

EXPLORING THE INFLUENCE OF THE PIVOT TO ONLINE INSTRUMENTAL LESSONS DURING THE COVID-19 PANDEMIC ON CHINESE MUSIC STUDENTS IN A U.K. UNIVERSITY

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There are a growing number of Chinese students studying music at U.K. universities and conservatories. Measures taken to decrease the spread of coronavirus in 2020 led to school closures worldwide, which resulted in current and prospective music students facing new challenges. This qualitative study is based on literature investigating the influence of the COVID-19 pandemic on Chinese music students studying at a U.K. university. Online semi-structured one-to-one interviews with five Chinese music students explored information about their perceptions and experiences of online learning during the pandemic. The results demonstrate that the pandemic made them experience the following: additional pressure and adjustment of mental status; changes in their learning environment during school closure; changes in the way of approaching online lessons; and changes to strategies of autonomous learning. This study is based on analysis of the literature and interview data exploring the influence of the COVID-19 pandemic on Chinese music students' learning. It also provides suggestions to teachers that teach online courses and offers ideas for the future of music education institutions.

KEY WORDS: online music lessons, Chinese students, higher music education, instrumental and vocal studies, COVID-19 pandemic

1. INTRODUCTION

Since March 2020, the world has been affected by the COVID-19 pandemic. According to the United Nations Educational, Scientific and Cultural Organization (2020), the nationwide closures intended to reduce infection (Imai et al., 2020) impacted over 40% of the global student population in August 2020, and while the situation has improved, 90% of global

students were affected in April 2020. Schools can only temporarily replace previous face-to-face lessons with online lessons (Zhou et al., 2020).

Although there is a great deal of literature exploring the feasibility and challenges of online teaching for music education, particularly in the context of the COVID-19 pandemic, there is limited research on the perspectives of Chinese music students studying abroad. Therefore, in this study we collected data from five Chinese students studying music performance at a U.K. university, and through interviews, we explored how they continued their learning during the pandemic in order to understand their views on online instrumental music lessons and what challenges they faced and overcame. They were recruited because they experienced the shift from face-to-face to online lessons for at least one term (10 weeks). This means they had sufficient online learning experience to provide interview content.

The University of York was chosen because it provided timely online education plans (including synchronous one-on-one and group lessons, online tutorials and supervision, and asynchronous video lessons) and substituted digital pianos for piano students. All of the data are based on the personal experiences and perspectives of the individual interviewees. The results of this research could validate previous studies on the effects of online lessons and the experiences of Chinese international music students learning abroad, particularly during the pandemic. Additionally, this study could provide teachers with opportunities for reflection and suggestions for approaches to online lessons and teaching methods.

2. LITERATURE REVIEW

2.1 Chinese Music Students in Overseas Universities/Conservatories

The primary objective of this study focuses on Chinese music students studying overseas. Therefore, it is important to understand the reasons why Chinese students study abroad, the challenges they encounter, and the factors influencing their academic success (Choi, 2013; Haddon, 2019; McMahon, 2011). McMahon (2011), who did not target any specific academic discipline, used qualitative research methods to explore the experience of Chinese students studying and living at U.K. universities. Interviewees expressed consensus across four topics, including (a) difficulties in establishing friendships with British students; (b) significance of academic success; (c) less self-confidence in English expression and writing; and (d) unwillingness to actively ask questions in class. The research conclusion was representative of overseas students. The Choi (2013) research on music students expanded the McMahon (2011) perspective on academic success. Choi (2013) focused on East Asian students (Taiwanese, Japanese, mainland Chinese, and Korean) studying music at the Juilliard School in the United States and explored what affected their academic success. The results presented in Table 1 come from 92 participants who completed the survey.

TABLE 1: Some influencing factors of East Asian students' academic success studying overseas (Reprinted from Choi with permission from SAGE Publications, Copyright 2013, p. 352)

Number	Factor	Mean	SD
1	Good relationship with professors	4.46	0.78
2	Good feedback from professors	4.41	0.70
3	My emotional stability	4.19	0.81
4	Conversational English skills	3.96	1.00
5	Asian cultural background	3.95	0.86
6	Good relationship with American friends	3.85	0.88
7	Familiarity with the American school system	3.80	0.75
8	Written English skills	3.80	0.86
9	Presentational English skills	3.77	0.88
10	Good feedback from American friends	3.69	0.85
11	Social support network in the United States	3.69	0.93
12	Asian learning style	3.66	1.02

For international students studying music abroad, a good relationship with the professor and good feedback were the most influential factors in achieving academic success, as shown in Table 1. In addition, emotional stability in the face of stress and alienation was highly recognized. Only these three factors exceeded the mean of 4.0. English proficiency was also considered to affect academic success, including general writing and presentation skills. However, defining their previous learning style as Asian was less important (mean of 3.66) because there are some changes that need to be made. In summary, McMahon (2011) and Choi (2013) showed that the most important factors influencing the academic success of Chinese students abroad are language skills, social activity, and emotional stability.

Haddon (2019) conducted an interview-based qualitative study on nine postgraduate program music students from mainland China and Hong Kong who studied at British universities. The study focused on their reasons for choosing to study in the United Kingdom, their perspectives on academic performance, and the challenges they experienced. The study found that Chinese students come to the United Kingdom to study music for the following reasons: (a) the positive academic atmosphere; (b) a one-year postgraduate degree could accelerate academic and financial progress; (c) it provides an opportunity to expand cultural awareness and language skills; and (d) a chance to develop friendships and understand different perspectives. In terms of academic learning, interviewees in the study stated they liked the student–supervisor relationship at the institution, and the feedback given by the teacher was very important. Additionally, the students were very satisfied with

the school's facilities, which included a 24-hour library, school studio, and availability of musical instruments. In terms of learning challenges, Haddon concluded:

These participants experienced challenges in adjusting to different ways of thinking and using new learning strategies, particularly in developing critical thinking skills, individuality and self-reliance in interpretation in performance. Students were concerned about their English language skills, and might experience challenges concerning the peer group. (Haddon, 2019, p. 49)

The results from McMahon (2011), Choi (2013), and Haddon (2019) show that students consider language, social interaction, and academic achievement to be important. Only Choi's research focused on the importance of student mental stability for academic success, while Haddon (2019) additionally emphasized the cultivation and challenge of students' critical thinking and self-reliance in interpretation of performance abilities, which would be different from the previous Asian learning style (Choi, 2013).

