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Incorporating alexander techniques into the preparatory piano courses for the national art entrance examination in China: An experimental study

Yixiang Fang[1]
Clinton Chidiebere Anyanwu[2+]
Tassanee Laknapichonchat[3]
Yaoping Liu[4]

[1,2,3,4]*Institute of Science Innovation and Culture, Rajamangala University of Technology Krungthep, Bangkok, Thailand.*
[1]*Email: 669240200115@mail.rmutk.ac.th*
[2]*Email: clinton.c@mail.rmutk.ac.th*
[3]*Email: tassanee.l@mail.rmutk.ac.th*
[4]*Email: yaoping.l@mail.rmutk.ac.th*

(+ Corresponding author)

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ABSTRACT

An experimental study was conducted to observe the effect of the Alexander Technique (AT) on piano performance within curriculum learning, specifically aimed at reducing pre-examination anxiety caused by China's National Art Entrance Examination (NAEE). The study employed a pretest-posttest controlled design with a sample of 60 NAEE piano students aged 16-20 years, who were randomly divided into four groups: a group (Group A) that received continuous AT intervention, a group (Group B) where the AT was terminated after three months, a group (Group C) where the AT intervention was introduced after a three-month delay, and a traditional pedagogy control group within a formal educational context. Anxiety levels were assessed using the Beck Anxiety Inventory (BAI). The results indicated significant reductions in anxiety among the AT intervention groups (A, B, C; $p < 001$); average BAI scores attenuated from moderate anxiety (21.87, 22.87, 21.53) to non-clinical levels (2.93, 5.20, 3.27). We found the largest reduction in anxiety in Group A (combining full AT integration), which outperformed Groups B and C. There was no significant change for the control group (D), as $p = .339$. AT integration is a viable method to alleviate pre-exam anxiety, and the best outcome can be achieved with continuous application. These results endorse the didactic potential of AT in high-stakes exam preparation, as it enhances mind-body interfacing and sustainable action skills.

Contribution/ Originality: The paper contributes a new pedagogical model in which the Alexander Technique (AT) is integrated into conventional piano training to address the differences in psychology and spacing techniques encountered by China's National Art Entrance Examination (NAEE) entrants. Its results provide the first support for AT's capacity to reduce pre-examination anxiety and improve performance readiness in Chinese conservatoire pianists.

1. INTRODUCTION

The National Art Entrance Examination (NAEE) is an independent component of China's higher education admissions system and is used to recognize talent in the arts throughout the country. Parallel to the Gaokao, or national college entrance examination, the NAEE offers an alternative path for students seeking to secure a place in renowned art colleges and universities. Candidates still have to pass the Gaokao, but those who excel in their artistic talent only need to meet lower minimum academic scores [1]. This two-tiered merit structure – academic and artistic – reflects China's attempt to harmonize cultural cultivation with academic attainment in its higher education system.

The NAEE has expanded considerably in reach and influence. In 2022, approximately 1.15 million candidates across the country took this examination, with music majors accounting for about 15% of them [2]. Of these, piano performance is still the most common, and it is understood in all music faculties of universities in China. Piano applicants are required not only to play their instrument proficiently but also to comply with requirements in related fields, such as music theory, solfège, aural skills, and singing. In contrast to the decelerated process of long-term conventional piano education, NAEE training tends to be very rapid (often in terms of months rather than years) and competitive, with a tenor of high-stakes academic pressure and psychological stress. This rush to preparation has led to pervasive examination-induced anxiety among NAEE piano students. The urgency to sound professional in a short amount of time and the 'competition' nature of the exam often lead to increased stress, tension, and lower quality playing. A national survey of prospective NAEE entrants (n=354) was carried out, and found that 87% felt anxiety or tension during preparation, 70% had unresolved anxiety at examination times, and more than 80% believed these were detrimental to performance.

These results underscore the pressing demand for pedagogical methods that cover not only technical but also psychological aspects of piano performance. One potential intervention in this area is the Alexander Technique (AT), an educational method that originated in the early 20th century by Frederick Matthias Alexander. It trains people to become aware of and change ingrained habits of unnecessary tension and mispositioning, which inhibit freedom of motion, optimal health, and self-expression [3]. In music learning, AT was found to improve musicians' physical muscle coordination, posture, and breath control or mental concentration, as well as decrease performance-related anxiety and fatigue [4, 5]. Clearly, to be recommended as a powerful pedagogical tool for musicians wanting to play with ease and expression, it is outstanding in its focus on mindful awareness and body-mind integration. Although the Alexander Technique has shown substantial benefits in Western music education, it is still rarely investigated in China, especially in high-stakes contexts like NAEE. Piano teaching in China has been more influenced by technical perfection and examination passing, though there still tends to be little interest in the whole physical being of the performer.

