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Bridging Expectations and Satisfaction: The Effectiveness of After-School Music Training at Meiledi Art Center, Nanning, China

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ABSTRACT

This study explores the effectiveness of after-school music training programs at the Meiledi Art Centre in Nanning, China, focusing on aligning student expectations and satisfaction across key dimensions of the educational experience. Objective: The objectives were to assess the demographic characteristics of students, evaluate their satisfaction levels with the programs, and identify key factors influencing their overall experience.A structured questionnaire was administered to 217 students aged 12 to 18 years, collecting data on satisfaction across five core dimensions: Supporting Environment, Course Content, Teaching Method, Teaching Material, and Learning Method. Descriptive and inferential statistical analyses, including correlation analysis and ANOVA, were employed to analyze the data. The findings reveal high overall satisfaction among students, with the "Supporting Environment" receiving the highest ratings, reflecting the center's success in creating a conducive learning atmosphere. However, the "Learning Method" dimension received the lowest satisfaction scores, indicating areas where pedagogical improvements are needed. The results from hypothesis testing further supported the significance of these dimensions, with all five hypotheses confirming positive relationships between the quality of each dimension and overall student satisfaction. Notably, the supporting environment had the strongest impact on satisfaction ($\beta = 0.44$, $p < 0.001$). The ANOVA results indicated consistent satisfaction across different class types and campuses, with marginal significance favoring singing classes and the Liangqin campus. Additionally, the study highlights the demand for enhanced performance opportunities, improved digital infrastructure, and more diverse instrument rentals, reflecting evolving student needs. This study contributes to the broader discourse on music education by providing empirical evidence on the importance of aligning educational offerings with student expectations in a culturally diverse context.

Keywords: After-school music training, Student satisfaction, Student expectation, Educational enhancement

1. INTRODUCTION

In recent years, art education has gained increased attention and priority in China's national education policies, which is part of a larger transformation in the country. This was highlighted by President Xi Jinping at the 19th National Congress of the Communist Party of China in October 2017, stating that Chinese socialism has entered a new era, marked by a significant change in the primary societal contradiction: the growing demand for a better life among the people and the unbalanced and inadequate development. As people's material and cultural needs reach higher levels, there is a burgeoning enthusiasm for education that can express and fulfill aesthetic and spiritual pursuits (Xinhua News Agency, 2017). The integration of art skills into the National College Entrance Exam (高考Gao Kao) scoring system reflects a recognition of the growing importance of holistic education (Ministry of Education of the People's Republic of China, 2014). Later, The State Council General Office's emphasis in 2015 on standardized development and strengthened supervision of off-campus art training aligned with these broader socio-political changes (State Council General Office, 2015). Additionally, as shown on the website of the Minister of Education, at the 2020 National Education Work Conference emphasized the transformation of art education from a 'soft task' to a 'hard indicator' within supervision, evaluation, and assessment systems (General Office of the Central Committee of the Communist Party of China and the General Office of the State Council, 2020).

In this evolving landscape, institutions like the Meiledi Art Center in Nanning, Guangxi, emerged to cater to the increasing demand for after-school art training. In the context of this study, after-school training focuses specifically on extracurricular music education and training for children, including instruction in singing and instrumental music. Meiledi Art Center's educational philosophy aligns with the arts curriculum outlined in China's national curriculum standards, providing children with additional music training opportunities outside of school can enhance their skills, engagement, and well-rounded development. It is, however, important to note that not only cognitive well-being is enriched by the after-school music programs, but the social and emotional well-being as well. For instance, playing in a music ensemble group teaches students about teamwork, cooperation, and social relations since people need to work together to make music (Wang et al., 2022). Furthermore, the process of learning and performing music affect positively students' self-esteem and confidence because students learn and perform music and get positive feedback from their instructors and peers (Creech et al., 2013). In view of these findings, which include social-cognitive and affective components, after-school music programs should be a critical part of comprehensive schooling.

Although the importance of music education has been assessed, overall outcomes of after-school music programs are highly dependent on how much these programs satisfy the needs of participants. It means that students' expectations widely differ and may range from the expectations to get skills to develop – academic or another – to personal satisfaction and self-fulfillment (Provenzano et al., 2020). When expectations are met or exceeded as identified by participants, there are high chances that the outcomes in terms of level of satisfaction can enhance their engagement and, in the process, record high outcomes (Chong & Kim, 2010). On the other hand, if the expectations and the experiences do not tally, the result will be disappointment, diminished morale, and possibly a high attrition rate from the program. For post-school music programs, the expectation-satisfaction paradigm is highly applicable because emotions and opinions do matter in the delivery of musical learning. From the expectation-confirmation theory provided by Yun (2011) it can be deduced that satisfaction depends on the extent to which the consumption experience meets the consumer's

expectations. According to this theory, satisfaction with participants' expectations would make them engage more in the program.

The case of Meiledi Art Center in Nanning, the People's Republic of China, provides a useful background for researching the efficiency of after-school programs, which include music. Leveraging on the rapid economic development and urbanization characteristic of the city in the past decades, Nanning, the capital of Guangxi Zhuang Autonomous Region, has needed various educational services, including arts activities outside the classroom. The Meiledi Art Center has already put itself in the framework of the leader and the provider of music lessons within the given area. Therefore, it offers a number of after-school programs aimed at filling the needs of each age and accomplishment level. Even though the Meiledi Art Center is a center of excellence in music training, little research has captured its efficiency. It is important to know the views of the students who engage in such programs so as to evaluate their effectiveness in providing quality music education to the center.

Nonetheless, several studies have provided evidence of the positive impacts of after-school music programs, while a gap still exists in the literature in terms of how these programs fit the expectations of participants and if this has an impact on their level of satisfaction, especially in the context of non-Western countries such as China (Hedemann & Frazier, 2017). In fact, the majority of past research findings concerning music education after school have been found in Western countries where different cultures are, unlike in China (Hopkins et al., 2017). As in many Asian countries, academic success and formal instructional styles are valued in China; it is, therefore, important to determine whether or not the Chinese attend structured music classes after school, and how such perception affects their outlook towards the program (Rounds & Bradshaw, 2021).

This study focuses on evaluating the effectiveness of after-school music programs at the Meiledi Art Center by examining five key variables that contribute to student satisfaction, including the quality of course content, which measures how well the material aligns with students' learning needs and interests; the effectiveness of teaching methods, assessing the instructional approaches used by educators; the quality of learning methods, reflecting the students' engagement and comprehension strategies; the adequacy of teaching materials, which refers to the availability and relevance of resources provided; and the supportive learning environment, which considers the physical and social setting in which the education takes place. Together, these variables help determine the alignment between student expectations and their overall satisfaction with the program. This paper aims to understand how effective the after-school music training is at the Meiledi Art Center since it seeks to find out whether the program meets the aspirations of its clientele in a way that leads to their satisfaction. On this premise, organized and structured learning and/or recreational activities such as after-school programs, especially those that offer music lessons and activities, have been found to hold several beneficial effects on children and adolescents (Li et al., 2021). Furthermore, engagement in music education induces positive changes in certain mental functions foundational to learning, including memory, attention, and spatial-temporal skills, which significantly affect academic performance among learners (Khoso et al., 2022).