The research shows that Chinese music students studying in the United Kingdom have different characteristics compared to other students studying in the United Kingdom, which need to be further researched during the pandemic in order to understand whether and how these characteristics changed.

2.2 The Impact of the COVID-19 Pandemic

COVID-19 was characterized as a pandemic by the Director-General of the World Health Organization on March 11, 2020 (World Health Organization, 2020). Many countries took joint containment and mitigation measures aimed at flattening the curve of infection and delaying a surge in patients to meet the demand for hospital beds, while focusing on protection for the most vulnerable groups (Bedford et al., 2020). Measures were designed to restrict mass gatherings and maintain social distancing to reduce the spread of the virus. Many countries decided to impose a complete lockdown (Chakraborty and Maity, 2020). For higher education students, face-to-face lessons were suspended to slow the spread of the disease; instead, teachers sent teaching materials and facilitated exams through distance learning platforms and moved to online pedagogies (Ortiz, 2020). In the United Kingdom, the pandemic created a significant disruption for students and impacted their final term, exams, and potentially future employment opportunities and mental health (Sahu, 2020).

Nguyen et al. (2020) performed a quantitative study of the impact of COVID-19 on college students in Vietnam and received 440 completed questionnaires. Table 2 contains the means and standard deviations (*SDs*) for the ratings (1 = *strongly disagree*; 5 = *strongly agree*) of five perspectives of the impact of COVID-19 on their learning/work. Nguyen et al. (2020) showed that COVID-19 influenced learning for most students, who agreed that universities were not safe places and their learning activities changed. They believed that the learning content load was reduced, but they did not have a high level of agreement on whether their

learning was less efficient. However, the study did not specify how COVID-19 affected students' learning and work in detail.

TABLE 2: Perspectives of the impact of the outbreak on participants' studies/work (Adapted from Nguyen et al. under a CC BY 4.0 license, 2020, p. 4; <https://creativecommons.org/licenses/by/4.0/>)

Number	Item	Mean	SD
1	COVID-19 has greatly affected work/study activities	4.05	0.98
2	Work/study activities are transformed during COVID-19 pandemic	4.44	0.91
3	Work/study loads are reduced	3.74	1.25
4	You are concerned that going to work/university is not safe amid the pandemic	4.21	0.88
5	You feel that your time spent on working/studying is less productive	3.37	1.15

Sahu (2020) and Zhai and Du (2020) analyzed the influence of the pandemic on college students' mental health. They highlighted many potential negative effects of the pandemic on contemporary college students, including some who experienced feelings of loneliness and isolation from friends, classmates, and partners. College students were also troubled by uncertainty within the semester. Technical challenges of online lessons bothered students and caused them anxiety and irritability (Sahu, 2020). In addition, interruption of their research projects and internships, and delays in examinations and graduation threatened their study and employment plans, thereby exacerbating the anxiety of the college students (Zhai and Du, 2020). However, these two studies did not indicate specific mental health risks that students were experiencing. These studies were not specific to the context of instrumental and vocal music education, but are a good guide for in-depth research and investigation.

In summary, the impact of the pandemic on universities was that campus closures shifted face-to-face lessons to online modes, with a potential impact on learning methods, effectiveness, and students' mental health. However, the impact of the pandemic on online teaching and learning in the context of Chinese students' studying abroad is not fully understood. Therefore, the next step is to understand the current research and development of online lessons in order to understand the impact of online teaching and learning on Chinese music students studying in the United Kingdom.

2.3 Online Instrumental and Vocal Lessons

Distance online education is popular today. Moore (1992) asserted that distance instruction would be an important pattern of future education. Crawford-Ferre and Wiest (2012) further

stated that managers of higher education were, at the time, paying more attention to online teaching and learning, and were preparing to use it as a development strategy for both the short and long term. For the field of online music education, many studies have focused on effective methods to teach and learn online using Skype, Zoom, and LoLa (a low-latency tool). Their research has suggested that while technology poses challenges, online music teaching and learning is feasible (Dammers, 2009; Koutsoupidou, 2014; Redman, 2020).

Dammers (2009) arranged nine lessons for a case study of a student and teacher pair using Skype videoconferencing software. The results revealed that the benefits of Skype lessons were that they could be used for distance learning, Skype's connection was reliable, and the teacher's evaluation and pace of lessons were not affected. However, the case study showed that the challenges of a Skype lesson were the following: the delay between video and audio, which prevented the teacher and student from playing duets in real time; limited visuals, which prevented comprehensive and detailed analysis of behavior; and the presence of a camera and headphones, which caused limitation of movement. However, Dammers (2009) did not consider these challenges to be the main factors affecting teaching and learning.

