



A Scholarly Investigation into Performance Anxiety among Chinese Orchestra Musicians: Etiological Factors and Mitigation Strategies

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Abstract. Performance anxiety has attracted considerable attention from global music education researchers due to its direct impact on musicians' on-stage performance, behind-the-scenes preparation, physical and mental health, and career choices. However, there remains a paucity of research focusing on performance anxiety among orchestra musicians in the Chinese context. This study employs a qualitative methodology to explore this issue, utilizing semi-structured interviews with orchestra musicians from first-tier metropolitan cities in southern China. The participants include two professional orchestra members and four college orchestra members. The findings indicate that performance anxiety is a persistent issue among these musicians, with some individuals independently seeking coping mechanisms. Consequently, it is imperative to address performance anxiety among orchestra musicians, facilitate their acquisition of effective management strategies, and support the development of Chinese orchestras.

Keywords: Musical performance; Anxiety; Orchestra; Orchestra player; China

1 Introduction

Performance anxiety, also known as "stage fright," refers to the phenomenon wherein musicians experience psychological anxiety in front of an audience, sometimes hindering their ability to perform[1]. The symptoms of stage anxiety include strong activation of the sympathetic nervous system, resulting in rapid heartbeat, shortness of breath, shaking, nausea, dry mouth, blurred vision, sweating, and numbness of hands and feet. Stage anxiety is a prevalent phenomenon worldwide, children, young musicians, and established performers may all experience it, may experience it. Alleviating stage anxiety enables musicians to execute their works more smoothly, enhances their stage confidence, and provides a better audition experience for the audience. In many foreign countries, specialized workshops employ various methods to address stage anxiety. For example, the new technology(VR) is being used to deal with stage anxiety[2]. They employ projection to simulate virtual audiences and judges, replicating the backstage warm-up environment before a performance. Additionally, they incorporate the audience's applause for successful performances or sighs for less smooth performances.

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This enables musicians to identify factors contributing to stage anxiety before and during performances, thereby enhancing their actual performance.

Despite the prevalence of research on performance anxiety, few studies have specifically addressed this phenomenon among orchestra musicians within the Chinese context. Moreover, it has been observed that the majority of Chinese musicians have not received professional training in performance anxiety interventions throughout their careers. Consequently, this study aims to investigate Chinese musicians' comprehension of performance anxiety and their coping mechanisms, with the goal of enriching the empirical literature on music performance anxiety.

2 Literature Review

Music Performance Anxiety (MPA), often referred to as stage fright, encompasses a range of physical, emotional, cognitive, and behavioural symptoms characterized by excessive anxiety and tension during a musical performance in front of an audience. Manifestations of MPA can vary significantly among individuals, with common symptoms including elevated heart rate and increased muscle tension. Incomplete statistics suggest that MPA is prevalent among both students and professional musicians specializing in performance. This anxiety can negatively impact both the physical and mental well-being of performers[3]. Consequently, there is considerable focus on understanding and addressing performance anxiety in both domestic and international contexts. Some countries have established specialized workshops aimed at mitigating performance anxiety, and numerous scholars have undertaken experimental research to explore effective intervention strategies for managing this condition.

Since the 1980s, China has increasingly focused on the impact of performance anxiety on musicians. Scholars have identified that the primary causes of performance anxiety are twofold: intrinsic psychological factors of the musicians and extrinsic influences such as parents and teachers[4]. From the perspective of the musicians, performance anxiety is closely linked to their self-esteem and willpower. Research indicates that individuals with low self-esteem are more likely to be preoccupied with external opinions, leading to difficulties in maintaining concentration during performances or recovering from mistakes. Additionally, studies have suggested that some individuals possess inherent "anxiety traits," which may have a genetic basis[5]. In the realm of professional training, the teaching methods and attitudes of instructors significantly affect students' experiences of performance anxiety[6].

