

# **The worst is yet to come: The psychological impact of COVID-19 on Hong Kong music teachers**

The COVID-19 pandemic has made online and distance learning the new normal at all levels of education. Music as a school subject that relies heavily on multimodal sensory and auditory-motor interactions has been dramatically affected. Music teachers may not be coping mentally or psychologically with these drastic changes. This study examined the psychological impact of COVID-19 on music teachers' (N = 120) mental health and well-being through a questionnaire survey and semi-structured interviews (n = 10). The Fear of Coronavirus-19 Scale, the Generalized Anxiety Disorder Scale and a shortened version of the Chinese Teacher Stress Questionnaire were used to measure Hong Kong music teachers' experiences of psychological pressure and problem behaviours linked to the outbreak of the infectious disease. The findings revealed that music teachers are experiencing stress, fear, and anxiety in response to the pandemic. They are concerned about the effectiveness of online music teaching, parental expectations, students' adaptability to online learning, technological integration and maintaining transformative teaching professionalism.

Keywords: word COVID-19, music teacher, anxiety, fear, teacher professionalism

## **Introduction**

Since its outbreak, COVID-19 has rapidly transitioned into a pandemic, posing challenges for people in all walks of life, including those working in education. Schools have had to close temporarily, sometimes without a foreseeable reopening. Innovative education practices, such as online and distance learning, have become the new normal at all education levels, regardless of whether students, parents, and teachers are ready to engage in such practices. When face-to-face teaching is not possible, school subjects that rely heavily on multimodal sensory and auditory-motor interactions are at a disadvantage. There have been efforts to develop alternatives, but their effectiveness is unclear. In music education, incorporating information and communication technology

has become a viable solution, as it may offer new teaching approaches. Blended learning and virtual performance, which emerged before the outbreak, have been widely adopted during the recent school suspension (Cayari, 2018; Crawford, 2017). However, music teachers may not be practically or mentally ready to accommodate the rapid changes in the education sector, posing a threat to their well-being (Haning, 2016; Payne, Lewis & McCaskill, 2020).

Hong Kong was one of the first regions to encounter COVID-19. Before the pandemic, the government's apparent attempts to facilitate the Chinese Communist Party's control over the city sparked a series of political crises (Hartley & Jarvis, 2020). Many of the provocations impacted school teachers, such as attempts to introduce Moral and National Education as a compulsory school subject (Morris & Vickers, 2015) and the recent enactment of the National Security Law and the National Anthem Law (Cheng, 2020). Together with the pro-democracy social movement and civil unrest, COVID-19 may have brought teachers' mental health and well-being to a new low, potentially affecting their long-term commitment to the profession (Dornyei & Ushioda, 2011; Wong & Moorhouse, 2020). The novel coronavirus outbreak has posed another challenge to music teachers, whose main duties involve in-person contact with students. In line with the digital 'turn' in school education around the world, Hong Kong schools and authorities asked teachers to adopt online learning, and they may not have been capable or ready for such an adoption (Wong, 2016).

In the school context, teachers are role models for members of the younger generation. They show students how to be positive and optimistic when facing challenges, including the threat posed by a pandemic. Their psychological state has been an important factor to improve teaching performance and school commitment. Through a questionnaire survey with 264 Chinese school teachers, Cheung, Tang and

Tang (2011) found out that higher psychological capital was negatively related to burnout and positively related to job satisfaction. This is echoed by other studies revealing the positive relationship between teachers' psychological health and their teaching performance (Brien, Hass & Savoie, 2012). Previous research has also revealed the cross-sectoral associations between the mental health and wellbeing of teachers and students (Harding et al., 2019), which reflected the values of positive teacher-student relationships for learning and behaviour (Roorda et al., 2011). Based on these results, subsequent research has been conducted to identify different ways for the improvement of teachers' wellbeing and hence the positive learning environment (Roffey, 2012).