Additionally, Koutsoupidou (2014) collected information on seven teachers' understanding. The Koutsoupidou (2014) research results were more extensive than those of Dammers (2009), and indicated that online lessons require students to have a certain level of maturity and discipline. Moreover, in asynchronous academic lessons, a sense of isolation often prevents students from enjoying lessons. Perhaps the solution would be to increase one-to-one or videoconferencing real-time communication. Despite these shortcomings, Dammers (2009) and Koutsoupidou (2014) both stated that being able to achieve remote teaching and learning was the biggest advantage of online lessons, and expressed a positive attitude toward the feasibility of online lessons. By contrast, in online piano teaching research, a digital piano is often a technical tool of distance teaching (Hamond, 2017). In Hamond (2017), both teachers and learners pointed out the limitations of digital pianos. In summary of those limitations:

Musical performance parameters associated with limited response on the digital piano are sonority, touch, tone quality, and pedalling. These limitations occur mainly because of differences in the mechanics of digital pianos in comparison with acoustic pianos, and also in the resonance of their harmonics. (Hamond, 2017, pp. 277–278)

Previous studies have compared and analyzed teacher and student behavior in face-to-face and online instrumental music lessons (King et al., 2019; Orman & Whitaker, 2010). The research of Orman and Whitaker (2010) indicated that “teacher modelling through performance occurred 28% more often during face-to-face lessons ... and student performance increased over 22% during distance” (p. 96). In support of the findings by Dammers (2009) that the online teaching process would be affected by the limited visual range, participants in Orman and Whitaker (2010) said that it was easier to cheat or make mistakes in online lessons, such as using wrong fingerings. Similarly, subsequent research by King et al. (2019) also focused on the behavior of teachers and students; however, in

contrast to Orman and Whitaker (2010), King et al. (2019) found no difference between the behavior of teachers and students in digital lessons and face-to-face lessons, including teachers asking questions, feedback, demonstrations, listening, observing, and students' playing or singing. However, King et al. (2019) found that it took longer for teachers and students to talk because communication was more difficult on Skype. In addition, due to the time delay, accompanying activities of online lessons became more difficult, with a significant decline compared to face-to-face lessons.

Regarding the challenges of time delay and the inability to play duets, the research by Redman (2020) explored the potential of low-latency acoustic technology (LoLa) in teaching. LoLa is intended to minimize the vocal delay between teachers and students, allowing for the possibility of ensembles. Redman (2020) first investigated the needs of teachers and students for performing synchronously in face-to-face lessons. The results showed that in face-to-face lessons, after students finished playing, the most common teaching method for teachers was to play the same phrase with students at the same time. Redman (2020) then planned two trials using LoLa in four institutions in the United Kingdom, and the students and musicians who participated in the experiment expressed that compared with standard videoconferencing platforms, LoLa minimized the delay, improved audio quality, and allowed for the simultaneous performance of two people; the natural sound also made people feel comfortable. However, Redman (2020) stated that the use of LoLa could not eradicate the difficulties of physical separation, including the observation of student posture and instrument detail. Moreover, the inability to purchase, install, and use LoLa was its biggest challenge since it "requires a specialist build with dedicated sound and graphics cards, along with a specialist camera, a separate lens, and high-speed monitors" (Redman, 2020, p. 12).

The studies described previously explored the feasibility of online instrumental music lessons in detail, and have shown there were no obvious behavioral differences for teachers and students in online lessons compared to face-to-face lessons; however, technical challenges still limited simultaneous performance between teachers and students, which reduced accompaniment activities, and low-latency technology was difficult and expensive. Therefore, based on the results of existing research, how university students' online music lessons change and whether they are efficient is worth investigating. In particular, there is a gap in the evidence regarding the learning characteristics of Chinese music students at U.K. universities, and how the shift to online lessons during the pandemic influenced their instrumental music learning.

3. AIMS AND RESEARCH QUESTIONS

At the time of submission, the impact of the global pandemic is ongoing; therefore, online education is likely to continue. This demonstrates the importance of the present research and supports the development of online education as recommended by Crawford-Ferre and Wiest (2012) and Moore (1992). The aim of this study was developed based on review of previous literature and in the context of the COVID-19 pandemic, and to explore the

influence of the pandemic and online lessons on Chinese students studying instrumental and vocal music in the United Kingdom. Three smaller research questions were devised for this group of interest:

1. What are students' perceptions of the shift to online learning during the COVID-19 pandemic?
2. How have online lessons and the COVID-19 pandemic affected the way students approach their lessons?
3. How have online lessons and the COVID-19 pandemic affected students' independent learning?

4. METHODS

4.1 Participants

The five participants (P1–P5) in this study were Master of Arts (MA) students studying music performance at a U.K. university. They were all Chinese, aged around 23 years, and at the time the study was conducted they were preparing for the third term recital in September 2020, which is assessed. They used the English language in lessons, which was not their first language; an International English Language Testing System score of at least 6.0 was required for university admission. All participants were learning and practicing advanced level music pieces. Table 3 describes the individual details for each student's U.K. MA course and musical instruments, living location at the time of the interview, lesson and practice locations, lesson types, and learning materials.

The interviews were held at a time when the school's piano practice room and concert hall were conditionally open. P1 had the opportunity to take face-to-face piano lessons and go to the piano room to practice on the grand piano. The interview with P4 was conducted during the opening stage of the school library. She had a new learning location, and the rest of her learning continued in an online learning environment. Among them, P2 and P5 returned to China before the start of the third semester, and did not return to the United Kingdom since they were able to learn online. P1 and P3 planned to return to China from the United Kingdom within two weeks of the interview. Therefore, the information presented in Table 3 changed over time, where various resources were used at different times instead of all of the materials listed in Table 3 being used in every lesson.

TABLE 3: Participant information

Participant	U.K. MA Course	Living Location	Lessons and Practice Location	Lesson Type	Materials
P1	MA Music (piano studies)	United Kingdom	Dormitory room and practice room in music department	One-to-one lesson; asynchronous video lessons and tests	Laptop; iPad; digital piano; printed sheet music
P2	MA Music (flute performance)	China	Study at home	Twice a week one-to-one lessons; practice video before lessons	Laptop; iPad and apple pencil; printed sheet music; book; speaker; music stand
P3	MA Music (vocal performance)	United Kingdom	Dormitory room	One-to-one lesson; group singing technology lesson	Laptop; smartphone; printed sheet music; music stand
P4	MA Music (vocal performance)	United Kingdom	Dormitory room, library, and practice in a public indoor facility on campus	One-to-one lesson; group singing technology lesson	Laptop; iPad; digital piano; printed sheet music; music stand
P5	MA Music (piano studies)	China	Study at home	One-to-one lesson; asynchronous video lessons and tests	Laptop; acoustic upright piano; printed sheet music