Foreign studies have indicated that music performance anxiety needs to be analyzed on two distinct levels: solo and ensemble performance. Research suggests that ensemble performance often mitigates anxiety among musicians, providing a sense of shared responsibility and support[3]. Conversely, solo performance tends to amplify anxiety, as the individual musician bears the full focus and pressure of the audience, leading to heightened stress and performance anxiety.

In addressing performance anxiety, domestic experts suggest that music teachers and parents should adopt encouraging and supportive approaches during the learning process. Rather than criticizing students for performance mistakes, they should employ

gentle and positive reinforcement to help students overcome negative emotions associated with errors, thus better preparing them for future performances. Foreign experts, on the other hand, recommend a variety of interventions to alleviate performance anxiety. Psychologically, the use of simulated performance environments and targeted psychological suggestions can be effective. Additionally, physical exercises such as yoga have been demonstrated to significantly reduce anxiety associated with musical performance. Furthermore, dietary considerations also play a role, with appropriate nutritional choices helping to alleviate anxiety to some extent.

Performance anxiety often has a negative impact on young musicians[7]. Anxiety will make immature musicians tense their muscles and speed up their heart rate during performances, resulting in unsatisfactory performances. Moreover, a wrong performance will affect the career direction of musicians in serious cases, making them doubt whether they have the abilities to become professional musicians. The psychological mistakes in the performance will also lead to the loss of self-confidence of the musicians, if the correct psychological counselling is not carried out, it will increase their performance anxiety, and fear of performance.

But on the other hand, anxiety will have positive effects to some extent[8]. More mature musicians will transform anxiety into excitement. Studies have shown that positive emotions and negative emotions are neither opposite nor mutually exclusive, so they are more immersed in music.

3 Purposes

This study aims to elucidate the underlying causes and coping mechanisms associated with performance anxiety among Chinese orchestra musicians. The investigation is structured around the following two research questions:

1. How do Chinese musicians perceive performance anxiety and its causes?
2. How do Chinese orchestra players cope with performance anxiety?

4 Methods

In this study, the researcher conducted six semi-structured interviews to gain insight into the interviewees' understanding and coping with MPA. Interviews can provide in-depth information about participants' experiences and viewpoints on a particular topic. The researcher uses interviews as an instrument for data collection because they give "privileged access to our basic experience of the lived world" [9]. In addition, conducting interviews is the primary way for researchers to "investigate an educational process through the experience of the individual people who carry out the process" [10].

Semi-structured or focused interviews[11] are used to gain an in-depth understanding of the participants' MPA experience. The semi-structured interviews included predetermined questions and further in-depth questions ("second questions") based on the interviewees' answers[12]. Semi-structured interviews incorporate opened-ended questions and need not be aimed at accomplishing a specific goal.

4.1 Research Participants and Sampling

The researcher selected participants using the purposive sampling method, which enabled us to sample our participants in a strategic way to ensure a good deal of variety in the sample. Under this method, we selected university students and professional musicians who were playing oboe, flute, cello, violin, horn, piano. I invited six participants between 18 and 47 years of age to participate (see Table 1). These students and artists are all members of three orchestras from a metropolitan city in Guangdong Province and have had MPA experience at the same time. Some of them are professional orchestras principals, some are first-year college students. All reported names are pseudonyms.

These musicians have been learning music since childhood, and have a lot of experience in the orchestra, several of them are professional musicians, their performance experience is very rich, and they have studied abroad experience.