AT is therefore an innovative addition to NAEE piano lessons and a new gateway to achieve somatic awareness, psychophysical equilibrium, and emotional control in student performers. Initial searches in major academic databases using keywords (e.g., "NAEE Piano Education," "Alexander Technique in Music," and "Alexander Technique Piano Pedagogy") found no empirical research on AT as applied to Chinese NAEE settings. This significant lacuna in research highlights the importance of investigating how such a mature, Western-imported technique could be adjusted to meet the particular needs and culture of Chinese music education. This study, therefore, seeks to investigate the introduction of the Alexander Technique into NAEE piano preparation courses and its effect on students' performance anxiety and level of readiness for examination. More precisely, this study aims to address: What is the level of pre-test anxiety in NAEE piano students learning with the Alexander Technique to sit their exams? The study aims to create a more integrated, that is, multi-systemic learning model which combines piano tuition with AT principles so that students benefit not only from enhanced technical ability but also resiliency towards the psychological effects of the pursuit of virtuosity. It is anticipated that this will advance theoretical and practical understanding on the part of music educators and policymakers in relation to evidence-based rationales for mind-body coordination strategies used to enhance performance success as well as student well-being. Finally, it extends the literature related to holistic and humanistic approaches within Chinese higher music education and simultaneously connects international pedagogical models with localized educational contexts.

2. LITERATURE REVIEW

This literature review is focused on three key domains: the Alexander Technique theory, research on the Alexander Technique, and NAEE research in China.

2.1. Alexander Technique Theory

Originating in the first half of the 20th century, the Alexander Technique is a comprehensive discipline that encompasses a wide range of fields, including medicine, psychology, pedagogy, and kinesiology. Today, it is widely used in the field of music performance in many European and American conservatories. The pedagogical goal of the technique is to help music performers reduce the physical and mental stresses that may occur during practice and performance, including tension, fatigue, and pain, and to help them identify and improve poor movement habits in order to achieve a more comfortable and harmonious state of musical performance. This is a unique modality (referring to the Alexander Technique) that is neither psychotherapy nor purely physical therapy but rather a psychophysical technique aimed at the amelioration and education of the use of the body [6]. Therefore, summarizing the above, the Alexander Technique theory can be understood as a comprehensive curriculum theory based on the technique and its related curriculum content and concepts, which involves a number of disciplines such as medicine, psychology, pedagogy, and kinesiology. Its philosophical basis is derived from the "unity of mind and body" theory of the famous American philosopher John Dewey, and its teaching goal is still to help music performers solve the problems of tension, fatigue, and pain caused by the imbalance of mind and body.

Frederick Matthias Alexander (1869-1955), founder of the Alexander Technique (AT), developed persistent vocal and respiratory distress during his acting career that proved unresponsive to medical treatment. Through a decade of self-observation and experimentation before mirrors, he not only resolved his own condition but also established a technical system for alleviating muscular tension and coordinating mind-body integration [7]. The American philosopher John Dewey, having encountered chronic ailments, sought Alexander's guidance and studied AT over their ensuing 36-year association. AT profoundly influenced Dewey's educational philosophy writings, while Dewey's philosophical thought reciprocally contributed to the theoretical refinement and development of AT [8].

The core of AT theory lies in mastering bodily experience [9]. It is advocated that the body be integrated into education, as the body constitutes the natural foundation of artistic experience, the source of art, and its primordial form [10]. Within AT, bodily experience is manifested through the establishment of Body Mapping. Body Mapping refers to an individual's mental representation of their own physiological structure. These cognitive maps interpret proprioception and visceral sensations while guiding movement. The formation of Body Mapping is influenced by kinesthetic and tactile experiences, among other factors, essentially constituting memories of how individuals interpret bodily experiences [3].

This study integrates AT into traditional piano pedagogy to assist candidates in establishing accurate Body Mapping. The application of precise Body Mapping facilitates healthy and efficient movement, whereas inaccurate Body Mapping results in biomechanically inefficient and potentially injurious movements [11]. Consequently, this research hypothesizes that by enabling candidates to develop correct Body Mapping and master physiologically optimal piano-playing techniques, physical stress during performance may be reduced, thereby alleviating pre-examination anxiety levels. This study will adopt an experimental research approach, setting up an experimental group and a control group to verify whether incorporating AT into NAEE exam preparation courses can alleviate candidates' pre-exam anxiety levels.