4.2 Materials

The main interview tools used were Zoom and WeChat (with video and audio communication functions) and emails. The interviewees were given the choice of whether or not to turn on their camera in one-to-one interviews. Due to Internet restrictions, it was not convenient to use Zoom for interviewees in China; therefore, some interviewers used WeChat video or audio calls on mobile phones, and recording was done using separate computer equipment. For participants in the United Kingdom, Zoom was used for interviews, which can directly record. The aforementioned interview methods all respected interviewee choice. Recording required the interviewee's consent, and all interview videos, audio, transcripts, emails, and social software chat records were not shared with any third party and were deleted immediately after the study was completed. The interview times all followed interviewee schedules; to ensure that the interview had no impact on their lives, the schedule was built

such that the interviewees could participate in the interview in a comfortable time without tension. The interviews lasted between 25 and 40 minutes and were conducted in Chinese (since this was the interviewees were most familiar language), which allowed them to fully express themselves and minimized the impact of language challenges on both the efficiency of the interview and the quality of the answers.

4.3 Procedure

Semi-structured one-to-one online interviews were the main data collection method used in this research project. This interview method can obtain in-depth and specific information (Hofisi et al., 2014) from interviewees. The interviews were conducted within a week of receiving the university's ethical approval. The interviewees read and agreed to the consent form and information sheet before the interviews. When transcribed manuscripts were given to the interviewees to modify and supplement, some interviewees continued to provide information. Moreover, after the interview, according to the passage of time and changes in university reopening and examination policies, some interviewees continued to provide supplementary information through the WeChat software program. These data sources made the research content richer and more accurate.

4.4 Data Analysis

After the interviews, the recorded data were first transcribed in Chinese, which were then sent back to the interviewees to modify and supplement according to their own wishes. Some of the interviewees added more detail to the interview questions. After the Chinese interview manuscripts had been approved, they were translated into English and information not related to the research was deleted. The Chinese and English transcriptions were read again by the interviewees; however, there were only a few modifications the second time and the interviewees agreed to their anonymous use. The repeated reading and translations increased familiarity with participant comments and helped prepare the data for coding. The NVivo tool was used to help with the coding, followed by a thematic approach of inductive analysis. The conclusions of this study were also informed by the issues raised in the extant literature.

5. RESULTS

The participants stated that, compared to previous face-to-face lessons, the pandemic and online lessons had changed many aspects of their perceptions and learning. Therefore, the results obtained are discussed in the following four sections in relation to: student pressure and changes to mentality; learning environmental changes; lesson approach changes; and changes in the way autonomous learning is approached.

5.1 Students' Perceptions of Online Lessons during the Pandemic: Pressure and Mentality Changes

All five participants had experienced a certain amount of pressure and mentality changes after campus closure and online lessons were implemented. Pressure mainly arose from assessed recitals. They all mentioned the need to prepare for the third term recital, which included a 45-minute performance. As one participant claimed, “the pandemic and school closures does not cancel the concert exam and the works would be harder as the duration will be longer from 30 minutes to 45 minutes” (P4). At the time of writing this study, the university could provide on-campus venues for students in the United Kingdom for recitals, and the remaining students received instructions for recorded performances from a MA program leader. P5 explained that they needed to set up a Zoom meeting for live performances and use additional video recording equipment to record the performance for assessment. Therefore, students in China said that they also worried about live performance and recording videos, since they now needed to find suitable venues and video equipment. For vocal and flute exams, they also needed suitable accompanists. In addition, P1 (who was returning to China) reported just before the exam:

Due to the pandemic, people who take international flights back to China need to be quarantined at designated hotels for 14 days (Cheng, 2020). My tutor says that if this is the reason affects the exam, I can have 14 days more after the scheduled time. But there will be no piano during the isolation period, it will take some time to practice again after 14 days ... Therefore, it is still quite stressful to complete the exam with high quality within the limited time. (P1)

Additionally, P2 and P3 both stated that their learning pace was slower than expected since they did not successfully learn many pieces during the middle of the semester; this made them feel under pressure to complete the works in a limited amount of time.

In terms of mentality, the interviewees said that their acceptance of online learning had undergone fundamental changes, including transitioning from doubting to accepting online lessons and from anxiety to enjoyment; however, some interviewees also expressed despondency. P4 stated: “If you interviewed me at the beginning of this term, I could definitely pick out a lot of challenges towards the online lessons. It felt like the whole world was going to collapse.” However, later she said: “I used to think that the effect of online classes must be bad, but I have no choice but to adjust my mentality and face the status quo to accept.”

As a result of having undergone at least 10 weeks of adjustment and adaptation, the interviewees said that they could accept this way of learning during the pandemic. P1 said that using digital pianos could facilitate preparation for the assessed recital by allowing students to practice piano during the pandemic. P3 also said:

I think the current situation is pretty good, because there is no need to book a practice room and fearing that others would hear it, so it is easy and good now as I do not worry

about others and just focus on myself.

P5 also said that she enjoyed it because she had more time for her own practice at home, not limited by the scheduled time of the school piano room. In this semester, P2 learned many new techniques of contemporary flute music, such as flutter tongue. Focusing on new techniques made her feel like “I will not be bored just studying alone. I still feel that learning new things is quite fresh, and my mentality has not changed.”

Alternatively, the current lockdown environment still made P2 feel sad and despondent:

There are few classmates studying flute, and I am the only Chinese student. In the past, the teacher would arrange small concerts and I could meet a lot of people, but now the pandemic makes them all absent which makes me feel despondent.

The previous comments suggest that the pandemic had caused participants to face many challenges from examinations and online learning, which brought certain pressures and challenges to students. However, participants slowly accepted the online learning because they knew it was the best solution given their current social environment. Moreover, they believed that it was important to adjust and maintain their mentality, and some participants also said that they were happy and satisfied with the current situation, although there were some feelings of despondency.