1.1 Research Questions

1) How does the quality of course content at the Meiledi Art Center influence student satisfaction?

2) To what extent do the teaching methods employ in the music program impact student satisfaction?

1.2 Research Hypotheses

H1: There is a positive relationship between the quality of course content and student satisfaction.

H2: The effectiveness of teaching methods positively influences student satisfaction.

H3: The quality of learning methods is positively associated with student satisfaction.

H4: The adequacy of teaching materials positively impacts student satisfaction.

H5: A supportive learning environment enhances student satisfaction.

2. LITERATURE REVIEW

Chinese art has a very long and remote background and is indistinguishable from the progression of China as a nation. Beginning from art customs in the forms of calligraphy and painting, instrument and vocal music, to those present in current-day arts in arts of visual and performing arts, art in China has always been a mirror of societal aesthetics and cultures (Fashola, 1998). Modern Chinese art has been transformed and developed throughout two and half thousand years in historical course affording to outline the corresponding variations of political economy and social condition. Nevertheless, it still has its features and characteristics of Chinese art. As in many other societies of the contemporary world, art remains relevant in education and social evolution in Mainland China, with many art centers and institutions contributing to nurturing talents and promoting arts and culture in China (Chong & Kim, 2010). This was the case in the context of the Meiledi Art Center situated in Nanning, Guangxi Province of China, which forms part of this system of art education in China. Solely driven by the goal of offering students of all ages a superior level of art education the center has grown to be the haven of arts within the region. Music, Visual Art, and Performing Arts are the major classes that are taught in the center and target a wide variety of students' populations and abilities (Olubukola, 2021).

The sponsorship and teaching pattern practiced at the Meiledi Art Center closely relates to the general pattern of Chinese tropical art education, stressing methodology and training mode instructions. This focus is correspondingly compatible with advertisement and the traditional Chinese conception of education, discipline, hard work, and passion for working towards perfection (Zhang et al., 2006). But the center also understands the need to foster imagination and self-identity and tries to address these areas in the curriculum as well. In this way, Meiledi Art Center not only performs as the standard-bearer for traditional Chinese artistic practices but also promotes the development of creativity and the search for new art forms, which makes a major contribution to the development of the cultural potential of Nanning and Farther (Reisner et al., 2004). To this extent, the center has benefited from flexibility that allows it to totally embrace the culture and expectations of the people.

2.1 The Evolution of Art Education in China

Art education in China has undergone significant transformation over the centuries, evolving from traditional methods deeply rooted in Confucian philosophy to more contemporary approaches influenced by global educational practices (Cheng, 2010). Historically, art In China education was largely associated with the imperial examination system whereby calligraphy, poetry, and painting were part of the education of the scholar-official class (Evans, 2001). They were viewed as not only a way to cultivate and refine the self but also a means to prove one's propriety and status. For the next several centuries, ink calligraphy and landscape painting remained the favored mode of expression, as they conveyed the quintessentially Chinese sensibilities of order, symmetry, and reverence for nature (Xiaoguang, 2015). Chinese art education has

undergone some significant changes, especially from the onset of the twentieth century, more so after the formation of the People's Republic of China in 1949.

In the post-Mao period, the Chinese Government started changing its policy regarding art education for children as China started liberalizing and opening up to the world and beginning reforms (Bao, 2022). While in the Soviet period, traditional Chinese art was developed actively, in the 1980s and 1990s, the national art styles breathed their revival, and new styles from the West, as well as new educational approaches to art, appeared (Han, 2022). Education in art academies and schools began to expand its syllabus contents that encompassed Chinese and Western art history, theories, and techniques. Thus, there was an enhancement of the discourse on the necessity for a more wholesome approach to art education (Li et al., 2022). This period also saw a growth of contemporary art in China, with artists and educators growing interested in new media and interdisciplinary practice. It is possible to state that art education in China today can be defined as diverse and rather actively developing. In China, the government has valued the place of art in nurturing creativity and innovation, as well as a cultural consciousness among students (Khoso et al., 2024). Under the reforms in education, art has been included in the curriculum framework at the national level though the teaching-learning resources offer the selections of both traditional and modern Chinese art (Li, 2016).

2.2 Quality of Course Content and Student Satisfaction

The quality of content delivered in courses is relevant to the overall determination of student satisfaction, especially if the content to be delivered in the course should, in one way or the other, enhance the student's academics and or personal development. Relevance, together with depth and the capability of the course content to capture the attention and interest of students, is an important factor in promoting a positive learning environment (Leach, 2019). According to Su (2023), materials that are well-organized and courses that are well-planned facilitate student learning and increase motivation. Further, course contents that are viewed as important and realistic are expected to provide quality that meets the students' expectations; thereby giving high rats for satisfaction (Li et al., 2022). Under the conditions of thinking about music education, the quality of course content is paramount since it has to be tailored for students of different levels, from total novices to the most experienced. In music programs, literature has suggested that satisfaction is improved in the context of course content that is integrated and defined based on different learning styles (Li, 2016). Hence, it is required to balance between the content difficulty level and its retrievability in order to satisfy after school music program participants as high as possible (Han, 2022).

2.3 The Effectiveness of Teaching Methods and Student Satisfaction

Teaching methods involve the mode by which knowledge is delivered, and they have a direct impact on the satisfaction levels of the students, especially where the latter's learning styles may demand some form of integration into the teaching mode used in a given learning institution (Webster, 2012). The views as to what constitutes effective knowledge-delivery processes are those that not only impart knowledge but also get students to participate actively in the processes through which such knowledge is acquired (Wilson, 1997). Teaching approaches that are active and centered on students, including problem-based learning and collaborative projects, have been realized to lead to high student satisfaction. These methods foster ownership of learning by the students, which makes the education process more fulfilling. Since music is a practical subject delivered through hands and fingers, teaching techniques applied to it are rather significant. Research has also indicated that the use of techniques that embrace the conversion of theory into practical practice, including masterclasses, one-to-one coaching or training sessions for ensembles, dramatically

improves students' satisfaction levels (Xiaoguang, 2015). Also, teaching strategies that cater to the learning modalities as well as the learning rate of student will ensure that the students' needs are met fully hence resulting in higher levels of satisfaction (Awang & Ismail, 2010). Hence, there is a need to incorporate a variety and flexible approach to teaching in order to enhance student satisfaction in after-school music classes.