2.2. Previous Studies on the Alexander Technique

Clinical evidence demonstrates the efficacy of the Alexander Technique in pain management: AT constitutes a psychophysical re-education process that enhances postural balance and coordination, with empirical evidence confirming its efficacy in reducing disability among Parkinson's patients and alleviating pain behaviors in chronic back pain sufferers [12]. Clinical investigations demonstrate that when integrated with physical exercise, AT yields sustained back pain reduction exceeding 12 months, significantly outperforming massage therapy [13] while also surpassing exercise prescription alone in pain relief efficacy, concurrently enhancing patient adherence [14]. Functioning as a self-management method possessing therapeutic benefits [15], AT releases pathological muscle

tension while inhibiting maladaptive habits that provoke chronic pain [16]. Notably, AT programs achieve comparable effectiveness to targeted exercises in mitigating chronic neck pain through distinct biomechanical mechanisms [17] and reduce analgesic dependency through modulation of fear-avoidant behaviors [18]. This therapeutic capacity extends to musicians, among whom performance-related musculoskeletal disorders exhibit a 39-93% prevalence, with AT interventions proving effective in diminishing tension across playing-associated musculature [19, 20].

The Alexander Technique (AT) holds a natural advantage in the field of music. Alexander, encountering vocal problems during performance, began exploring methods of self-improvement. This ultimately led him to develop the Alexander Technique, which improves vocal production and performance by controlling how the body is used [21]. AT systematically improves articulation clarity through tension release [22] and establishes a body mapping framework for injury prevention [3]. Its core aim is to enhance quality of life and expressiveness in non-pathological contexts [23], optimizing respiratory function to elevate artistic performance [24] while also increasing technical efficiency in piano [25] and cello [26] playing. Crucially, AT alleviates Music Performance Anxiety (MPA) by reducing somatic stress through posture resetting [27], enhancing mind-body coordination in orchestral students [28], and demonstrating anxiety-reducing efficacy comparable to Cognitive Behavioral Therapy [19, 29]. Biomechanical analysis confirms increased head-neck mobility [30] and improved spinal alignment [31] during performance. Furthermore, pedagogical innovations like the Downside Alexander Technique utilize action mirroring to refine postural awareness [32]. Together, these elements empower musicians to achieve higher levels of artistic expression [33].

The practice of AT in China is still in its exploratory stage, and the Shanghai Conservatory of Music is currently the only professional institution offering AT instruction. Overall, there are few academic achievements: early research introduced the core principle of AT, which optimizes artistic expression by enhancing physical and mental coordination, especially for musicians [34] and its application in global performing arts and ergonomics [35]; After 2010, research has demonstrated that teaching applications include relieving performance anxiety through muscle tone regulation [36] vocal music [37] and piano posture correction [38, 39]; integrating physical and mental awareness to overcome movement limitations [40, 41]; improving instrumental techniques such as clarinet fingering and exhalation control [42]; developing phased training programs [43]; and using AT's "mind-body unity" principle of localization framework to prevent occupational injuries and enhance performance [9, 44].

2.3. Previous Studies on NAEE in China

In China, research on NAEE can be roughly divided into three stages. Early research from 2004 to 2008 focused on discussing the causes and impacts of the NAEE boom in China: the admission line for art colleges (50% for regular majors) attracting academically disadvantaged students to turn to art [45, 46]; high schools are using art exams to boost enrollment rates [47]; universities profiting from expanding enrollment due to high tuition fees and low operating costs [48]; and national quality education policies promoting art training [49]. Confirmed impacts during the same period include an imbalance in art education resources [47] decline in teacher and student quality [50, 51], commercialization challenges [52], and the role of art education in building cultural soft power [53].

From 2009 to 2016, the research focus of NAEE shifted to employment pressure and institutional reform. Art graduates faced severe employment challenges, with 55% engaged in non-professional jobs [54], and the employment rate for some majors was less than 60% [55]. The root cause lies in the imbalance between supply and demand caused by enrollment expansion [56, 57]. Scholars simultaneously proposed reform paths: abolishing the "reduced score admission" policy [58], raising the requirements for cultural courses [59], optimizing the provincial unified examination [60], establishing a decentralized evaluation system, and strengthening supervision [61].