Studies in other fields have revealed the adverse effects of COVID-19 on teachers' well-being around the globe. For example, MacIntyre, Gregersen and Mercer (2020) surveyed more than 600 language teachers and found out the high levels of stress produced by the rapidly adopted online teaching environment. Another study by Varea and González-Calvo (2020) has revealed pre-service physical education teachers' mixed emotions because of the unrealistic practicum experiences with the lack of direct contact with students. However, there is a dearth of research on the impact of the pandemic on music teachers. The subject of music involves classroom-based teaching and learning as well as other activities, such as instrumental training, chorus, and ensemble practice. This heavy workload is combined with administrative duties and student caretaking, which have been especially important during the recent social unrest in Hong Kong (Gordon, 2010; Ni et al., 2020). This study sought to understand and raise awareness of mental health concerns in music education to help teachers cope before the stress becomes debilitating (Hamann & Gordon, 2000). This mixed-methods

study was conducted to investigate music teachers' stress and anxiety in response to the pandemic in the Hong Kong context.

### **Aim**

The aim of this study was to examine the impact of COVID-19 on music teachers' mental health and well-being. The following three research questions guided the study.

- (1) What kinds of fear and anxiety have music teachers in Hong Kong encountered during the COVID-19 pandemic?
- (2) What ecological factors have contributed to the fear and anxiety of Hong Kong music teachers?
- (3) How have music teachers responded to the digital transformation of music education caused by COVID-19?

### **Methodology**

This study took a mixed-methods approach that included an online questionnaire survey and semi-structured interviews with 120 participants about the psychological impact of COVID-19. This approach allowed the research team to triangulate the data and strengthen the validity of the findings (Greene, Caracelli, & Graham, 1989).

### ***Participants***

A total of 120 Hong Kong music teachers were invited to complete the online questionnaire survey. They had full-time experience of teaching music, ranging from 1 to 30 years ( $M = 8.92$ ,  $SD = 7.26$ ). Table 1 summarises the demographic information of the participants, including their gender, highest education level, school type, and whether they taught subjects other than music, such as language, mathematics, general

studies, liberal arts, and science. Convenience sampling was used because of the voluntary nature of participating in this study and the difficulty of reaching potential participants due to social distancing during COVID-19.

Table 1. Demographic information of the participants

Source	<i>n</i>	Percentage
<b>Gender</b>		
Male	27	22.50
Female	93	77.50
<b>Highest education level</b>		
Certificate of Education	1	0.83
Bachelor's Degree	38	31.67
Postgraduate Diploma in Education	24	20.00
Master's Degree	57	47.50
<b>School type</b>		
Primary	70	58.33
Secondary	29	24.17
Other (e.g. special needs school, kindergarten)	12	10.00
<b>Teaching subject(s) other than music</b>		
Yes	94	78.33
No	26	21.67

### *Questionnaire survey and semi-structured interviews*

The online questionnaire survey consisted of four parts. The first part collected demographic information, including gender, age, years of teaching experience, and educational background. The second part assessed the participants' fear of the novel coronavirus using the Fear of COVID-19 Scale (FCV-19S). This seven-item scale was developed and validated by Ahorsu et al. (2020), and has been translated into various languages and validated in multiple countries with good reliability and validity

(Pakpour, Griffiths & Lin, 2020; Winter et al., 2020). The FCV-19S been used to examine the impact of the pandemic within different contexts around the globe, including the school and university learning environments (Cervantes-Guevara et al., 2021; Zolotov et al., 2020). The third part assessed the severity of the participants' anxiety using the seven-item Generalized Anxiety Disorder Scale (GAD-7), which was developed by Spitzer, Kroenke, Williams and Löwe (2006). The GAD-7 has been widely used to measure or assess the severity of generalised anxiety disorder in different contexts (Plummer, Manea, Trepel & McMillan, 2016). The fourth part determined the sources of stress, using the Chinese Teacher Stress Questionnaire (CTSQ), which was developed by Kyriacou and Chien (2004). The CTSQ covers teachers' sources of stress, coping strategies and perceived effectiveness. The subset used in this study has been adapted in previous studies to assess teachers' sources of stress in other Chinese contexts such as China and Hong Kong (Meng & Liu, 2008; Wong, Chik & Chan, 2018). The responses to the FCV-19S, the GAD-7 and a shortened version of the CTSQ were given on a 5- or 4-point Likert scale, based on the format of the original scales.

