 1986).

The impact of students' beliefs regarding their own creativity on the development of creativity has been widely acknowledged. Numerous studies have established a positive correlation between students' self-efficacy and their creative performance or creative outputs (Wang, 2019; Tierney & Farmer, 2002). When faced with challenges, students who possess a strong belief in their ability to generate creative solutions tend to experience an enhancement of their self-efficacy in creative thinking. This, in turn, stimulates the generation of more innovative ideas. Furthermore, students who believe in their capability to create original and captivating works tend to exhibit greater confidence in their creative abilities and are more likely to display



their creativity. When resilient in the face of criticism and not discouraged by external limitations, students are free to develop their creativity without restrictions, thus highlighting the positive impact of self-efficacy on creativity. The following hypotheses are proposed based on these observations:

H5: Students' self-efficacy has a positive impact on creativity.

### **The Mediating Effect of Students' Learning Attitude Between Aesthetic Experience and Musical Creativity**

According to the Stimulus-Organism-Response (SOR) theory, the stimuli (S) represent the individual's responses to their experiences of aesthetic perception, both internal and external. The internal psychological structure and process of the organism (O) forms the individual's attitude, which ultimately affects their response (R). In this context, musical creativity can be considered an external behavior, as it encompasses thoughts, beliefs, feelings, and actions. Therefore, this study hypothesizes that students' aesthetic experiences will have an indirect impact on their musical creativity, through their learning attitudes as shaped by the SOR theory (Shao, 2021). The following hypotheses are proposed based on these observations:

H6: Students' learning attitude plays a mediating role between aesthetic experience and musical creativity.

### **The mediating effect of students' self-efficacy on the relationship between aesthetic experience and creativity**

Lin (2009) asserts that aesthetic experience is not a passive phenomenon, but rather, it has the potential to activate and facilitate creative processes. This notion emphasizes that aesthetic experience is an actively acquired phenomenon, where an individual's openness and active acceptance of the experience determines its effectiveness. The aesthetic experience can broaden one's cognitive and emotional perspectives, alleviate emotional constraints, and reinforce personal convictions, thus fostering the capacity to face new challenges and harness them into proactive creativity. In other words, to reap the benefits of aesthetic experience, individuals must proactively and receptively engage with it, and repeated experiences can build confidence and inspire novel or divergent ideas that can potentially fuel proactive creativity.

According to the viewpoint of social cognitive theory on self-regulation, self-efficacy holds a crucial central role in the self-regulation system. It acts as an intermediary mechanism between individual cognitive experience and behavioral performance (Bandura, 1986; 1994).

The present study postulates that self-efficacy serves as an intermediary mechanism in mediating the relationship between aesthetic experience and creative behavior. Previous research has established a link between self-efficacy and creative behavior (Chen et al., 2018; Wang, 2019). Furthermore, the self-regulation theory of social cognitive perspective regards self-efficacy as a central component of the self-regulation system and suggests that it serves as a mediator between cognitive experience and behavioral performance (Bandura, 1986; 1994).

Additionally, the aesthetic experience, which is a result of an individual's cognitive process, may also be influenced by self-efficacy. Reybrouck et al. (2018) posit that aesthetic courses can enhance students' aesthetic experience, which in turn can trigger intrinsic motivation and self-belief, thereby strengthening learners' daily imagination. Aesthetic experience can be seen as a process of absorbing, accumulating and internalizing the beauty that individuals witness through aesthetic pleasure, aesthetic attitude, understanding of beauty, and complete experience. This process can enhance personal creative thinking, creative outcomes, and the confidence to resist negative feedback and embrace challenges, thereby furthering personal creativity. Scholars concur that aesthetic experience develops personal creativity through the individual's self-efficacy (Lin, 2009; Redies, 2015).

In conclusion, the study posits that the relationship between aesthetic experience and creativity may be mediated by self-efficacy. The hypothesis is as follows:

H7: Students' aesthetic experience can have an indirect impact on creativity through the mediating effect of self-efficacy.

## Research Framework

The present study is founded on the S-O-R learning theory put forward by Watson and Rayner (1920). This theory posits that motivation arises as a result of external stimuli, with a particular emphasis placed on the role of reinforcement in explaining the causal relationship between motivation and behavior. Both classical and operant conditioning theories concur that reinforcement is a crucial component in the formation and reinforcement of learned responses (Arora, 1982). Based on the S-O-R learning theory, it is believed that musical majors' exposure to

different aesthetic experiences in the course of their regular studies will elicit a series of internal psychological structures and processes, resulting in the formation of subjective learning attitudes and self-efficacy, which in turn will elicit a musically creative response. This constitutes a theoretical model that posits the causal sequence of aesthetic experience (S stimulus) leading to the formation of learning attitude/self-efficacy (O organism), which then elicits a musically creative response (R response).