2.4 The Quality of Learning Methods and Student Satisfaction

Learning methods are one of the essential components of educational quality, which is an indicator of the students' satisfaction. Teaching methods include the means, procedures, and processes through which the students acquire, analyze, and apply knowledge. Effective learning processes are those that Xiao and Wilkins (2015) refer to as 'quality enhancement' learning methods. These processes are instructional matches and consistent with the needs of the students to achieve specific educational outcomes. Accordingly, the desire of students to learn in ways that are, on the one hand, optimally conducive to success and, on the other, appealing to favorite learning styles causes the overall satisfaction to grow (Wang, 2012). Studies have also indicated that a combination of effective learning methods, such as active learning, reflective practices, and experiential learning, enhances the satisfaction level of students. For example, the application of active learning in students engages them in tasks that involve constructing meaning from lecture contents, hence increasing student comprehension and recall of information (Astin, 1993). In this vein, reflective practices require the student to evaluate the processes of their learning and monitor progress more closely to produce a greater appreciation of the things done right and the areas that require tweaking to meet satisfaction (Wang et al., 2011).

More specifically, it stands to reason that the quality of the learning methods is especially important in the case of education in musical instrument playing since such learning will principally entail practicing skills that are embedded in the practical art of music-making. Research has shown that students who incorporate various approaches to learning and innovation, including practicing routines, peer learning, and self-grading, have higher satisfaction levels, as found by Liu et al. (2018). For instance, on a regular basis practice of self-assessment enhances the students' monitoring of how far they have progressed, goal setting, and motivation, all of which are essential in making learning more satisfying (Khoso et al., 2022). However, flexibility in approaches adopted in teaching ought to be focused on meeting the needs of individual students in order to meet high levels of satisfaction.

2.5 Adequacy of Teaching Materials and Student Satisfaction

Teaching materials are indicators of satisfaction when it comes to students, especially in a learning system whereby the available materials determine the quality of the learning system in place (Leach, 2019). Teaching aids refer to the resources used by teachers while imparting knowledge and skills, including books, computer and other electronic-based materials, musical instruments, and any other equipment that the teacher may use in the course of lesson delivery. Relevant, accurate, and according to the curriculum, the teaching materials are regarded as of great quality contributing to the learning and understanding processes (Khoso et al., 2022). Thus, when the taught teaching materials are seen as sufficient to support the student learning and help in achieving the learning objectives, the student engagement and satisfaction, the educational experience is likely to be satisfactory (Xiao & Wilkins, 2015).

This has been found to be so through past studies in view of the effectiveness of content relevance in enhancing students' learning and their level of content satisfaction. For instance, Yue (2017) has pointed out that if students are provided with properly developed and contextually relevant learning resources,

students are generally healthier, academically and circumstantially, and more satisfied. This is particularly the case in subjects that involve equipment – music, for example – that the kind of instruments, scores, and other learning aids availed to the learners dramatically skew the learning process (Feng, 2017). To some extent, the availability of tutorial apparatus is highly relevant in music education since it defines the quality of teaching and learning resources available and the opportunities that students get to practice. A number of researches have established that students who enjoy the best teaching aids and instruments are more inclined in their learning activities and contented with their learning processes (Yu et al., 2023).

2.6 A supportive learning environment enhances student satisfaction

Student satisfaction is thus a combination of factors relating to the physical, emotional and social environment which the students encounter in their education system. The literature has demonstrated that students' perceptions of their learning environment as positively stimulating contribute to the student's academic engagement, motivation, and satisfaction with their learning experience (Li et al., 2021). In conclusion, I would like to note that an effective learning environment encompasses facilities and infrastructure, educational resources and instruments in a classroom, and, what is more important, the emotional and perceiving climate, where a student would not feel a failure but would feel secure and appreciated. Policies and place, especially physical aspects tied to the class, accessibility of comfortable space and light, the availability and accessibility of learning resources, and the comfort of the seats all contribute to the satisfaction among the students (James, 2021). For example, research has shown that students in schools with better physical learning environments do well academically as well as exhibit higher satisfaction levels. However, it is just as valid to speak about the emotional and social aspects of the learning environment. Positive affect also predicts favorable attitudes to learning since students supported by their friends and teachers want to engage themselves in the learning process (Rienties et al., 2015).

In the context of music education, a supportive learning environment is particularly crucial because of the collaborative and performance-oriented nature of the subject. Students who feel encouraged and supported by their instructors and peers are more likely to take risks in their learning, which is essential for developing musical skills. Additionally, a supportive environment that promotes positive social interactions can help reduce performance anxiety, leading to a more enjoyable and satisfying learning experience.

2.7 Theoretical Frameworks for Measuring Student Satisfaction in Art Education

To create a robust model for understanding student satisfaction within the context of art education, it is important to incorporate theoretical frameworks that align with the specific characteristics of arts as a subject area. Several established models have been applied in educational settings, including art education, to measure satisfaction. However, for the current study, the most appropriate model to use as the theoretical foundation is the Expectation-Confirmation Theory (ECT) by Oliver (1980). The Expectation-Confirmation Theory posits that satisfaction is determined by the degree to which students' experiences in the program align with or exceed their initial expectations. This model is relevant to the current study as it allows us to examine the gap between what students expect from the after-school music training at the Meiledi Art Center and how they evaluate their actual experiences. If their experiences meet or exceed expectations, satisfaction is likely to be achieved. The five key variables in the research model, quality of course content, effectiveness of teaching methods, quality of learning methods, adequacy of teaching materials, and supportive learning environment, are derived from this theory, as they represent core aspects of student experiences that influence satisfaction.

Although other models, such as the SERVQUAL model by Parasuraman et al. (1988), assess service quality in educational settings, they are not the primary theoretical foundation for this study. However, elements of the SERVQUAL dimensions (e.g., reliability, assurance, and responsiveness) do align with certain aspects of the five variables examined in this study. Similarly, the Self-Determination Theory (SDT) by Deci and Ryan (1985) offers insights into the psychological needs of students, such as autonomy and competence. Still, these elements are indirectly reflected in the overall satisfaction framework rather than forming the basis of the research model.