Ten of the participants who had completed the online questionnaire survey were invited to participate in semi-structured interviews. The interviews were conducted on a one-on-one basis through video or telephone calls, and each took between 15 and 20 minutes. The qualitative data from the interviews were used to contextually supplement the online survey participants' responses. The design of the open-ended questions aligned with the principles of content, clarity and sequencing (Miles, Huberman & Saldana, 2014), referenced the three aforementioned instruments, and was guided by the technological, pedagogical and content knowledge (TPACK) framework (Koehler & Mishra, 2009). The questions covered the use of and familiarity with online teaching technology, pedagogical changes due to the shift in learning environment, the

adjustment of content and activities without face-to-face interaction, interdisciplinary and ecological issues with overlaps across domains of the TPACK framework, and the detailed psychological impact on the participants in context. Care was taken to avoid the use of technical terms related to the use of technology that might be unfamiliar to music teachers who were new to online education. The interviewees discussed their well-being as music educators confronting the pandemic and their mental readiness for the digital turn in music education. The following series of open-ended questions guided each interview.

- (4) How are you and your school approaching music teaching and learning during COVID-19?
- (5) How is COVID-19 affecting your music teaching?
- (6) What has been the biggest challenge for you as a music teacher, and why?
- (7) How do you feel about the government's policymaking and actions in response to COVID-19?
- (8) How do you feel about the actions taken by your school in response to COVID-19?
- (9) What do you think about your students' adaptation to learning music online?
- (10) How has your role as a music teacher changed during the pandemic?
- (11) How do you feel about the adoption of technology in music education?
- (12) What is your assessment of your mental well-being as a music teacher?

### ***Procedure***

A questionnaire survey was administered using an online survey tool. There was a formal invitation on the first page of the survey, which explained the purpose of this study and the data collection process. It also explained to the participants that

proceeding to the next page would signal their informed consent to participate in the study. The participants were assured that their responses would be treated as confidential and anonymous. The survey was distributed through social media groups in which Hong Kong music teachers are known to connect virtually. The use of Google Forms as the data collection tool with a prohibited null response ensured that no data were missed.

On the last page of the survey, the participants were asked whether they would be willing to participate in a video or telephone call interview. The research team contacted the participants who agreed to be interviewed, using the contact information they provided. Each interview commenced with a brief introduction outlining the study's purpose and requesting permission to audio-record the conversation. The interviews were transcribed from the audio recordings and double-checked by the research team. An email with the interview transcript attached was sent to each participant after the transcriptions were completed. The emails also thanked the interviewees for their participation and asked them to confirm the validity of their transcripts.

### ***Internal reliability, normality, and homogeneity of data***

Cronbach's alpha was used to estimate the reliability of the quantitative data from the questionnaire survey, which contained multiple items that measured the same constructs. The alpha coefficients were rated as 'good' for the FCV-19S ( $\alpha = .86$ ) and 'excellent' for the GAD-7 ( $\alpha = .94$ ) and the CTSQ ( $\alpha = .95$ ) in terms of internal reliability (George & Mallery, 2003). The results of the analysis of variance (ANOVA) were confirmed by testing its parametric assumptions. The Kolmogorov-Smirnov test was conducted to assess the assumption of normality, and Levene's test was used to assess the assumption of homogeneity of variance. No violations were found in either



test. The inter-coder reliability of the interview data coded independently by research team members was calculated using Krippendorff's alpha, which was favourably calculated as .906 (Krippendorff, 2004). The survey was conducted online, and null input was prohibited; thus, there were no missing values in the responses to the three instruments.

## Findings

The participants' responses to the three instrument scale items were converted into numeral representations for further analysis (e.g., 1 = strongly disagree to 5 = strongly agree, as in the FCV-19S). The mean rating scores were analysed against the independent scores. Tables 2, 3, and 4 display the individual and mean rating scores for all of the scale items from the FCV-19S, GAD-7 and CTSQ, respectively. The participants' responses to the FCV-19S showed a mean of 2.92 on a 5-point Likert scale, and the mean scores of their responses to the GAD-7 and CTSQ were 1.87 on a 4-point Likert scale and 2.77 on a 5-point Likert scale, respectively.