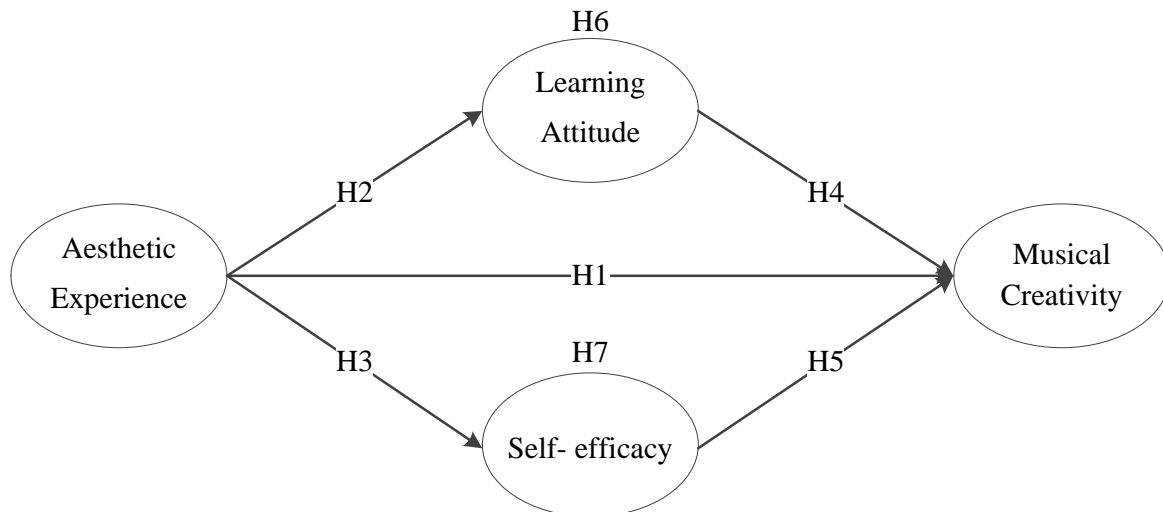


Fig.1 Research framework

## Research Methodology

### Research Tools

1. Aesthetic experience: This study utilizes a modified version of the aesthetic experience scale designed by Zhang and Xiao (2016). Specifically, the researchers have adapted the scale to suit the characteristics of music majors by modifying certain sentences and words in some measurement items. The dimensions of the aesthetic experience scale were thus established, consisting of 21 measurement items across four dimensions. The data was collected using a Likert-style five-point scale, with higher scores indicating a higher level of aesthetic experience in the students.

2. Learning Attitude: The learning attitude scale of Capar and Tarim (2015) was adopted for this study, with modifications made to some of the measurement items to align with the characteristics of the research participants, who were music majors. The resulting scale consisted of three dimensions and 12 measurement items, which were assessed using the Likert five-point method. A higher score indicates a higher level of the student's learning attitude.

3. Self-efficacy: The Self-efficacy Scale for Students developed by Chen et al. (2018) and Zhang and Xiao (2016) was utilized and modified to suit the specific characteristics of the population under investigation, who are music majors. The Self-efficacy Scale was then operationalized and comprised of 3 dimensions and 10 measurement items, which were assessed using a Likert five-point scale. A higher score indicates a higher level of self-efficacy among the students.

4. Musical Creativity: This study utilizes the musical creativity scale, which was validated by Baltzer (1988). To align with the characteristics of the study's participants, who are music majors, certain measurement items were modified in terms of sentence structure and wording. The scale consists of 6 items, which are measured using a five-point Likert scale. A higher score indicates a higher level of musical creativity in the student.

### **Research object**

According to Mo (2019), it can be challenging to effectively implement creative curriculum in primary and secondary education, as the benefits of learning transfer may not be realized even when creative courses are standalone. Therefore, integrating the cultivation of creativity into various fields in teaching could yield more favorable learning outcomes. The domain-specific and domain-general expressions of creativity have been identified by scholars, and integrating the cultivation of creativity across various fields is seen as more beneficial in enhancing creative performance in a wide range of domains (Qi & Wang, 2020). Silva (2020) found through his research on aesthetic experience that a higher level of aesthetic experience corresponds to a higher stage of developmental progress. Additionally, Wanzer et al. (2020) noted that many creative individuals often form their careers through chance encounters with mentors and friends, which frequently occur in universities, laboratories, art centers, and other similar settings. Thus, this study focuses on college students, specifically music majors, as its research participants.