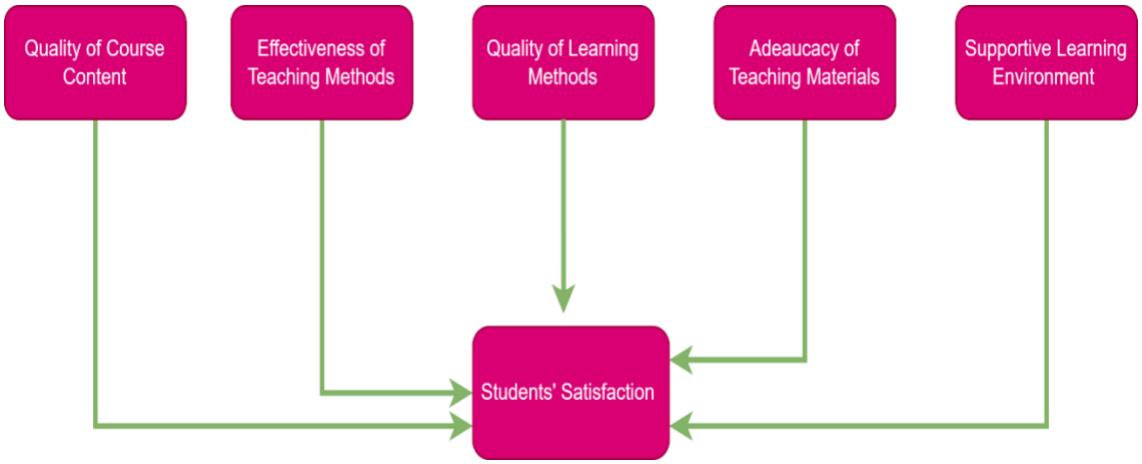

Figure 1: Research Framework

3. METHODOLOGY

3.1 Research Design

The research design employed in this study is a cross-sectional quantitative approach aimed at systematically collecting and analyzing data to understand the relationship between parents' expectations and their satisfaction with after-school music programs at the Meilide Art Center in Nanning, China. This design is particularly suited for capturing the current state of participant satisfaction and identifying key factors that influence it. The study evaluates five core dimensions of the educational experience: course content, teaching methods, learning methods, teaching materials, and the supporting environment. These dimensions were selected based on Total Quality Management (TQM) principles in education, as outlined by Sallis (2002), emphasizing the importance of quality and continuous improvement in educational settings. By employing a structured questionnaire, the study collected quantitative data from a representative sample of students between the ages of 12 to 18 who are enrolled in various music classes at the center. The cross-sectional nature of the design allows for a snapshot analysis of the participants' experiences and perceptions, providing valuable insights into the effectiveness of the after-school programs. This design was chosen for its ability to efficiently gather data from a large population, facilitating the identification of patterns and trends that can inform the development of more targeted and effective educational strategies.

3.2 Research Instrument

The primary instrument used for data collection in this study was a structured questionnaire, carefully designed to measure the expectations and satisfaction of students who are enrolled in after-school music

programs at the Meilide Art Center. The questionnaire was developed to capture a comprehensive view of parents' perceptions across five key dimensions: course content, teaching methods, learning methods, teaching materials, and the supporting environment. These dimensions were selected based on their relevance to Total Quality Management (TQM) in education, as articulated by Sallis (2002), ensuring that the instrument addressed critical aspects of the educational experience. The questionnaire was structured into three distinct sections. The first section focused on gathering basic demographic information about the respondents, including gender, age, and details about their child's class and campus within the Meilide Art Center. This information was essential for understanding the participants' backgrounds and performing subgroup analyses. The second section employed a 5-point Likert scale, ranging from 'strongly disagree' to 'strongly agree,' to assess various facets of the educational experience.

The third section of the questionnaire consisted of multiple-choice questions that sought to elicit detailed feedback on specific aspects of the after-school programs. Including these questions was intended to provide actionable insights that could guide the development of targeted improvements in the center's offerings. To ensure the validity and reliability of the instrument, the questionnaire was initially drafted in Chinese to maintain cultural and linguistic relevance. It was then translated into English for the purposes of this study. A panel of three experts in educational research reviewed the questionnaire, resulting in an Item Objective Congruence (IOC) index ranging between 0.67 and 1.00, indicating high validity and relevance of the items.

3.3 Research Data Collection

Data collection was conducted in Nanning, the capital of Guangxi Zhuang Autonomous Region in China. Nanning was chosen due to its rapid urbanization and increasing demand for diverse educational opportunities, particularly in the arts. The data collection process was carried out online using WenJuanWang (www.wenjuanwang.com) and distributed via WeChat to reach the target sample efficiently. The use of online platforms was chosen for its broad reach and convenience, allowing for the inclusion of a geographically diverse group of respondents within Nanning. Prior to full deployment, a pilot test was conducted with 30 respondents who were not part of the target group to refine the questionnaire and enhance its effectiveness. Of the 300 questionnaires distributed, 217 were returned, yielding a response rate of 72.33%. This high response rate can be attributed to the strategic use of WeChat, a widely-used communication tool in China, facilitating easy access and engagement with the target audience.

Table 1. Response Rate of Data Collection

Description	Value
Total Questionnaires Distributed	300
Total Questionnaires Returned	217
Response Rate (%)	72.33%

Table 2. Reliability of Questionnaire

Dimension	Cronbach's α	Items	Sample
Course Content	0.75	5	30
Teaching Methods	0.78	4	30

Learning Methods	0.72	4	30
Teaching Materials	0.7	3	30
Supportive Learning Environment	0.73	4	30
Overall Questionnaire	0.68	20	30

The reliability of the questionnaire was assessed using Cronbach's alpha, which yielded a value of 0.68, as shown in Table 1. This indicates an acceptable level of internal consistency across the 20 items in the questionnaire, based on a pilot sample of 30 respondents. The Cronbach's alpha value suggests that the questionnaire items are sufficiently reliable for measuring the constructs of interest in this study.

3.4 Sample Size and Sampling

The sample size for this study was determined using the Krejcie and Morgan (1970) formula, which is widely recognized for calculating sample sizes in social science research. For a population of 500 children enrolled in after-school music programs at the Meilide Art Center, a sample size of 217 was deemed appropriate, providing a 95% confidence level with a 5% margin of error. This ensures that the findings are statistically significant to the broader population of the center. A stratified sampling technique was employed to ensure that the sample was representative of the different subgroups within the population. The strata were based on the type of music class (e.g., piano, violin, singing) and the campus location (Qingxiu, Liangqin, and Xingning). To further explain the process of stratified sampling, the number of learners selected from each stratum was determined according to the proportion contributed by a particular category to the total population of 500 students enrolled in after-school music programs at Meilide Art Center.This approach allowed for a more precise understanding of satisfaction levels across various classes and campuses.