5.2 The Impact of the COVID-19 Pandemic: Learning Environment Changes

Analysis of the respondents' answers demonstrated that the pandemic had impacted the learning and practice environment in two main areas, including changes in learning locations (Table 3) and peer learning atmosphere. Changes in the learning location were due to the pandemic limiting the use of the piano room, concert hall, and library. P3, who is learning vocal performance, indicated:

The school is closed and students cannot use the piano room so I can only practice in the dormitory, but later, I go to the kitchen to practice where it has a certain resonance effect, which is more similar to a concert hall.

P2 similarly mentioned:

When I practiced flute in a concert hall with a very subtle sound, I can also hear it, so I can adjust my music dynamic to a larger range. In the piano room, there is no such effect, let alone in the bedroom, the sound effect will definitely be reduced.

Flute and vocal students all described the impact that the different places used for learning or practicing has had on sound. This impact not only comes from the divergent contrasts between the bedroom and kitchen compared to the concert hall, but it also comes from limits on possible volume to avoid annoying others. P4 stated that:

Because of the pandemic, I do not have a place to practice. I do not like to practice in the bedroom because if I sing too loud it would bother others, and practicing quietly is

not what I want ... I temporarily find an indoor facility on campus to practice, but at first it is easy to be disturbed by people passing by.

P4 practiced outside and tried to raise practice efficiency. She said:

At first I practiced outside. If someone passed by, I would stop because it felt embarrassing, but with time spent practicing their long-term efficiency actually improved substantially: I got used to someone walking by and I still sing without being affected, so the efficiency became much higher than before or in the bedroom.

P2 said that her efficiency had risen while practicing in a bedroom, and stated:

I am very worried about disturbing others, so I only practice piano between 10 a.m. and 4 p.m., and I have to eat lunch, so the time is compressed, and I have to accomplish my goal in a limited time, so I have to improve effectiveness.

With respect to the library closure, P4 said:

The closure of the library only allows me to work on my commentary in the bedroom, which is very inefficient for me, so closure of the library reduces my learning resources. Fortunately, the school library just opened this week and I have a place to study, but the library is only open from 9 a.m. to 4 p.m., which is not as free as before.

Almost all of the participants mentioned that using a digital piano, or not having a piano to practice, was one of the biggest changes from the past. However, for P5, learning at home, this had little impact. For piano student P1, the only difference was to practice and learn with a digital piano, which was also the biggest challenge in learning. P1 said:

Many sonorities in the music cannot be made by digital pianos ... when I get used to the digital piano, I suddenly feel uncomfortable when I return to the acoustic piano ... if some works with fast chords or heavy sound on the digital piano plays, it will shake, which affects practicing.

The vocal and flute students said that not having a piano made it difficult for them to determine whether their pitch was standard during practice, and it was inconvenient to use mobile phones or computer software (P3 and P2).

Despite the problems associated with changes in learning locations, all interviewees mentioned their influence on peer-learning and students' communication during the pandemic. P3 and P2 said that although their exams were both solo, they still had a lot of social activities in their previous study and life. For example, P2 participated in the baroque orchestra, while P3 participated in both university and baroque choirs. The emergence of the pandemic stopped these activities. P2 expressed her view on this change in peer learning:

Before the pandemic, we could rehearse in the orchestra, there were three flute learners present with opinions and suggestions on the music. And we would ask each other what music they have learned recently to share interpretations, which was a pretty good way for me to learn. But the pandemic reduces a lot of activities ... so this kind of learning between us is gone.

In contrast, P4 expressed the opposite view; she said:

In fact, it does not matter if the communication and activities between peers are reduced. I only joined a choir for one term because I felt that the time was wasted ... the peers are almost at the same level, in fact, it does not help me much.

Therefore, everyone has their own way of learning, and it is unknown whether changes due to the pandemic would have an impact on individuals. The previous comments demonstrate the changes in the study and practice environment of the interviewees, the good and bad effects of such changes, and the different viewpoints about the impact of changes in the atmosphere of peer learning.

5.3 The Impact of the COVID-19 Pandemic: Lesson Approach Changes

The participants indicated that their current online lessons after the school closure are one-on-one and group lessons in Zoom and asynchronous video lessons. They said there are a few differences between one-on-one Zoom lessons and face-to-face lessons, which provide some advantages and challenges to online learning.

For Chinese students encountering language challenges, Zoom lessons and asynchronous video theory lessons had some advantages for understanding English. P2 said:

When there are some words that I do not understand, the teacher can text me in the chat bar of Zoom and I can search for them immediately. The chat can be saved so I can also review after lessons. This method is faster than before when my teacher wrote it down.

For P3, the search and translation functions of a smartphone helped to improve the efficiency of understanding English:

I did not dare to use mobile phones to search the meaning of the lyrics and musical terms at all in class before. Now I can secretly search and translate it into Chinese so that I can understand right away, which avoids the comprehension and the efficiency of lessons that are affected by the language.

For asynchronous video lessons and tests, two piano learners (P5 and P1) both mentioned that one of the benefits of this kind of video lesson is that there are subtitles that can be translated; therefore, the effect of learning was better than before because their understanding became more comprehensive. Conversely, almost all of the interviewees mentioned the impact of the technical challenges of network stall and delay during Zoom lessons. P3 said the network lag had a big impact on her lessons because she brought the emotions of the characters in opera when singing the aria, but a network stall would pull her out of the emotions and she would need to bring them back again. She also said that if there was a person with a network delay or break during the group lessons, all of the other students would have to wait for this person, which was a waste of time. P1, P3, and P4 specifically stated that due to the network delay and the lack of accompanists during the lockdown period, their one-to-one online lesson approach had undergone many changes. P3 explained the changes in detail:

In the first few weeks after we switched to the online lessons, my teacher tried to play accompaniment when I sang. But there was a time delay, which caused us to fail to match. So, I sang alone for a few weeks in the middle, during which the learning efficiency was the lowest and the lesson pace was very slow. Later, my teacher sent me the accompaniment audio. I need to follow the audio by myself in class, but there is a challenge to match the fixed speed of audios. So, the accompaniment greatly affects the lesson, and the challenge has still not been solved in the end.