### **Sample**

In this survey, 31.2% male, 42.5% first-year students, 9.5% second-year students, 41.1% third-year students, and 34.2% fourth-year students, with 15.2% being seniors. In terms of major, 1.8% were composition majors, 7.3% were music performance majors, and 71.6% were music majors, while the remaining 19.3% belonged to other music-related majors.

## Research Results

### Common method bias

In this study, measures were taken to mitigate the potential for common method bias in the questionnaire data collection, including the implementation of anonymity (MacKenzie & Podsakoff, 2012). The data was analyzed through the use of Harman's one-way test to assess the presence of common method bias. Additionally, an exploratory factor analysis was conducted on the observations of all variables, which revealed that the first principal component obtained without rotation accounted for 31.668% of the variance, a value well below the critical threshold of 40%. This suggests that the issue of common method bias in this study is not significant.

### Reliability and validity analysis

In this study, the intercorrelation between variables was established, and a Confirmatory Factor Analysis (CFA) model was formulated. The model's goodness of fit was assessed using a set of commonly used indices, including  $\chi^2/df$  (2.631, less than or equal to 3), GFI (0.941, greater than or equal to 0.9), AGFI (0.908, greater than or equal to 0.9), CFI (0.968, greater than or equal to 0.9), RMSEA (0.075, less than or equal to 0.08), and PCFI (0.788, greater than or equal to 0.5). These results indicated that the model fit the data well and that there was a strong correspondence between the two.

Additionally, the standardized factor loadings ( $\lambda$ ) of each item were greater than 0.6, and the Comprehensive Reliability (CR) was higher than 0.6, indicating that the scale had adequate reliability. The Average Variance Extracted (AVE) was also higher than 0.5, demonstrating the scale's convergent validity. Finally, the internal consistency of the scale was measured using Cronbach's  $\alpha$ , which was found to be greater than 0.7 for all dimensions, suggesting that the scale was reliable.

### Correlation Analysis and Discriminant Validity

The findings of the descriptive statistics, including the mean, standard deviation, and correlation coefficient, are presented in Table 1. The results of the correlation analysis indicated a positive relationship between aesthetic experience ( $r = 0.50$ ,  $p < 0.01$ ), learning attitude ( $r = 0.47$ ,  $p < 0.01$ ), and self-efficacy ( $r = 0.44$ ,  $p < 0.01$ ) with musical creativity. These correlations provide initial evidence for the hypothesis proposed in the study. Furthermore, the diagonal AVE value for each variable being larger than its correlation with the other variables demonstrates good discriminant validity.

**Table 1:** Correlation analysis and discriminant validity

Variables	M	SD	1	2	3	4
1 Aesthetic experience	3.74	.67	.74			
2 Learning attitude	3.62	.62	.46**	.79		
3 Self-efficacy	3.43	.78	.41**	.53**	.75	
4 Musical creativity	3.75	.80	.50**	.47**	.44**	.83

Note: \*\* $p < 0.01$ ; The value of the diagonal line is the AVE root value;

### Hypothetical test

The results of the path analysis are presented in Table 2. A significant positive relationship was found between aesthetic experience and musical creativity ( $\beta = 0.35$ ,  $p < 0.001$ ), providing support for H1. Similarly, significant positive relationships were identified between aesthetic experience and learning attitude ( $\beta = 0.29$ ,  $p < 0.001$ ), supporting H2, and between aesthetic experience and self-efficacy ( $\beta = 0.33$ ,  $p < 0.001$ ), supporting H3. Additionally, a significant positive relationship was observed between learning attitude and musical creativity ( $\beta = 0.42$ ,  $p < 0.001$ ), supporting H4, and between self-efficacy and musical creativity ( $\beta = 0.39$ ,  $p < 0.001$ ), supporting H5.