Table 2. *Summary statistics for FCV-19S scale items among Hong Kong music teachers*

Items	Mean	Standard Deviation
1. I am most afraid of coronavirus-19	3.61	0.83
2. It makes me uncomfortable to think about coronavirus-19	3.58	0.87
3. My hands become clammy when I think about coronavirus-19	1.97	0.80
4. I am afraid of losing my life because of coronavirus-19	3.33	1.10
5. When watching news and stories about coronavirus-19 on social media, I become nervous or anxious	3.50	1.00
6. I cannot sleep because I'm worrying about getting coronavirus-19	2.00	0.97
7. My heart races or palpitates when I think about getting coronavirus-19	2.43	1.18
Average:	2.92	0.97

Table 3. *Summary statistics for GAD-7 scale items among Hong Kong music teachers*

Items	Mean	Standard Deviation
1. Feeling nervous, anxious or on edge	1.98	0.84
2. Not being able to stop or control worrying	1.70	0.84
3. Worrying too much about different things	1.91	0.83
4. Trouble relaxing	2.02	0.94
5. Being so restless that it's hard to sit still	1.73	0.84
6. Becoming easily annoyed or irritable	2.03	0.89
7. Feeling afraid as if something awful might happen	1.71	0.82
Average:	1.87	0.86

Table 4. *Summary statistics for CTSQ scale items among Hong Kong music teachers*

Items	Mean	Standard Deviation
1. Pupils who lack motivation	2.75	1.00
2. Communications to and from parents	2.50	1.01
3. Public's attitude and misunderstanding about primary teachers' workload	2.96	1.18
4. Pupils' misbehaviour	2.64	1.06
5. Management style of the school principal	3.14	1.01
6. Additional administrative work	3.39	1.02
7. Competition between classes/colleagues	2.33	1.05
8. Instructing pupils who take part in local or national competition	2.88	1.08
9. Too many pupils in one class	2.65	1.07
10. Poor working conditions	2.49	1.24
11. Having to join too many teacher research and study seminars	2.30	1.21

12. Sundry class duties (e.g. collecting money for lunch/tuition fee or samples for parasite/urine inspection)	3.08	1.18
13. Subject or grade taught does not fit expectations or self ability	2.57	1.25
14. Changeable education policy of the government	3.38	1.20
15. Special pupils in the class (eg with autism, attention deficit and hyperactivity disorder (ADHD), low ability or low emotional intelligence)	2.87	1.13
16. Not enough teaching resources	2.58	1.12
17. Pupils' poor attitudes toward classroom tasks	2.82	1.20
18. Being observed by colleagues, student teachers, college tutors or parents	2.73	1.22
19. Too much subject matter to teach	2.40	1.10
20. Break time is too short	2.96	1.24
Average:	2.77	1.31

### ***Impact of demographic factors***

A one-way multiple analysis of variance (MANOVA) was performed to test the difference between males ( $n = 27$ ) and females ( $n = 93$ ) in the mean rating scores for the three instruments, and no significant difference was found ( $F(3, 116) = 1.077$ ,  $p = .362$ , partial  $\eta^2 = .027$ ). Another set of independent t-tests was performed to assess the statistical significance of the effect of teaching only music as a subject on the mean rating scores. The participants who only taught music had a significantly higher mean rating score in the GAD-7 ( $n = 28$ ,  $M = 1.96$ ,  $SD = 0.86$ ) than the participants who also taught other subjects ( $n = 92$ ,  $M = 1.84$ ,  $SD = 0.70$ ), as shown in Table 5. Because the three scales were independent that there are no causal relationships between any of them, no correction for multiple comparisons was required.