3.5 Analysis Method

The data collected as part of this study were examined by means of both descriptive and inferential analysis, and the objectives of this research are as follows: This way, the authors were able to obtain an overall picture of general trends and simultaneously study variations between these subgroups in more detail. Descriptive analysis was employed by summarizing merely mean variations throughout the view of the dataset. In particular, the Mean and Standard Deviation of each item of the questionnaire were computed. The Mean was arrived at to give a central estimate of the level of the responses received, capturing, in essence, the (rounded to the closest whole number) overall agreement or satisfaction among the respondents. The Standard Deviation, on the other hand, was calculated to provide data on the dispersion of the responses and, therefore, show the extent of agreement (or lower) with the Standard Deviation, On this basis, it was possible to see where satisfaction or dissatisfaction was consistent across students and thus compare trends in perceptions easily.

To explore whether statistically significant differences existed in satisfaction levels across various subgroups, inferential analysis was conducted using Analysis of Variance (ANOVA). ANOVA was chosen for its ability to simultaneously compare means across multiple groups, making it ideal for examining differences based on factors such as the type of music class (e.g., piano, violin, singing) and the campus location (Qingxiu, Liangqin, Xingning). This method allowed the study to determine whether variations in satisfaction were due to random chance or if they reflected actual differences between subgroups. The F-value and P-value obtained from the ANOVA tests were critical in assessing the significance of these

differences, guiding the interpretation of the results. To deepen the analysis further, Multi-attribute Utility Analysis was employed to bring out how different attributes valued by students contribute to their satisfaction with the center's offerings. It helped pinpoint key opportunities for improvement, like increasing performance opportunities and expanding the range of instruments available for rental, which directly corresponded to student preferences. A Correlation Analysis was also performed to investigate the relationships between different dimensions of students' expectations and their respective levels of satisfaction. Such analysis has identified the degree of association between major variables like course content, teaching methods, learning methods, teaching materials, and the supporting environment. This gives meaning into how these different elements interact in influencing student satisfaction.

The analysis was performed with the help of computerized statistical software to achieve accuracy in computations and objectivity in assessing the information obtained. This eliminated the likelihood of errors that would be made by man when analyzing large datasets; it also made possible the performance of other complicated statistical procedures such as ANOVA and generally made the study less prone to error. Based on the descriptive and inferential analysis outcomes, the following recommendations were derived and laid down. These recommendations pointed at situations that would be of interest to the center and which can help modify their portfolio to fit the expectations of the students.

3.6 Ethical considerations

The first author distributed the online questionnaires via a survey platform WenJuanWang, with an informed consent form at the beginning of the questionnaire. This informed consent form contained all the information about the purpose of the research, the procedures, the rights of the participants, and the confidentiality measures. We notified the purpose of the survey both to students and parents in advance through the WeChat group before the students started filling out the questionnaires. Informed consent was obtained from the parents on their children's behalf, and the students' permission was based on their parents' consent. Moreover, all data collected were anonymized to protect the identity of participants and guarantee their privacy and security. The study procedures were approved by the department of Bansomdejchaopraya Rajabhat University, Thailand, where this researcher was studying. In this case, the study proposal was subjected to the University Ethical Committee to ensure that all the procedures followed were ethical and met the University’s Ethical Standards.

4. RESULTS AND DISCUSSION

4.1 Demographic Information

The demographic analysis of the study participants provides valuable insights into the characteristics of the student population enrolled in after-school music programs at the Meilide Art Center. The data was collected from 217 students aged between 12 and 18 years, ensuring a focus on adolescents who are at a critical stage in their educational and personal development. The demographic breakdown reveals a nearly equal distribution of male (52.53%) and female (47.47%) students, highlighting a balanced gender representation. Additionally, the analysis categorizes students by age groups, class preferences, class levels, and campus locations, offering a comprehensive view of the student body. This detailed demographic information is crucial for understanding the diverse needs and preferences of the students, enabling more targeted recommendations for enhancing the quality and effectiveness of the music programs. The specifics of this demographic breakdown are presented in Table 3 below.

Table 3. Demographic Information

Question	Item	Frequency	Percentage
Q1 - Gender	Male	114	52.53
	Female	103	47.47
Total	-	217	100.00
Q2 - Age Group	12-14 years	89	41.01
	15-16 years	73	33.64
	17-18 years	55	25.35
Total	-	217	100.00
Q3 - Class	Piano (Male)	67	30.88
	Piano (Female)	54	24.88
	Violin (Male)	24	11.06
	Violin (Female)	28	12.90
	Singing (Male)	23	10.60
	Singing (Female)	21	9.68
Total	-	217	100.00
Q4 - Class Level	Beginner	98	45.16
	Intermediate	79	36.41
	Advanced	40	18.43
Total	-	217	100.00
Q5 - Campus	Qinxiu District	120	55.30
	Xinning District	60	27.65
	Liangqin District	37	17.05
Total	-	217	100.00

4.2 Descriptive Analysis

Table 4 presents the mean and standard deviation of students' expectations and satisfaction levels across five dimensions related to their educational experience, along with an overall rating. The dimension with the highest mean of 4.28 and a standard deviation of 0.66 is the "Supporting Environment", indicating the highest satisfaction level. This is followed by "Course Content," with a mean of 4.26 and a standard deviation of 0.65. The next highest is the "Teaching Method," with a mean of 4.25 and a standard deviation of 0.66. "Teaching Material" has the same mean of 4.25 but a slightly higher standard deviation of 0.68. Finally, the "Learning Method" has the lowest mean of 4.21 with a standard deviation of 0.67. The overall mean across all dimensions is 4.25, with a standard deviation of 0.66, suggesting an overall "Satisfied" level.

Table 4. The Students' Expectations and Satisfaction in Five Dimensions

Dimension	Mean	S.D.	Level	Rank
Course Content	4.26	0.65	Satisfied	2
Teaching Method	4.25	0.66	Satisfied	3
Learning Method	4.21	0.67	Satisfied	5

Dimension	Mean	S.D.	Level	Rank
Teaching Material	4.25	0.68	Satisfied	4
Supporting Environment	4.28	0.66	Satisfied	1
Overall	4.25	0.66	Satisfied	

4.3 Differential Analysis

Table 5 presents an Analysis of Variance (ANOVA) comparing the satisfaction across various dimensions of a music class, broken down by the type of class: Piano, Singing, and Violin. Each dimension includes frequency, mean, standard deviation, F-value, and P-value for each option, along with a total that aggregates all options. Overall, the ANOVA analysis predominantly shows no significant differences in student satisfaction across different class types for most dimensions except for a marginal significance in the learning method, which favors singing classes.