**Table 2:** Path analysis table

Path	Estimate	S.E.	C.R.	$p$	results
Aesthetic experience → Music creativity	.35	.05	4.90	***	H1 supported
Aesthetic experience → Learning attitude	.29	.06	4.51	***	H2 supported
Aesthetic experience → Self-efficacy	.33	.04	5.04	***	H3 supported
Learning attitude → Music creativity	.42	.06	6.11	***	H4 supported
Self-efficacy → Music creativity	.39	.06	5.27	***	H5 supported

Note: \*\*\* $p < 0.001$

A sampling bootstrap with 5000 iterations and a 95% confidence interval was employed to evaluate the presence of indirect effects and determine the validity of the mediation effect. The results, presented in Table 3, indicate that the indirect effect of aesthetic experience on music creativity through learning attitude is significant, with an indirect effect of 0.12 ( $p < 0.001$ ), thereby supporting H6. Similarly, the indirect effect of aesthetic experience on music creativity through self-efficacy was found to be significant, with an indirect effect of 0.13 ( $p < 0.001$ ), providing support for H7.

**Table 3:** Intermediary analysis table

Intermediary path	indirect effect	95% CI		
		<i>p</i>	lower	upper
Aesthetic experience→Learning attitude→Music creativity	0.12	0.001	0.007	0.078
Aesthetic experience→Self-efficacy→Music creativity	0.13	0.000	0.011	0.085

## Discussion

In the present study, with aesthetic experience serving as the independent variable, learning attitude and self-efficacy as the mediating variables, and musical creativity as the dependent variable, a study of music major students in China was conducted. The findings indicated that each of the paths and hypotheses were supported, revealing a positive impact relationship.

In light of these results, it can be argued that aesthetic experience has a significant impact on musical creativity, with learning attitude and self-efficacy serving as crucial mediators in the relationship. This suggests that an individual's level of aesthetic experience can affect their musical creativity, and this effect can be partially explained through their learning attitude and self-efficacy.

Moreover, the results highlight the importance of cultivating students' aesthetic attitude and understanding of aesthetics, as well as enhancing their learning attitude and self-efficacy. This, in turn, can help to increase their musical creativity and overall aesthetic experience.

In conclusion, the present study provides new insight into the relationship between aesthetic experience, learning attitude, self-efficacy, and musical creativity, and highlights the significance of incorporating aesthetic education into music education programs. Further research may consider exploring the generalizability of these findings to other populations and cultural contexts.

## Conclusion and suggestion

### Conclusion

The results of the study demonstrate that aesthetic experience has a positive influence on musical creativity. Furthermore, it was established that aesthetic experience has a positive impact on students' learning attitude and self-efficacy. Additionally, the study found that a positive learning attitude towards learning positively affects musical creativity, and that students' self-

efficacy also positively affects musical creativity. Lastly, the results suggest that aesthetic experience has an indirect impact on musical creativity through both learning attitude and self-efficacy.

The present study sheds light on the pivotal role played by students' aesthetic experience in the theoretical framework of the research. By operationalizing the concept of aesthetic experience, this study conducted an in-depth investigation and analysis of its impact on various factors such as learning attitude, self-efficacy and musical creativity. The results of this study indicate that students' aesthetic experience not only has a direct impact on musical creativity, but it can also enhance musical creativity through its effect on learning attitude and self-efficacy. This highlights the considerable influence of aesthetic experience on musical creativity, and underscores the importance of incorporating aesthetic experience into future research on musical creativity.

### **Suggestion**

The present study aimed to investigate the influence of the aesthetic experience of music majors on their music creativity, as well as the mediating effects of learning attitude and self-efficacy in this process. The major contributions of this study are twofold:

First, it extends the existing research on the effect of aesthetic experience. The study established a research framework based on the SOR behavioral learning theory and the individual-environment interaction theory, to examine the direct effect of aesthetic experience on music creativity of music majors. This investigation sheds light on how individual creativity, specifically music creativity, is influenced by individual knowledge, such as aesthetic experience, and broadens the scope of research on the impact of aesthetic experience. This study offers new avenues and perspectives for future research.

Second, this study enriches the relevant literature on learning attitude and self-efficacy. By investigating the combined effect of aesthetic experience on learning attitude and self-efficacy, the inner mechanism of the "stimulus-body" relationship in the SOR behavioral learning theory is explored. This study sheds light on the relationship between aesthetic experience as a stimulus and learning attitude and self-efficacy as the body. At the same time, by exploring the influence of learning attitude and self-efficacy on music creativity based on the internal mechanism of the "body-behavior" relationship, the study deepens the understanding of the SOR behavioral learning theory, tests the mediating role of learning attitude and self-efficacy, and expands the existing literature on the impact of learning attitudes and self-efficacy.



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