In addition, the online teaching methods of different teachers determined the approach of students' online lessons. The lesson content of P2 had added more questions and answers and pre-class video sections. The teacher also sought feedback from students on the online lesson. P2 described the change between online lessons and previous face-to-face lessons as follows:

In the past face-to-face lessons, we usually had a warm-up section first, and then transition to the main class. Now after the online class, the teacher will ask me if I have practiced before the class. I usually say that I practiced, he will skip the warm-up process.

This change made her feel a little uncomfortable in the beginning: “when the teacher asks me to write the feelings and feedback of the online lessons, I wrote this point” (P2). The teacher then adjusted her lesson later on. P2 summarized the change: “My teacher adds an extra lesson to practice specific skills. And I am a kind of student who likes to ask questions very much, so the teacher will answer questions in this additional lesson.”

In order to save more time in lessons and improve efficiency, P2 also mentioned that she added the task of submitting practice videos, which also adjusted the content of her class. She said:

My teacher suggests that I try to send her the video I recorded in 24 hours before the class ... The biggest advantage is that it saves time ... after the teacher watched and knew the conditions through the video, she could directly suggest where to start at the beginning of the lesson, which is indeed much more efficient than before. (P2)

The interview results demonstrate that online lessons have advantages and disadvantages. Some students' lessons had not fundamentally changed, while other students' lessons had changed entirely. Vocal and flute students were more likely to be affected by network delays, while piano students said that the online teaching had not changed. Moreover, online teaching made it easier for Chinese students to face language challenges. Different teachers also have differences in teaching methods with respect to how they approach their lessons. P2's lessons were greatly changed from the previous face-to-face lessons; this aspect was not mentioned by the rest of the interviewees.

5.4 The Impact of Online Lessons on Learning: Changes in the Way of Autonomous Learning

The previous sections have described the approaches of online lessons, as well as the changes in learning environments. These changes brought about changes to students' autonomous learning methods. These changes are solutions to the learning challenges brought about by environmental changes and lesson approaches, and they also come from the interviewees discovering the advantages of online lessons. In the interviews, the students expressed that they were gradually taking the advantages of online lessons into their own autonomous learning methods. As P5 said, "The disadvantages of online lessons bring new learning methods for me to try and improve." She said that due to the low quality of the teacher's audio, use of the pedal is often not obvious enough to notice; therefore, they hardly discussed the use of the pedal. This shortcoming motivated her to study the use of pedals and analyze other people's video or audio to figure out the use of other pianists' pedalling.

Moreover, due to the reduction of choir activities and audio delay preventing effective accompaniment, P3 also stated, "I have paid more attention to cultivating my sight-reading ability. I also buy a book of sight-reading practice. I rarely practiced sight-reading on my own before."

For vocal and flute students who needed accompaniment, due to the lack of access to piano usage during the lockdown, they changed their way of accompaniment in class. The lack of accompaniment had changed their self-learning method in two ways: one change was to analyze the music by the accompaniment part, and the other was to pay more attention to their intonation. P2 said, "So now when I read the score, I will read even the piano accompaniment part as there may be hidden dynamics or articulation marks on it." She also said:

Because there is no piano both where my teacher and I live, when I do decrescendo or crescendo dynamics, I often get inaccurate pitch and the teacher will bring it up ... now, I pay more attention than before to recognize if there is a mistake with the pitch when I play. (P2)

Vocal student P3 said, "I used to sing along with the accompaniment in class ... now I have to rely more on myself to sing accurately, so I will think about the relationship of pitch especially when the two notes are far apart." However, P4 said the influence of accompaniment had not changed much and that "I used to learn a piece of music by following other people's audio, and I am learning this way now, so it has no effect on me without accompaniment during my practice."

Furthermore, P1 did more work on analyzing and comparing different versions of sheet music. This was also in line with the changes in P2's learning method:

Because I use my iPad to read digital sheet music when learning online, I can find scores from many different publishers, and the teacher also scans and gives me the

version she has. In this way, compared with before, I have a stronger ability to learn by comparing and analyzing music scores, and I am better at finding a version of music scores that suit me.

In addition to sharing music scores, the online lesson mode also provided students with an advantage that the teacher scanned the teaching content and shared it via email. As P3 indicated:

I used to look at the teacher's materials in class with the teacher together. After reading it, I could not take it away ... now the teacher will scan a copy so I can save it for repeated viewing after class, reducing the challenges of not understanding in class. In addition to reading scanned materials sent by the teacher, she also said that she read more books. Before the pandemic she could discuss with classmates about singing technology, but during the pandemic there were fewer classmates to meet, so she tried to read more and found that books illustrated the concepts well.

In terms of promoting the self-examination ability by listening and learning from self-recorded video, P2 added the lesson content of submitting videos before every lesson:

I record the whole piece while I am practicing, and then listen to it repeatedly. I feel that my mistakes are magnified by the video, so listening to my own recording captured details that I did not notice, and improved my self-examination ability. Now, this learning method is basically used every day when I practice flute, and it really improves the effect of my independent learning.

The previous comments suggest that online lessons have several limitations, but these can motivate students to change their approach to autonomous learning. In summary, their autonomous learning methods included learning from video recordings, enhancing sight-reading ability, comparing and analyzing music scores, promoting self-examination skills, doing more research, and reading more books.

6. DISCUSSION

This study explored the experience of Chinese students studying instrumental and vocal performance in the United Kingdom, and undertaking online lessons during the COVID-19 pandemic. Within the context of the pandemic, many of the impacts and changes that affected teaching and learning have not been previously studied. The overall research results show that the switch to online lessons during the pandemic led to a series of changes, which are discussed subsequently.