Table 1. Demographic information of research objects

Name	Age	Gender	Instrument	Principal	Time join the orchestra
Pan	28	Male	Horn	Yes	17 years
Kai	47	Male	Oboe	Yes	32 years
Wu	24	Female	Cello	No	6 years
Ao	18	Female	Horn	No	10 years
Long	23	Male	Bass Trombone	Yes	10 years
Zhou	37	Male	Oboe	Yes	15 years

4.2 Procedure

The researcher invited the players that cover a wide range of parts of the orchestras and have a wealth of experience, several of them are principal. Before the interview, the researcher will send the interview outline to the participants in advance, and inform them that the interview will be recorded and the participants has the right to come out at any time. The researcher interviewed each participant privately for about 30 min. The interviews took place at the studio where the participants learned their instrument to minimize their anxiety. The researcher audio-recorded the interviews using a smart phone's recording function and then transcribed them. The audio files and interview transcripts were stored in a password-protected file on the researcher's computer. The researcher read the transcripts several times to provide a context for the emergence of themes.

The researcher herself is the oboe principal of the orchestra and has 13 years of orchestra playing experience. As a result, she was able to conduct in-depth communication with interview subjects as an "insider" and obtain more reliable data. In addition, the researchers used a method called "member checking," in which the results of data analysis were sent back to the subjects for review, and the findings were adjusted accordingly. In order to ensure the "objectivity" of the research, the researcher also submitted the data analysis results to the supervisor/advisor, an associate professor of the

Conservatory of Music, for discussion, so as to ensure the reliability and credibility of the research to the greatest extent.

5 Findings

Numerous studies have indicated that performance anxiety is intricately linked to the developmental stages of individuals, particularly noting a marked increase during adolescence. In childhood, the manifestation of performance anxiety is generally minimal, but it escalates significantly during the teenage years. This increase is primarily attributed to the burgeoning self-expectations and the fear of failing to meet the standards set by their own practice. With the progression of age and the accumulation of performance experience, individuals often develop strategies to manage and mitigate their anxiety. Consequently, seasoned professional musicians typically exhibit a higher degree of control over their performance anxiety. However, advancing age introduces new challenges, such as physical fatigue, slower cognitive and motor responses, and decreased finger dexterity. These age-related physiological changes can exacerbate performance anxiety, as musicians become increasingly concerned about their ability to perform at the high standards they once maintained.

“In my opinion, with the increase of experience and working in this industry for so many years, gradually the tension will not reach such a point that the quality of the performance will be affected. However, with the growth of age, that is to say, after the old age, the tension may increase again. Maybe because your physical condition is declining, and your technical ability is also declining, you may be nervous.” (Individual interviewer, 10 April 2024)

Numerous studies have demonstrated that performance anxiety can be a persistent issue, indicating that musicians are particularly susceptible to chronic nervousness and stage fright. Many participants in these studies reported that the complete elimination of nervousness during a performance is improbable. However, they also emphasized the availability of strategies to mitigate the impact of anxiety. This capability to employ effective anxiety-reduction techniques is a key factor contributing to the superior performance skills of professional musicians compared to those of college music majors.

“In fact, anxiety, pressure I think is there, there will always be, no matter who, I also went to see a violin before, he has released how many albums of the German, and then the global tour in Shenzhen, but in Shenzhen that he may be tired, he may be too tired or what, but also will appear.” (Individual interviewer, 10 April 2024)

Some research subjects pointed out that during performances, pieces that exceed the technical abilities of musicians can induce performance anxiety. However, the maturation of technical skills is a result of long-term accumulation and cannot be overcome with short-term practice. As musicians gain more performance experience or spend more time as professional musicians, some are able to alleviate the anxiety caused by difficult pieces.

“For me, it’s the techniques beyond my current skill level and some of the more challenging passages, such as those requiring advanced techniques or where the timbre

is more difficult to control, that can make me more nervous. But as my performance experience increases, this situation improves.” (Individual interviewer, 10 April 2024)

Other musicians noted that insufficient preparation time can lead to anxiety, causing them to worry about making mistakes during the performance and not being able to meet their expectations. Longer preparation time can help musicians become familiar with the repertoire and anticipate difficult sections in advance.