Subsequently, from 2017 to the present, research on NAEE has gradually shifted from theoretical research to teaching practice research, revealing issues such as teaching deficiencies, institutional reforms, and psychological

pressure on examinees. Studies have shown that standardized courses generally inhibit learning enthusiasm [62, 63], the teaching of solfège and ear training is fragmented [40, 64], and vocal music teaching neglects individual differences [65, 66]. 78% of examinees suffer from clinical anxiety, and academic, family pressure, and mental health stigma exacerbate symptoms [67, 68]. Reform proposals advocate for provincial digital unified exams to enhance fairness [69] and balanced assessment of artistic ability and cultural literacy [70].

In summary, it can be seen that there is little research on the NAEE teaching method. However, as the NAEE is an examination, teaching during the preparation stage is particularly important. At the same time, although AT is a teaching method that has matured in the international music education community, research on it in China remains largely unexplored. Therefore, this study aims to fill this research gap, striving to reform and advance NAEE piano preparation teaching and contributing to the development of AT in Chinese piano education.

3. RESEARCH METHODS

3.1. Research Design

This study employed a pre-test and post-test experimental design to investigate the impact of AT on the pre-exam anxiety levels of NAEE candidates. Finally, the pre-test and post-test scores of the candidates were compared. To clarify the causal effect of AT integration into the NAEE piano program on candidates' pre-exam anxiety levels, a strict separation of the teaching method variable from other potential confounders was achieved through human intervention (AT was set as the teaching method in the intervention group) and active control (the traditional teaching group as the control), thus ensuring that the differences in the observed results stemmed directly from the differences in the teaching modes. Therefore, this study will use an experimental approach to directly observe the causal effects of teaching methods (independent variables) on anxiety levels (dependent variables) in a controlled environment. In this way, the differences between the two types of teaching methods will be verified.

3.2. Participants

This study involved 60 candidates (20 males and 40 females) from an NAEE training and education institution in China. All participants were candidates preparing for the 2024 NAEE exam, aged between 16 and 20. They were selected based on the fact that they were preparing for the 2024 NAEE, which was in line with the theme of this study. Ethical considerations were followed, including obtaining permission from the college research and ethics office and the head of the economics department. Consent letters were provided to participants, ensuring their right to withdraw from the study at any time.

3.3. Experimental Process

The study involved 194 candidates from a specific art school who participated in the 2024 NAEE and selected piano as their instrument. A random sampling method was employed, with a sample size of 60 participants. The experiment was conducted from July to December 2024, lasting six months. Data collection utilized the Beck Anxiety Inventory (BAI) as the experimental tool. The BAI, developed by Aaron T. Beck and colleagues in 1985, is a self-report questionnaire comprising 21 items. The scale uses a 4-point rating system to assess the extent to which participants are bothered by various anxiety symptoms. It accurately reflects the subjective level of anxiety experienced. Final pre-test and post-test scores were collected for each student. Reliability was verified using Cronbach's alpha coefficient, which yielded a value of 0.88. The BAI scores were ultimately used as the experimental results.

The experiment will divide participants into four groups, labeled A, B, C, and D. Each group consists of 15 people, with 5 males and 10 females. The specific allocation of the experimental and control groups is detailed in the study protocol, as shown in Table 1.

Table 1. Comparison of teaching methods between the experimental group & control group.

A	Piano teaching method using integrated AT throughout the entire process	Experimental group
B	The piano teaching method using Fusion AT was used for the first three months of the experiment, and the traditional piano teaching method was used for the last three months.	Experimental group
C	The traditional piano teaching method was used for the first three months of the experiment, and the piano teaching method incorporating AT was used for the latter three months.	Experimental group
D	Using the traditional piano teaching method.	Control group

The purpose of setting up groups and arranging teaching methods in this way is to explore the sustainability of AT and the optimal time for intervention, ultimately to enhance the effectiveness of NAEE's piano preparation courses.

To ensure consistency in the application of the Alexander Technique to Groups A, B, and C, researchers summarized the AT into the following nine teaching points based on the teaching progress of traditional piano teaching methods:

1. *Hands on the back of a chair*: The exercise involves sitting on one chair, reaching for the back of another in front of you, and holding it without misusing your body, requiring dynamic posture and control.

2. *Elbows out, wrists in*: Sit with your hands flat on the table, rotate your little fingers outward and wrists inward, keeping elbows out; this creates constructive opposition in your arms, making your fingers stronger, while reversing the position weakens them.

3. *Dynamic sitting*: Your sitting posture is influenced by your body type, habits, chair, and goals; ideally, you should sit forward on your sit bones, with an erect back, a long spine, a mobile head, and feet flat on the floor.