Table 5. *Impact of teaching music only on FCV-19S, GAD7 and CTSQ scores*

Scale	Subject(s) taught	n	Mean	SD	t-value	df	p-value
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FCV-19S	Only music	28	2.96	0.66	0.34	118	.880
	Music and one or more other subjects	92	2.91	0.73			
GAD-7	Only music	28	1.96	0.86	0.80	118	.027
	Music and one or more other subjects	92	1.84	0.71			
CTSQ	Only music	28	2.82	0.90	0.35	118	.353
	Music and one or more other subjects	92	2.76	0.80			

One-way MANOVA and between-groups ANOVA were performed to test the hypothesis that the school type (primary, secondary, other) at which the participants taught would affect the dependent variables. The overall effect of the school type was found to be statistically significant among the mean rating scores in the three scales ( $F(6, 230) = 2.396, p = .029, \text{partial } \eta^2 = .059$ ). Subsequently, a statistically significant effect was found for the mean score in the FCV-19S ( $F(2,117) = 5.64, p = .005, \text{partial } \eta^2 = .088$ ) but not for the mean rating scores in the GAD-7 ( $F(2,117) = 2.36, p = .099, \text{partial } \eta^2 = .039$ ) or CTSQ ( $F(2,117) = 2.38, p = .097, \text{partial } \eta^2 = .039$ ). The mean rating score for the FCV-19S among the participants who taught in secondary schools ( $n = 29, M = 2.55, SD = 0.76$ ) was significantly lower than that among the primary school teachers ( $n = 70, M = 3.06, SD = 0.63$ ) and other types of teachers ( $n = 21, M = 2.95, SD = 0.75$ ), such as those who worked with kindergarteners or students with special needs (Table 6).

Table 6. *Impact of participants' school type on FCV-19S, GAD7 and CTSQ scores*

Source	<i>df</i>	<i>SS</i>	<i>MS</i>	<i>F</i>	<i>p</i> -value
<b>FCV-19S</b>					
Between groups	2	5.31	2.66	5.64	.005
Within groups	117	55.13	0.47		

Total	119	60.44			
<b>GAD-7</b>					
Between groups	2	2.53	1.26	2.36	.099
Within groups	117	62.57	0.54		
Total	119	65.09			
<b>CTSQ</b>					
Between groups	2	3.12	1.56	2.38	.097
Within groups	117	76.72	0.66		
Total	119	79.84			

Bivariate analysis was conducted to examine the null hypothesis that there would be no relationship between years of teaching experience and the mean rating scores for the FCV-19S, GAD-7, and CTSQ. Assumptions of normality, linearity, or homoscedasticity were assessed through the examination of kurtosis, skew, normal probability plots, and scatterplots prior to the bivariate analysis. No violations were found among the four variables. A statistically significant relationship was found between years of teaching experience and score in the GAD-7 but not between years of teaching experience and scores in the FCV-19S or CTSQ (Table 7). Pearson correlation coefficients revealed a weak negative relationship between years of teaching experience and the GAD-7 score ( $r = .200$ ,  $p = .029$ ), indicating that participants with more teaching experience tended to achieve lower scores for items in the GAD-7. Between-groups ANOVA was performed to examine the effect of educational background on the mean rating scores for the three instruments. No statistically significant effects were found.

Table 7. *Correlation of participants' years of teaching experience on FCV-19S, GAD7 and CTSQ scores*

	FCV-19S	GAD-7	CTSQ
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Years of teaching experience	-.136	-.200	0.75
<i>p</i> -value	.138	.029	.528

### ***Potential relationships between anxiety, stress, and fear of COVID-19***

Bivariate analysis was conducted to evaluate the null hypothesis that there would be no relationships between the mean rating scores for the FCV-19S, GAD-7 and CTSQ. The null hypothesis was rejected. There were positive and significant relationships between the rating scores for the three scales. Pearson correlation coefficients revealed a medium relationship between scores in the FCV-19S and GAD-7 ( $r = .485, p < .001$ ), a strong relationship between scores in the FCV-19S and CTSQ ( $r = .506, p < .001$ ), and a strong relationship between scores in the GAD-7 and CTSQ ( $r = .534, p < .001$ ) (Table 8).

*Table 8. Pearson correlations among FCV-19S, GAD-7, and CTSQ scores*

Source	FCV-19S	GAD-7	CTSQ
<b>FCV-19S</b>			
Pearson correlation	1	.485	.506
<i>p</i> -value		.000	.000
<b>GAD-7</b>			
Pearson correlation	.485	1	.534
<i>p</i> -value	.000		.000
<b>CTSQ</b>			
Pearson correlation	.506	.534	1
<i>p</i> -value	.000	.000	

### ***Sources of fear and anxiety***

The participants revealed several sources of fear and anxiety during the pandemic. One was the sudden increase in feedback from parents, as teaching resources had been made

available online to parents as well as students.