Tables 5. ANOVA for Class

Dimension	Option	Frequency	Mean	S.D.	F	P
Course Content	Piano	121	4.26	0.63	0.52	0.597
	Singing	44	4.30	0.76		
	Violin	52	4.24	0.57		
	Total	217	4.26	0.65		
Teaching Method	Piano	121	4.23	0.63	0.52	0.594
	Singing	44	4.28	0.65		
	Violin	52	4.27	0.68		
	Total	217	4.25	0.66		
Learning Method	Piano	121	4.20	0.67	2.73	0.068
	Singing	44	4.32	0.70		
	Violin	52	4.16	0.67		
	Total	217	4.21	0.69		
Teaching Material	Piano	121	4.24	0.74	0.77	0.464
	Singing	44	4.21	0.66		
	Violin	52	4.3	0.61		
	Total	217	4.25	0.68		
Supporting Environment	Piano	121	4.30	0.67	2.94	0.055
	Singing	44	4.32	0.64		

Dimension	Option	Frequency	Mean	S.D.	F	P
	Violin	52	4.18	0.62		
	Total	217	4.27	0.66		

Table 6 presents an Analysis of Variance (ANOVA) to compare student satisfaction across various dimensions of educational experience, segmented by campus location: Qingxiu, Liangqin, and Xingning. The analysis includes data on frequency, mean scores, standard deviations, F-values, and P-values for each campus option, including overall totals. Overall, the ANOVA analysis across all dimensions demonstrates that there are no statistically significant differences in student satisfaction between the campuses for any of the evaluated educational aspects, indicating a consistent quality of experience across locations.

Table 6. ANOVA for Campus

Dimension	Option	Frequency	Mean	S.D.	F	P
Course Content	Qingxiu	120	4.26	0.63	2.18	0.115
	Liangqin	37	4.35	0.76		
	Xingning	60	4.21	0.57		
	Total	217	4.26	0.65		
Teaching Method	Qingxiu	120	4.23	0.63	0.62	0.538
	Liangqin	37	4.26	0.65		
	Xingning	60	4.29	0.68		
	Total	217	4.25	0.66		
Learning Method	Qingxiu	120	4.20	0.67	0.41	0.666
	Liangqin	37	4.26	0.70		
	Xingning	60	4.22	0.67		
	Total	217	4.21	0.69		
Teaching Material	Qingxiu	120	4.24	0.74	0.16	0.854
	Liangqin	37	4.24	0.66		
	Xingning	60	4.27	0.61		
	Total	217	4.25	0.68		
Supporting Environment	Qingxiu	120	4.28	0.67	1.23	0.293
	Liangqin	37	4.34	0.64		
	Xingning	60	4.23	0.62		
	Total	217	4.27	0.66		

Table 6 presents the results of an Analysis of Variance (ANOVA) conducted to compare satisfaction levels across different campuses, Qingxiu, Liangqin, and Xingning, for various dimensions of the educational experience at the Meilide Art Center. The analysis shows that, for the "Course Content" dimension, the mean satisfaction scores were 4.26 for Qingxiu, 4.35 for Liangqin, and 4.21 for Xingning. The associated F-value of 2.18 and a P-value of 0.115 indicate that there are no statistically significant differences in satisfaction with course content across these campuses. Similarly, for the "Teaching Method" dimension, the mean scores ranged from 4.23 in Qingxiu to 4.29 in Xingning, with an F-value of 0.62 and a P-value of 0.538, again suggesting no significant differences in satisfaction levels among the campuses.

For the "Learning Method" dimension, the mean scores were fairly consistent across the campuses, with Qingxiu at 4.20, Liangqin at 4.26, and Xingning at 4.22, yielding an F-value of 0.41 and a P-value of 0.666, which further confirms the lack of significant variation in satisfaction. The "Teaching Material" dimension also showed little difference in satisfaction, with mean scores of 4.24, 4.24, and 4.27 for Qingxiu, Liangqin, and Xingning respectively, and an F-value of 0.16 and a P-value of 0.854. Finally, for the "Supporting Environment" dimension, mean scores were slightly higher for Liangqin (4.34) compared to Qingxiu (4.28) and Xingning (4.23), but the F-value of 1.23 and a P-value of 0.293 indicate that these differences are not statistically significant. Overall, the ANOVA results suggest that satisfaction levels across the different campuses are fairly consistent, with no significant variations observed in any of the educational dimensions analyzed.

4.4 Multi-attribute Utility Analysis

Table 7 reveals opportunities to enhance the Meiledi Art Center's offerings based on student preferences. Top implications include increasing performance opportunities, enhancing digital infrastructure and recreational facilities, providing more diverse instrument rentals, rehearsal sessions, and student-organized performances, offering new courses/activities for the Chinese zither, drumming, and harmonica, facilitating summer camps by renowned musicians, performance/exchange events, and competitions, while continuing to prioritize quality teaching staff, leveraging word-of-mouth recommendations, and maintaining affordable tuition fees which were key reasons for choosing the institute. Implementing the top three desired additions for each area can drive improvements in learning experiences, campus amenities, performance development, and overall satisfaction aligning with attendee needs and interests.

Table 7. Recommendations

Q26-What type of additional resources or facilities would enhance your learning experience? (Choose more than one answer)

Options	Frequency	Percentage
* More practice rooms	114	52.53%
* Access to online learning materials	134	61.75%
*Workshops or masterclasses	95	43.78%

* Performance opportunities	144	66.36%
* One-on-one tutoring sessions	108	49.77%
* Enhanced library or multimedia resources	68	31.34%
* Forming music bands	28	12.90%
Total	217	

Q27-What type of additional campus facilities would enhance your experience?" (Choose more than one answer.)

Options	**Frequency**	**Percentage**
* Enhanced digital infrastructure (Wi-Fi, computer labs)	147	67.74%
* More recreational areas (e.g., sports facilities, game rooms)	127	58.53%
* Improved cafeteria or food services	109	50.23%
* Additional study areas or quiet zones	90	41.47%
* More parking space or better transportation access	52	23.96%
Total	217	

Q28-What improvements would you suggest for the performance events? (Choose more than one answer)

Options	**Frequency**	**Percentage**
* Enhanced stage and audio-visual equipment	87	40.09%
* More frequent rehearsal sessions prior to the event	121	55.76%
* More engagement for student to organize performances	120	55.30%
* More diverse types of musical instrument rental	136	62.67%
* The opportunity to collaborate and perform with higher-level	67	30.88%
Total	217	

Q29-Would you be interested in additional courses or activities if offered? (Choose more than one answer)

Options	**Frequency**	**Percentage**

* Guitar	78	35.94%
* Drum set	100	46.08%
* Harmonica	97	44.70%
* Guzheng (Chinese zither)	112	51.61%
* Suona (Chinese horn)	73	33.64%
* Erhu (Chinese two-stringed fiddle)	35	16.13%
Total	217	

Q30-Which of the following would you be willing to spend more money or time on purchasing or participating in? (Choose more than one answer)

Options	**Frequency**	**Percentage**
* Musical instruments and related accessories	84	38.71%
* Competitions (involving training fees, registration fees, etc.)	131	60.37%
* Performances or exchange salons (involving training fees, registration fees, etc.)	140	64.52%
* Summer (winter) camps by renowned musicians Suona (Chinese horn)	142	65.44%
* Master classes	52	23.96%
* Grading test	23	10.60%
Total	217	

Q31-What are reasons for choosing the institute? (Choose more than one answer.)