4. *Reaching out*: The process involves directing your head, neck, and back, followed by your pelvis, legs, and feet, then your back and shoulders, arms, hands, and fingers, and finally lifting your arms to hold the chair's railing while maintaining all previous directions.

5. *Holding and handling an object*: Mastering the touch when holding a chair involves four difficulties: finding the appropriate force, maintaining good posture without tension, controlling timing, and smoothly combining dynamics and timing.

6. *Power and strength in the arms*: To play loudly, a pianist must avoid creating unnecessary tension by overusing their arms and instead rely on well-distributed tension that feels like relaxation, with the back doing more of the work and the arms doing less.

7. *Quadrilateral transfer*: Quadrilateral transfer occurs when the legs and arms work together, creating an opposition of forces, with the back balancing the tension as you use your arms and legs to control a chair's tilt while keeping your back aligned.

8. *Practice mentally*: Practice a piece either with or without a score, and mentally away from the instrument, visualizing gestures and sounds; this allows the music to live freely in your mind, fostering psychophysical connections that can be carried over into actual performance.

9. *Working on yourself with Alexander's procedures*: Follow these directions: free the neck, allow the head to go forward and up, lengthen and widen the back, let the knees go forward and away, lean the trunk from the hips, spread the shoulders, extend the arms through the elbows, wrists, and fingertips, bring the arms around the chair's back, and let the fingers grip the chair.

During the experiment, Group A candidates will learn one key point every two lessons, while Group B and Group C candidates will learn one key point per lesson in the first three months and the last three months of the course, respectively.

During the analysis phase, the Statistical Package for Social Sciences (SPSS) version 26 will be used to analyze the collected BAI data. To analyze changes in pre-test and post-test data for each group, a paired samples t-test will be employed to verify the research hypothesis.

4. RESULTS

This study conducted a controlled experiment to investigate the effect of incorporating AT into NAEE piano exam preparation courses on candidates' pre-exam anxiety levels. Specifically, this study found that incorporating AT into NAEE piano exam preparation courses can effectively alleviate candidates' pre-exam anxiety levels.

4.1. Results of Paired Sample T-Test

The pre-test and post-test scores for psychological anxiety among the examinees participating in the experiment were analyzed and compared using a paired samples t-test. The results are shown in Table 2:

Table 2. Differential analysis of anxiety scores before and after the experiment for each group.

Group	Pre- and Post-test	Mean value	Standard deviation	t-value	p-value
Group A	Pre-test	21.87	4.66	16.141	0.000
	Post-test	2.93	1.10		
Group B	Pre-test	22.87	3.74	17.447	0.000
	Post-test	5.20	1.37		
Group C	Pre-test	21.53	4.55	15.850	0.000
	Post-test	3.27	1.10		
Group D	Pre-test	21.27	5.08	0.991	0.339
	Post-test	19.67	2.94		

The t-values for the experimental groups A, B, and C in Table 2 were 16.141, 17.447, and 15.850, respectively, with p-values of 0.000. At the 5% significance level, these results have statistical significance ($p < 0.05$), indicating that the anxiety scores of the three experimental groups decreased significantly after the experiment. The t-value for the control group D was 0.991, with a p-value of 0.339. At the 5% significance level, this result was not statistically significant ($p > 0.05$), indicating that there was no change in group D before and after the experiment.

4.2. Results Analysis

As shown in Table 2, the mean pre-test anxiety scores for Groups A, B, C, and D were all between 20 and 23 points. According to the BAI scoring criteria, 0–13 points indicate no anxiety, 14–19 points indicate mild anxiety, 20–28 points indicate moderate anxiety, and 29–63 points indicate severe anxiety. Prior to the experiment, the anxiety levels of students in all four groups were classified as moderate anxiety. The standard deviation indicates that the data dispersion across the four groups is relatively similar, suggesting that students had relatively consistent psychological anxiety levels prior to the experiment. The post-test scores in the table show that the mean post-test anxiety scores for Groups A, B, and C were 2.93, 5.20, and 3.27, respectively. According to the BAI scoring criteria, the anxiety levels of students in these three experimental groups were at a state of no anxiety after the experiment. The standard deviation indicates that the data dispersion of the three groups is more concentrated than in the pre-test, with all around 1. The post-test anxiety score mean of the control group D is 19.67. According to the BAI scoring criteria, the psychological anxiety state of group D students remains at a moderate anxiety level, unchanged from before the experiment.