It is a lot easier now for parents to observe and provide feedback, either positive or negative. They talk to the teachers or even the school as soon as they are unhappy about anything that they see in the online teaching resources. Sometimes they compare online teaching practices between schools and request changes. (Teacher A)

(Synchronised) online teaching involves not only students but also their parents. Sometimes parents directly challenge us through the teleconferencing platform. (Teacher B)

Another major source of fear and anxiety was the integration of technology to music teaching and learning. The participants in this study admitted that they were technologically and mentally unprepared to adapt to the digital transformation of music teaching, which left them unsure about their teaching performance.

I am not familiar with those online teaching technologies and still often click on the wrong buttons. It makes me feel unready to teach the lesson, even though everything else has been prepared. (Teacher C)

It has been more difficult than I expected to adopt online teaching for music. (Teacher D)

The participants also felt incapable of offering help to students and their families who struggled to meet the minimum requirements for online learning, owing to insufficient technology and Internet access.

Cross-boundary students do not have stable Internet access in mainland China. Even if that could be secured, they are also restricted by the use of learning platforms and resources because of Internet censorship in China. (Teacher A)

Although the implementation of music activities such as ensemble practice and instrumental lessons in this unfavourable online environment was unavoidable, the ineffectiveness of the music teaching and learning led to frustration and depression

among the participants. Some teachers blamed themselves for being unable to keeping up with the demands of teaching.

The school management required us to provide extracurricular activities for students' music learning. We all want to see that happen, although everyone knows that it will not be effective to teach musical instruments or conduct choral practice online. Students realise this too, which is reflected in their devotion and participation. (Teacher E)

### ***Ecological factors***

In addition to sources of fear and anxiety within the context of classroom music teaching and learning, ecological factors associated with other stakeholders in music education contributed to the music teachers' stress. These included the continuation of public examinations and benchmarking exercises, governmental bureaucracy, and insensitive educational policies.

One of the major challenges of music education in Hong Kong is keeping up with covering everything included in the curriculum. Although there have been no hints as to when face-to-face teaching will be resumed, we have had to assume that benchmarking activities will happen. The only thing we can do is always prepare students to be ready for the examinations. (Teacher F)

The government is too naïve in thinking that making everything go online will solve all the problems. No, it cannot. Online teaching cannot replace face-to-face teaching, especially for music. (Teacher B)

Although there is no centralised policy on what should be done in relation to online teaching, parents compare the school policy with others anyway. Then they start to complain about why some practices at other schools are not happening at our school. (Teacher G)

### ***Digital transformation of music education***

The participants described the pandemic as a catalyst of digital transformation in music education and the teacher's role.



My school has been implementing an e-learning policy for a few years and making a very small part of the teaching content digitally available online for students to learn by themselves. It has been slow because everyone was busy and reluctant to do so, but now everyone has been forced to learn and implement e-learning within a very short period. (Teacher D)

Kids, at the age of ten, can handle online learning already. They can look for resources by themselves on the Internet. This affects the role of music teachers, who may no longer need to spoon-feed their students and perhaps need to prepare for the role of learning facilitator. (Teacher H)

Under the new normal of online learning and the continuously changing teaching conditions, music teachers must be very flexible and technologically prepared for sudden changes in relation with their teaching duties. For example, one participant learned to adopt a hybrid mode of teaching to allow non-local students to study with those physically present in the classroom.

The school reopening in September was sudden, but cross-boundary students were not ready because of quarantine measures. To avoid repeating the lessons with these two types of students, I had to organise live streaming to make it possible for cross-boundary students to attend the lessons virtually. (Teacher C)

The music teachers were also involved in educating their students' parents. The participants revealed that parents were obliged to seek help from teachers regarding technological and pedagogical issues aspects of their children's home-schooling experience.