“I think this is important, really important, even a decisive factor for me. So I believe preparation is still very important for me. For example, if your instrument has many solo parts, you certainly need a strong heart to perform well and comfortably. For us too, though our hearts may not need to be as strong, they still need to be robust. In general, I think it all depends on practice. When you have enough practice, you develop a sense of the music and know exactly what you are going to play, which naturally reduces nervousness.” (Individual interviewer, 30 April 2024)

Musicians' self-expectations can exert considerable pressure on them. As they transition from childhood to young adulthood, musicians encounter external pressures from parents, teachers, and peers, in addition to their own expectations, which can lead to performance anxiety. This phenomenon is particularly pronounced among student musicians. However, this psychological pressure tends to diminish as musicians become professionals.

“When I was a sophomore, there was an invisible pressure from others and peers in the same field, which significantly affected me. Consequently, this anxiety and pressure had surrounded me for an extended period.” (Individual interviewer, 10 April 2024)

In the context of experienced participants and some articles have also point that performance anxiety is not invariably detrimental[13]. The anxiety and nervousness experienced during a performance can, in fact, enhance musicians' focus, prompting them to concentrate more intensively on their playing. This heightened focus can lead to significant improvisational elements, thereby enriching the audience's audio-visual experience.

“Uncertainty is not necessarily negative. Sometimes it can bring positive effects. In the performing arts, your uncertainty might lead to some extra creativity, or sometimes it might make the performance more brilliant.” (Individual interviewer, 10 April 2024)

“I think if a performance lacks any nervousness, it is quite dangerous. There should be a certain level of nervousness to ensure that you are both nervous and excited, which can greatly benefit the entire process.” (Individual interviewer, 5 April 2024)

Several musicians who have entered professional bands report that anxiety relief strategies are predominantly both physical and psychological.

“There are two ways to relieve tension: one psychological and one physical.” (Individual interviewer, 10 April 2024)

Research indicates that most musicians engage in a stage of meditation before a performance, which includes employing psychological self-suggestions during the performance to maintain focus, thereby alleviating performance anxiety.

“I might take 20 minutes to sit in a room in advance to calm down, to tell myself the first thing to pay attention to, the second is to go through everything, and then wait for the stage. After the stage, I completely relax and adjust before starting, even if it takes a little longer so that my state is a little better.” (Individual interviewer, 10 April 2024)

“On the stage, in the process of the performance, I can only rely on the psychological state, the psychological state is how to focus on the music, the usual rehearsal of these things to do.” (Individual interviewer, 4 June 2024)

In terms of physiological coping strategies, these include dietary measures and pre-show warm-ups. Some musicians also report individual pre-performance rituals, such as specific dietary choices and clothing, which may serve as psychological suggestions. Additionally, some musicians have attended anxiety relief workshops abroad, learning techniques to alleviate anxiety through specific exercises.

“I received a little bit of this kind of coaching when I was at a university in Germany, where an instructor would teach techniques to relieve physical tension before playing in a band or performing.” (Individual interviewer, 10 April 2024)

“When I first came to the orchestra, the teacher taught me to eat a banana or a Snickers bar before a concert. It was said that chocolate or bananas can ease the mood.” (Individual interviewer, 4 June 2024)

In summary, both psychological and physiological strategies are employed by musicians to manage performance anxiety, with techniques ranging from meditation and self-suggestion to dietary choices and physical exercises.

6 Conclusion

Performance anxiety is a persistent emotional condition that musicians often experience. Although performance anxiety can sometimes enhance the auditory and visual experience, it presents a significant challenge for young musicians who have not yet developed effective coping mechanisms. In China, the issue of performance anxiety among musicians has not been given adequate attention, and there are no corresponding courses or training programs in major universities. In the future, universities should place greater emphasis on addressing performance anxiety by incorporating relevant courses and workshops. This would enable young Chinese musicians to manage their performance anxiety, elevate their performance standards, and provide audiences with an enhanced auditory and visual experience. Such efforts would also invigorate Chinese orchestras and contribute to the development of Chinese cultural arts.

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