5. DISCUSSION OF FINDINGS

The implications of this study suggest that integrating AT into the NAEE piano exam preparation course can be an effective means of reducing candidates' pre-examination anxiety levels. According to Table 2, for all the groups, before the experiment, on average, anxiety scores in BAI were between 20 and 23, indicating a moderate level of anxiety, while their standard deviations were approximately 4.66, 3.74, 4.55, and 5.08. This suggests a small difference in the anxiety state between groups at pre-test, overall remaining around the same level. After the intervention, the mean scores for Groups A, B, and C decreased to 2.93, 5.20, and 3.27, respectively, reflecting no-anxiety levels with

more condensed SDs (1.10, 1.37, and 1.10). The post-test score for control group D remained at 19.67, which was not significantly different from the pre-test, still indicating a moderate anxiety level. According to the analysis of paired-sample t-test results, three groups (Group A, Group B, and Group C) all showed significant differences at the 5% probability level ($p<.005$), showing that the extent of decrease in anxiety levels was not significant in Group D (.339). It can therefore be concluded that AT exercises do have an effect on reducing pre-exam anxiety in candidates.

Furthermore, as listed in Table 3, the mean anxiety scores of Groups A, B, and C decreased from 21.87, 22.87, and 21.53 to 2.93, 5.20, and 3.27, respectively ($p<0.0001$), with reductions of absolute change of -86.60%, -77.26% and -84.81%.

The reduction of pre-exam anxiety levels can be compared among Groups A, B, and C as follows: Group A (with AT intervention continuously throughout the entire period) achieved the largest reduction (86.60%) compared to Group B, which received AT for three months after the experiment started (77.26%).

Table 3. Decrease in anxiety levels in the experimental group.

Group	Pre- and post-test	Mean value	Standard deviation	Rate of decline
Group A	Pre-test	21.87	4.66	86.60%
	Post-test	2.93	1.10	
Group B	Pre-test	22.87	3.74	77.26%
	Post-test	5.20	1.37	
Group C	Pre-test	21.53	4.55	84.81%
	Post-test	3.27	1.10	

The results suggest that embedding AT in the NAEE's piano exam preparation courses may be useful for reducing candidates' pre-exam anxiety. In addition, Group A outperformed groups that exited halfway through the AT intervention (Group B) or halfway through the AT intervention program (Group C).

5.1. Limitations

Limitations of the present study are the number and nature of researchers (and type, of course; one-to-one teaching). So, the experiment was relatively small. If the NAEE piano preparation course, which integrated AT, could be refined and standardized, and if more NAEE piano teachers would participate in the experiment from more schools or regions, it would be favorable to future research. Meanwhile, for the sake of objectivity from the venue environment and conditions, we only adopted a questionnaire to measure candidates' pre-exam anxiety. In future studies, it will be even more meaningful to have ways to identify candidates' pre-exam anxiety via multiple methods and show AT's impact significantly in piano teaching.

6. CONCLUSION AND RECOMMENDATIONS

The purpose of this study is to verify the effects of combining AT with NAEE piano examination preparation courses on prospective examinees' pre-examination anxiety. The findings reveal that incorporating AT into the NAEE piano exam preparation course is a successful approach to reducing candidates' pre-exam anxiety. Also, the results show that attaching AT to the entire course yields better performance than interrupting or starting halfway through. In short, we may infer that applying AT throughout the entire preparation for the NAEE piano examination in China contributes to successfully reducing candidates' pre-exam anxiety.

To further elucidate the educational effectiveness of AT, future studies should concentrate on refining the design in three aspects as follows:

- Increase in sample size, diversity.
- Conducting follow-up observations.
- Enrich testing methods.

For a long time, the NAEE preparation in China has suffered from high exam pressure and a physical-mental imbalance, which makes candidates work as "mechanical players" with increasing stress. The Alexander Technique is a learning method that promotes mind-body unity, so-called "awareness awakening" and "body re-education," with the purpose of reducing psychological overburden placed on candidates. When the range of instruction shifts from 'how to do' to a concern for the physical and mental condition of candidates, this independence bursts into life, and thus the technique ends up being used by the person rather than the technique virtually using them – returning us, in fact, to that which is fundamental to all music education: "Finding freedom in the sound of piano-touch, seeing oneself on stage."

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Transparency: The authors state that the manuscript is honest, truthful, and transparent, that no key aspects of the investigation have been omitted, and that any differences from the study as planned have been clarified. This study followed all writing ethics.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study. All authors have read and agreed to the published version of the manuscript.

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