In the very early phase, I had to instruct the parents step by step on how to use the telecommunication and e-learning platforms for synchronous learning and homework submission. (Teacher H).

The participants also mentioned the collaboration and mutual support among teachers has enabled the sharing of good practices, concerns and ideas about how to become better music teachers within the digital transformation process.

Online classes present a few unique challenges, from managing remote students' participation to making an effort to maintain the privacy of students' interactions. No-one has any experience regarding these issues, so colleagues have had to share with each other their approaches, and together, we have built a new practice. (Teacher I)

Another possible positive change observed in the interviews concerned students' attitudes towards music learning with teachers. The blended learning approach has drastically decreased the level of interaction between teachers and students. However, students have started to appreciate seeing their teachers' faces and talking to them.

Students feel happy meeting with us even though it is only for 50 minutes per week. Some of them have started to pay more attention and become more willing to learn music. (Teacher J)

## **Discussion**

The participants' responses to the FCV-19S, GAD-7 and CTSQ revealed that the music teachers had varying degrees of fear and anxiety about the COVID-19 pandemic, which were positively correlated with each other. Among the mean rating scores for the three scales, more extreme responses were recorded for the FCV-19S items. Low rating scores were mostly related to superficial symptoms, such as sweaty hands, insomnia, and palpitation. High scores were related to items relating to emotional and psychological states, such as fear, discomfort, nervousness, and anxiety. The extreme rating scores indicate that the participants were more sensitive to COVID-19 than they were to the general anxiety and stress of being a teacher. The adverse impact of COVID-19 was more psychological than symptomatic. The top-ranking stressors and the insignificant relationship between the rating scores and demographic factors found in the present study were similar to the results of a study by Wong, Chik and Chan (2018), who surveyed the stressors of Hong Kong primary school music teachers using

the CTSQ. The stressors and rating scores reflect a combination of global and contextual factors specific to Hong Kong music education. However, the coronavirus outbreak has created a new dimension of stress.

Junior teachers and those who only taught music seemed to suffer more from anxiety than those who had more teaching experience or taught other subjects. The survey results showed that key stressors included overwhelming administrative duties and extracurricular music activities, including after-class instrumental lessons, coaching choir, and music ensembles, and preparing for music competitions and performances (Wong, Chik & Chan, 2018). Previous studies have found that administrative and peer support, especially from experienced teachers, are essential factors in enhancing junior music teachers' well-being (Krueger, 2000). The transformation brought about by the outbreak has resulted in an excessive administrative burden for those who may not have experience of coping with abrupt changes. Together with other factors such as job instability for early career teachers and unfulfillment in the teaching profession (Tang, 2011), the unfavourable conditions resulting from COVID-19 have made it difficult for junior teachers to find music education a psychologically safe working environment.

One major source of stress comes from pupils' parents. In contrast with the monthly or semi-annual class visit that is part of building trust in the teacher–parent relationship, the shift in all formal lessons from face-to-face to online has made it possible for parents to monitor teaching content and assess teachers' performance. The complete disclosure of classroom dynamics has increased transparency and accountability, resulting in an extra burden for teachers, who must also meet parents' expectations and answer for their advices. Teachers usually welcome recommendations; however, when suggestions have been made without considering broader environmental factors, such as school management and policies, holding teachers accountable to

parents' requests is more stressful than beneficial. It is an extra burden for teachers to liaise between stakeholders and make adjustments to meet all parents' wishes. This is especially critical in the Chinese context, parents are overwhelmingly concerned about their children's academic performance (Cheng, 2010). However, the increased interaction between music teachers and parents may not be simply a negative change. One positive form of engagement has seen teachers taking on the role of moderators to provide support for parents suffering from the shift in teaching effort required by the change in the physical learning environment from school to home. To this end, the digital transformation of music education caused by COVID-19 could be seen as an opportunity to open up more possibilities for parental engagement and transformative change in home-school co-operation (Jiménez-Castellanos, Ochoa & Olivos, 2016).