Options	**Frequency**	**Percentage**
* Reputation of the institute	64	29.49%
* Quality of teaching staff	125	57.60%
* Recommendations from friends or family	111	51.15%
* Proximity to home or work	100	46.08%
* Affordable tuition fees	103	47.47%

* Availability of performance opportunities	88	40.55%
* Payment method	34	15.67%
* Other reasons.	2	0.92%
Total	217	

4.5 Correlation Analysis

A correlation analysis was conducted to explore further the relationships between the various dimensions of students' expectations and satisfaction levels. This analysis examined the degree of association between key variables such as course content, teaching methods, learning methods, teaching materials, and the supporting environment.

Table 8. Correlation Matrix

Variable	1	2	3	4	5
Course Content	1	0.65**	0.60**	0.58**	0.63**
Teaching Method	0.65**	1	0.66**	0.64**	0.68**
Learning Method	0.60**	0.66**	1	0.62**	0.61**
Teaching Material	0.58**	0.64**	0.62**	1	0.60**
Supporting Environment	0.63**	0.68**	0.61**	0.60**	1

Table 8 presents the correlation matrix for the key variables in the study: course content, teaching methods, learning methods, teaching materials, and supportive learning environment. The correlation coefficients indicate strong, positive relationships between all variables, with values ranging from 0.58 to 0.68. All correlations are statistically significant at the 0.01 level, as denoted by the ** symbol, which indicates highly significant results. The consistent positive correlations suggest that improvements in one area, such as course content or teaching methods, are associated with improvements in others, reflecting the interconnected nature of these dimensions in contributing to student satisfaction.

4.6 Hypothesis Testing

Table 9. Hypothesis Testing Results

Hypothesis	Path	Beta (β)	Standard Error	t-value	p-value	Result
H1	Course Content -> Satisfaction	0.42	0.08	5.25	0.00	Supported
H2	Teaching Method -> Satisfaction	0.38	0.07	5.43	0.00	Supported
H3	Learning Method -> Satisfaction	0.36	0.09	4.00	0.001	Supported
H4	Teaching Material -> Satisfaction	0.34	0.1	3.4	0.001	Supported

H5	Supporting Environment -> Satisfaction	0.44	0.06	7.33	0.00	Supported

The results of the hypothesis testing, as shown in Table 8, indicate that all hypotheses are supported with significant positive relationships between the key variables and student satisfaction. The strongest relationship was found for the impact of the supporting environment on student satisfaction ($\beta = 0.44$, $p < 0.001$), confirming the importance of a conducive environment in enhancing the overall effectiveness of the after-school music programs at the Meilide Art Center.

4.7 Discussion

The results of this study proved the helpfulness of after-school music training for students in Meiledi Art Center in Nanning, China, and made clear the correspondence of programs in students' expectations and satisfaction. The final section of the dissertation will entail discussing the observed data with reference to previous theories and research to make sense of the findings with reference to the existing literature and scholarship in the field of music education. Regarding students' distributions by gender and age, it was established that; The numbers of males and females were almost equal; however, as for the age line, students ranked between 12 to 18 years. This demographic diversity is essential in explaining the differentiated demands and expectations that students have towards their extracurricular music instruction. Prior studies have provided a secret of various demographic variables to the educational outcomes and satisfaction. For instance, Jiang et al. (2020) established that gender and age are factors that affect learning preferences and participation in music learning among students. These observations are supported by Meiledi Art Center's findings, especially regarding the gender distribution of students across the class preferences (for example, piano class, violin class, and singing class). That more than half of the students opted for piano classes proves that the tendency in music education throughout the world is to make piano an obligatory kind of class for students, stating that piano is the best kind of class for the general development of musical skills (Zhang et al., 2011).

The descriptive analysis of student satisfaction for each of the five aspects of their educational experience: the Supporting Environment, Course Content, Teaching Method, Teaching Material, and Learning Method revealed high mean scores for students' contentment. The "Supporting Environment" element has the highest mean score, reflecting the fact that the students appreciate the environmental conditions and facilities of the Meiledi Art Center. This finding aligns with the scholarly approaches to TQM in education, which emphasize the importance of a favorable environment for the improvement of the quality of education offered and its correlated influence on the satisfaction of the students (Sallis, 2002). That this result is in consonance with TQM principles points to the fact that the Meiledi Art Center has developed an environment that facilitates learning, which is a key tenet of learning with support from (Na et al., 2024). Previous work, including that of Huijun and Halabi (2023), has argued for an ability to teach students according to their learning style preferences. Thus, the lower satisfaction with learning methods at Meiledi Art Center could be explained by the necessity for more individual or diverse approaches to the teaching-learning process, which is one of the concerns that has been raised in the area of music education (Li, 2016).

The differential analysis, especially when accompanied by a comparison of the means of the different class types and campuses offered in Table 5, added more detail to the evaluation of the level of student satisfaction. The analysis revealed that the respondents did not differ greatly in most of the dimensions of

satisfaction, which can only mean that the students' quality experience is not determined by the type of music class or campus they attend. However, as the results available for the "Learning Method" and "Supporting Environment" demonstrated marginal significance in favor of singing classes and the Liangqin campus, these differences seem to be associated with the peculiarities of these classes or campus. This supports Xiaomin & Jie (2019) that it is still important to consider specific circumstances of music education: the type of instrument given to the student or the environment he or she is learning in. The higher satisfaction level in singing courses could be as a result of the fact that singing is more social and involves student expression more than dancing (Yang & Heong, 2024).

Furthermore, the multi-attribute utility analysis results showed the fields that might be of interest to the Meiledi Art Center in terms of development. All the identified needs, such as performance engagements, better IT facilities, and Instrument rental, show the ever-growing needs of the students in the education sector. This finding aligns with more recent studies indicating the affordances of new technologies with performance-based learning in music education (Feng & Peng, 2024). The desire for better facilities and performance opportunities also relates to the idea of a 'musicians' identity (He, 2022).