First, students experienced additional pressure and mentality changes. The pressure came from the assessed recital, and the change of mentality included adapting to approaches of online lessons. The adjustment of examinations and changes in the approach to lessons created considerable uncertainty. The detailed perspectives presented in this study corroborate the work of Sahu (2020), in that change and uncertainty may contribute to students' anxiety. Moreover, this present study supports research indicating Chinese

students' ability to adjust their mental attitudes, and suggests that they can do so even during the COVID-19 pandemic. Choi (2013) demonstrated that Chinese students are generally effective at regulating emotions, which is considered related to academic success. The pandemic also alienated classmates and friends and caused negative emotions of despondency. These results support the analysis of Zhai and Du (2020) on the mental health of students during the pandemic.

Second, the pandemic caused changes to the student learning environment and approaches to lessons. The closure of the school's library and piano room had a negative impact, but is in line with the suggested response by schools to reduce the outbreak (Ortiz, 2020). However, the closure of campus equipment directly limits the research results presented by Haddon (2019). That is, in the case of the pandemic, the 24-hour library and access to musical instruments, which Chinese students considered as two of the main advantages of learning in U.K. universities, were no longer available. The closure of the library made the efficiency of academic writing lower; however, it had no effect on the efficiency of instrument practice, and in some cases seemed to improve efficiency. This supports the research of Nguyen et al. (2020), and among Chinese music students there is not necessarily a reduction in effectiveness during the pandemic. As for piano students' temporary digital piano practice, the shortcomings of sound response are supported by the research of Hamond (2017); however, it would be fine if the student is using an acoustic piano in online lessons. In addition, the results of this study found that the pandemic reduced social activities and opportunities for students to communicate and learn from each other. This is in accord with and exacerbates the difficulty of establishing friendships between Chinese and British students described by McMahon (2011), and is a concern because it restricts the development of friendships and the opportunity to encounter diverse viewpoints, which was one of the major reasons for Chinese students choosing to study in the United Kingdom (Haddon 2019).

For the change in the approach to lessons, the online mode allowed students to use translation software on their smartphones, which reduced the challenges they faced in understanding the English language. This compensated for the concerns of students' English ability mentioned by both Haddon (2019) and McMahon (2011). However, written and presentational English ability was considered in the research by Choi (2013) to be important for academic success. The network stalls and delays caused by technical limitations have been widely confirmed as shortcomings in the online learning experience in this research, which is in line with the research results obtained by Dammers (2009) and Koutsoupidou (2014). However, despite our results showing that technical limitations are not the main factors to impact online teaching and learning efficiency, participants did not diminish the impact of the network stalls and delays on their lessons. Network delays leave no reliable way to play duets in vocal and flute lessons, and this is consistent with the research results in Dammers (2009) and King et al. (2019), in that the accompaniment activities of online teaching are greatly reduced. This study further indicates that the inability to synchronize

accompaniment due to network delays and stuttering greatly reduces the teaching efficiency of vocal lessons.

For group lessons, network breaks have a great impact on teaching pace because everyone needs to wait for whoever is experiencing the network stall or loss of connection, which is an important point that has not been mentioned in the previous literature. This study also asserts that adding extra lessons and pre-class videos are new online lesson approaches; however, none of the previously published literature studies are related to these methods. Although these lesson approaches were provided by only one participant, they received positive feedback on how they improved the teaching and learning process and student autonomous learning.

Finally, in the face of the shortcomings of online lessons identified herein, this research confirms that students would think about how to improve autonomous practice and learning methods, including reading books, comparing and analyzing scores, developing sight-reading practice, and strengthening self-examination skills. These changes in autonomous learning methods are not mentioned in the literature review, but support the results of Haddon's research that Chinese students studying in the United Kingdom need to use new ways of thinking and learning strategies to adapt to changing learning environments and the challenges and opportunities they represent (Haddon, 2019).

7. CONCLUSIONS

Although the COVID-19 pandemic delayed lessons and exams in most schools, the participants in this study continued to learn through online distance lessons, which allowed on-campus and remotely assessed recitals to be held within the scheduled time. During the online lessons, the students' perceptions underwent several stages of adjustment, including stress, anxiety, irritability, and despondency, but they all expressed their acceptance and adaptation to online lessons. Some participants even expressed some benefits of online courses, including time to search on their phones and translate to improve English understanding, and the recording of online lessons. In addition, teachers were able to easily share sheet music and reading materials with students, which helped them review and thoroughly understand the lessons after class.

In terms of lesson approaches, different teachers and learners of different musical instruments experienced different changes. For piano students, their teacher's methods did not change a great deal. However, for vocal and flute students who experienced dissatisfactory accompaniment, some considered the online lessons as having a negative impact on learning efficiency. However, the changes in lesson approaches and the shortcomings of online lessons, as well as the lockdown environment, meant that the students' autonomous learning abilities were subsequently improved. Overall, despite the low number of participants in this study, it suggests that the pandemic caused important changes in the learning of Chinese music students studying at a U.K. university. However, not all of these changes were negative since the approach to lessons was adjusted, and the

changes promoted autonomous learning to adapt to and accept the online learning environment.

This research demonstrates that, because of the visual limitation, the students were able to use translation to improve the efficiency of their English understanding, which might be a positive effect of online lessons. Therefore, future research should explore the positive or negative effects of visual limitation in online lessons. The previous research on LoLa (Redman, 2020) has shown that it provides an accurate solution to the time delay challenge presented by online music learning. However, this technology was not used by the participants in this study. If it could be used more widely, many of the challenges faced by online lessons that have been previously investigated in the literature and this research—such as accompaniment reduction and network stall—would be solved. Therefore, in future research, universities and educational institutions could use the context of this technology to continue to study the implementation and challenges of online education and possible lesson approaches.

Peer–peer, student–professor, and student–supervisor relationships represent a common point in the research of Haddon (2019) and McMahan (2011), and are important for students' academic success and enjoyment. Therefore, in the context of online one-to-one music lessons, the relationships of peer groups, and the relationships between pupil and teacher, are worth exploring further. Similarly, for the future development of music education institutions, it would be important to study the challenges and negative impacts of the lack of learning atmosphere in online lessons, for example, in relation to peer learning and orchestra and choir activities.