Technical incompetence or unfamiliarity with the technology were other key sources of anxiety for the music teachers in this study. The drastic change in music teaching, which newly depended on unfamiliar technology, resulted in anxiety, fear and concern, as found in previous studies (Bitner & Bitner, 2002). As both teachers and students were accustomed to face-to-face music activities and practice-based learning, the physical and material cost of teaching and learning music online might have been too great. Some of the participants mentioned the digital poverty that some of their students had encountered because of geopolitical conditions and their families' low socioeconomic status, which has also been observed in other parts of the world (Manson, 2020). This threatened music teacher's teaching professionalism, who were concerned about how they could support those left behind.

Besides technical incompetence and socioeconomic and geopolitical limitations, the interviews reflected the participants' frustration with the ineffectiveness of teaching music online. After the teachers had made their teaching plans and prepared their

materials, they realised that the volatility of the pandemic meant that their efforts had been in vain. When they had to teach instrumental techniques and conduct ensemble practice, they saw that the students' learning progress was far slower in the virtual environment than what would be expected in the physical classroom. This frustrated and depressed the music teachers and added to their teaching pressure and workload.

The participants' interview responses also revealed unfavourable ecological factors that have negatively impacted music teachers' mental well-being and prohibited them from teaching in a flexible manner according to the needs and concerns of their students and school. While the participants felt caught between students' needs, parents' expectations, school management orders, curriculum guidance, and their own teaching standards, there was no centralised policy on whether and how to implement online teaching at the inter-school level. Perhaps due to the limited policy capacity associated with a low-trust state (Hartley & Jarvis, 2020), the Education Bureau's official directions tend to rely on school-based management. Schools in Hong Kong must decide whether and how to provide online teaching, and comparisons result when there are discrepancies in the implementation of online teaching among different schools. However, public examinations and benchmarking exercises continue, forcing schools and teachers to keep up with educational changes by any means necessary.

The digital transformation of music education has catalysed the development of teacher professionalism. Online and blended learning have long been essential components of teaching (Philipsen, Tondeur, Roblin, Vanslambrouck & Zhu, 2019). Due to the pandemic, this approach has finally been implemented on a large scale. In response to the changing demands of the educational environment, the participants reflected various degrees of transformative teacher professionalism (Mockler, 2005). Younger students are having to learn how to handle self-directed learning in the virtual

environment, and music teachers are realising that they need to transform themselves from instructors into facilitators of students' learning. Teachers have become more proficient in using educational software and telecommunication platforms to instruct, handle assignments, monitor students' learning progress and shift between different learning platforms to cater to students with different needs. They have realised the educational affordances of the technologies, learned to compensate for the weaknesses of online teaching through other means and used technology to develop new, pedagogically sound music activities (Cheng & Leong, 2017). They also learned to support one another both mentally and pedagogically through the formation of learning communities, which resulted in a community of practice (Lave & Wenger, 1991).

## **Conclusion**

The music education sector has undergone a transformation in pedagogical practices, and it has sometimes been painful and difficult for music teachers to adapt to the 'new normal'. This study reported on the impact of COVID-19 on music teachers' mental health and well-being. It identified sources of fear and anxiety, including technical incompetence, parental expectations, and the ineffectiveness of online music teaching. This study revealed the ecological factors that contributed to the sources of fear and anxiety, including a lack of sensitivity and support in terms of policy directions, socioeconomic and geopolitical limitations, and comparisons within the school sector. Despite the stress and pressure, however, the participants were able to achieve transformative teacher professionalism and cope with the challenges of confronting the digital turn in music education during the pandemic.

During the interviews, the researchers observed that the participants lacked a vocabulary for sharing their feelings about their stress, anxiety, and fear. Whilst depersonalisation and hiding one's negative feelings to maintain a professional image

are usual practices for teachers in Chinese culture (Chan, 2003; Jin & Cortazzi, 2008), continuing to do so may eventually lead to burnout. In the ‘good old days’ before the pandemic, political instability, and civil unrest, music teachers could naively long for a better future, as expressed in the famous Cantopop song ‘The Best is Yet to Come’. Today, however, they have to prepare for the worst, facing a range of social, political, economic and public health crises. No-one knows when and how these crises will end. The findings of this study suggest that teachers must continuously equip themselves with skills and knowledge and pursue transformative teacher professionalism to cope with crises and challenges that arise in the future.

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