The results of the hypothesis testing provide even more evidence of the complex link between the quality of music education and students' satisfaction in Meiledi Art Center. All the hypotheses, one of which focused on the fact that the satisfaction level of students depends on the content of the course, the method of teaching, the method of learning, the teaching/learning aid, and the support environment, were answered statistically/probabilistically. Surprisingly, the impact of the most effective constructs were all rated very high, as seen through their higher means in the descriptive analysis, especially the supporting environment construct, which was nailed with the strongest prediction value of the student's satisfaction. This means that the physical atmosphere and facilities that accommodate education have a very important effect on education according to the TQM principle of education as postulated by Sallis (2002). These views are similar to observations sourced from Huijun and Halabi (2023) and Li (2016) under which educational approaches in teaching music need to be elastic to capture preferences in learning. This confirms the fact that Meiledi Art Center should continue to find ways to improve its teaching techniques and embrace more unique or individual teaching methods to improve students' satisfaction.

5. CONCLUSION AND RECOMMENDATIONS

This study has provided a deeper understanding of the effectiveness of after-school music training at the Meiledi Art Center in Nanning, China, specifically examining the relationship between student expectations and satisfaction. The results reveal that the Supporting Environment had the highest satisfaction rating, indicating the importance of a conducive physical and social atmosphere for enhancing student experiences. This underscores the need for continued investment in improving the learning environment, as it plays a crucial role in student satisfaction.

Additionally, while satisfaction levels were generally high, the findings highlight areas for improvement, particularly in the Learning Methods dimension, which received relatively lower satisfaction ratings. This suggests the need to incorporate more diverse and individualized teaching approaches that cater to students' different learning preferences, as supported by previous research in music education. The study also identified students' desires for more performance opportunities, enhanced digital resources, and access to a wider range of instruments, reflecting the evolving expectations of learners in the modern educational context. In line with other studies, the research confirms that factors

such as the quality of course content, teaching methods, learning methods, teaching materials, and supportive environment are central to student satisfaction. The Meiledi Art Center can continue refining its after-school music programs by addressing these key factors and aligning them with student expectations. These findings offer valuable insights for the Meiledi Art Center and similar educational settings, providing recommendations for enhancing student satisfaction in music education both in China and globally.

Despite the valuable insights gained, this study has several limitations. First, the sample was restricted to students aged 12 to 18 years, excluding other age groups that might also benefit from the music programs, limiting the generalizability of the results across all age groups. Additionally, the study was conducted at a single institution within Nanning, China, which restricts the applicability of the findings to other regions or educational settings with different cultural and social contexts. Methodologically, the reliance on self-reported data may introduce biases such as social desirability or recall bias, potentially impacting the accuracy of the findings.

5.1 Practical Implications

This study's findings have several practical applications for the Meiledi Art Center and other institutions that have after-school music programs. First of all, record high levels of satisfaction in relation to the‘’ Supporting Environment’’ dimension call for the need to continue improving and sustaining the physical and social environment of the Center. Such a center as the Meiledi Art Center should keep on providing finances for the improvement of the facilities so that they can even be more appropriate for learning and creation. This concerns not only the preservation of such status but also the search for the possibilities of the development and modernization of the infrastructure, for example, by expanding and improving the information and technical facilities and other areas of interest for the students. Yet another important consequence concerns the call for individualizing and varying approaches to teaching-learning practices – uneven as the findings for the “Learning Method” sub-indexes were significantly lower than the combined mean of all the five categories. In their practices, the center should refer to the idea of a diverse learning of students and, therefore, use flexible methods of instruction.

The study also sees performance opportunity as a crucial component in the education learning process. Thanks to the fact that a large portion of students expressed their wish to have more often and diverse performances, the Meiledi Art Center has a unique chance to expand its repertoire with more fancy recitals, concerts, and performances. Not only do such events afford students relevant ‘work experience’, but they also assist in building up their confidence and instilling a greater passion and interest in their musical pursuits. More performance experiences could also be as a strong selling point to the center, coupled by an overall improved reputation in the community. Furthermore, since the students’ perception of their overall satisfaction is slightly lower in classes where singing is offered, it can be assumed that maybe there are certain components of the singing classes that students find more appealing.

6. LIMITATIONS AND FUTURE STUDIES

It is important to acknowledge several limitations of this study, which aimed to understand the effectiveness of after-school music programs at the Meiledi Art Center. First, the study was conducted in a single institution within Nanning, China, which limits the generalizability of the findings to other regions, institutions, or cultural contexts. The results may not directly apply to other schools or universities with different social, economic, or cultural settings. Future research should consider expanding the study across

multiple institutions in different regions of China or even internationally to validate whether the observed trends are consistent in diverse educational settings, thereby offering a more comprehensive understanding of after-school music education. Additionally, the study focused on a relatively narrow age group of 12 to 18 years, which excludes younger or older students who might also participate in music programs. This age restriction limits the scope of the findings to adolescents, potentially overlooking how different age groups experience and benefit from such programs. Furthermore, the study did not account for the academic grade level of students, which could influence their engagement and satisfaction with the music programs. Future research should aim to include a broader range of age groups and consider the impact of academic grade levels on student outcomes.

Future research should include other ways of data collection like observation of the classes, interviewing of the teachers, or an evaluative criterion for assessing the improvement to increase the validity of the conclusions regarding the efficacy of the music programs. The study also used cross-sectional data, and this restricted its assessment of the remote learning effects of the performed music programmes on students. Further research that would focus on following students and the changes in student outcomes and satisfaction would be useful in determining the dynamics of these aspects of the program and the effect of continued exposure to the music programs on education. It could also investigate long term impact of learning and performing in after school musical activities on students' academic performance, character transformation and further trainings or careers in music and related professions.

Furthermore, while identifying five dimensions of educational experience, namely, Supporting Environment, Course Content, Teaching Method, Teaching Material, and Learning Method, the study might have omitted other factors that could have influenced student satisfaction. Further research might consider other possible dimensions, which could be school peer relations, involvement, or the effect of after-school activities on the overall schooling process of children. Extending the study in such a manner could bring more extended insight into the nature of what determines the satisfaction of the students in after-school music programs.

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Ethical Statement: Informed consent was obtained from the students and their parents before the data collection. Moreover, all data collected were anonymized to protect the identity of participants and guarantee their privacy and security. The procedures of the study were approved by the department of Bansomdejchaopraya Rajabhat University, Thailand, where this researcher was studying. In this case, the study proposal was subjected to the University Ethical Committee to ensure that all the procedures followed were ethical and met the University's Ethical Standards.
Consent to Participate: Before conducting this research study, the researcher has obtained permission from the Department of Bansomdejchaopraya Rajabhat University, Thailand. The researcher explained the objectives of the study before collecting the data. The respondents were assured that the information

would only be used for research purposes. The respondents were told that they could withdraw at any stage from the interview if they felt uneasy or did not want to continue the interview.

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