Additionally, this research has suggested the advantages of online lessons for students' learning and promoting greater student autonomy. Therefore, after the pandemic, future research and music education institutions should study comprehensive synchronous and asynchronous online music lessons and the mutual advantages of face-to-face and online lessons, and try to comprehensively design lessons to potentially maximize the effect and autonomy of student learning, which may be in line with the future development of higher education.

REFERENCES

- Bedford, J., Enria, D., Giesecke, J., Heymann, D. L., Ihekweazu, C., Kobinger, G., Lane, H. C., Memish, Z., Oh, M.-D., Sall, A. A., Schuchat, A., Ungchusak, & K., Weiler, L. H. (2020). COVID-19: Towards controlling of a pandemic. *The Lancet*, 395(10229), 1015–1018. [https://doi.org/10.1016/S0140-6736\(20\)30673-5](https://doi.org/10.1016/S0140-6736(20)30673-5)
- Chakraborty, I., & Maity, P. (2020). COVID-19 outbreak: Migration, effects on society, global environment and prevention. *Science of the Total Environment*, 728, Article 138882. <https://doi.org/10.1016/j.scitotenv.2020.138882>
- Cheng, E. (2020, March 20). Travelers to China try to navigate a shifting variety of quarantine policies. *Consumer News and Business Channel*. Retrieved August 31, 2020,

- from <https://www.cnbc.com/2020/03/20/travelers-to-china-encounter-changing-coronavirus-quarantine-policies.html>
- Choi, J. H. (2013). Attitudes of international music students from East Asia toward US higher education institutions. *International Journal of Music Education*, 31(3), 346–358. <https://doi.org/10.1177/0255761411433719>
- Crawford-Ferre, H. G., & Wiest, L. R. (2012). Effective online instruction in higher education. *The Quarterly Review of Distance Education*, 13(1), 11–14.
- Dammers, R. J. (2009). Utilizing Internet-based videoconferencing for instrumental music lessons. *Update: Applications of Research in Music Education*, 28(1), 17–24.
- Haddon, E. (2019). Perspectives of Chinese students on studying MA music programmes in a UK University. *Orfeu*, 4(2), 30–58. <https://doi.org/10.5965/2525530404022019030>
- Hamond, L. F. (2017). *The pedagogical use of technology-mediated feedback in a higher education piano studio: An exploratory action case study* [Doctoral dissertation, University College London].
- Hofisi, C., Hofisi, M., & Mago, S. (2014). Critiquing interviewing as a data collection method. *Mediterranean Journal of Social Sciences*, 5(16), 60. <https://www.richtmann.org/journal/index.php/mjss/article/view/3280>
- Imai, N., Gaythorpe, K. A., Abbott, S., Bhatia, S., van Elstrand, S., Prem, K., Liu, Y., & Ferguson, N. M. (2020). Adoption and impact of non-pharmaceutical interventions for COVID-19. *Wellcome Open Research*, 5, 59. <https://doi.org/10.12688/wellcomeopenres.15808.1>
- King, A., Prior, H., & Waddington-Jones, C. (2019). Exploring teachers' and pupils' behaviour in online and face-to-face instrumental lessons. *Music Education Research*, 21(2), 197–209. <https://doi.org/10.1080/14613808.2019.1585791>
- Koutsoupidou, T. (2014). Online distance learning and music training: Benefits, drawbacks and challenges. *Open Learning: The Journal of Open, Distance and e-Learning*, 29(3), 243–255. <https://doi.org/10.1080/02680513.2015.1011112>
- McMahon, P. (2011). Chinese voices: Chinese learners and their experiences of living and studying in the United Kingdom. *Journal of Higher Education Policy and Management*, 33(4), 401–414. <https://doi.org/10.1080/1360080X.2011.585739>
- Moore, M. G. (1992). Distance education: The foundations of effective practice. *The Journal of Higher Education*, 63(4), 468–472. <https://doi.org/10.1080/00221546.1992.11778381>
- Nguyen, D. V., Pham, G. H., & Nguyen, D. N. (2020). Impact of the Covid-19 pandemic on perceptions and behaviors of university students in Vietnam. *Data in Brief*, 31, Article 105880. <https://doi.org/10.1016/j.dib.2020.105880>
- Orman, E. K., & Whitaker, J. A. (2010). Time usage during face-to-face and synchronous distance music lessons. *American Journal of Distance Education*, 24(2), 92–103. <https://doi.org/10.1080/08923641003666854>

Ortiz, P. A. (2020). Teaching in the time of COVID-19. *Biochemistry and Molecular Biology Education*, 48(3), 201. <https://doi.org/10.1002/bmb.21348>

Redman, B. (2020). The potential of videoconferencing and low-latency (LoLa) technology for instrumental music teaching. *Music & Practice*, 6, 1–15. DOI: 10.32063/0610

Sahu, P. (2020). Closure of universities due to coronavirus disease 2019 (COVID-19): Impact on education and mental health of students and academic staff. *Cureus*, 12(4), Article e7541. DOI: 10.7759/cureus.7541

United Nations Educational, Scientific and Cultural Organization. (2020). *COVID-19 impact on education*. Retrieved August 30, 2020, from <https://en.unesco.org/covid19/educationresponse>

World Health Organization. (2020). *Virtual press conference on COVID-19*. Retrieved August 31, 2020, from https://www.who.int/docs/default-source/coronaviruse/transcripts/who-audio-emergencies-coronavirus-press-conference-full-and-final-11mar2020.pdf?sfvrsn=cb432bb3_2

Zhai, Y., & Du, X. (2020). Addressing collegiate mental health amid COVID-19 pandemic. *Psychiatry Research*, 288, Article 113003. <https://doi.org/10.1016/j.psychres.2020.113003>

Zhou, L., Li, F., Wu, S., & Zhou, M. (2020). “School's out, but class' on”, the largest online education in the world today: Taking China's practical exploration during the COVID-19 epidemic prevention and control as an example. *Best Evid Chin Edu*, 4(2), 501–519. <https://doi.org/10.15354/bece.20.ar023>