



The Effect of Music Listening and Progressive Muscle Relaxation on The Stress Level of Novice Music Teachers during Coronavirus Disease 2019 (Covid-19) in Malaysia

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Abstract

The outbreak of Coronavirus Disease 2019 (COVID-19) has contributed stress to many people around the world due to fear and anxiety. Other than health issues, it has threatened the overall economy and influenced a drastic change of lifestyle. The purpose of this quasi-experimental study was to examine the effect of music listening and progressive muscle relaxation (PMR) on the stress level of novice music teachers in Malaysia by using a mixed-method research design, combining quantitative and qualitative approaches. Based on the pre-test questionnaire, a sample of 30 participants was divided equally into high-moderate stress and low-stress groups based on Perceived Stress Scale-10 (PSS-10). The quantitative results revealed a significant decrease in stress scores among the majority of the novice music teachers from high-moderate stress groups and insignificant differences in low-stress groups. The intervention was found to be effective as a stress-reduction therapy and benefits more on participants with higher stress levels. Ten interviewees were selected from the 30 participants to examine their career-stress-related challenges. The qualitative findings were divided into professional and non-professional challenges, included online teaching and learning, time management, financial issues, physiological issues, and emotional issues.

Keywords: COVID-19, stress, novice music teachers, music listening, progressive muscle relaxation

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INTRODUCTION

This study investigated the effect of music listening and progressive muscle relaxation (PMR) on the stress levels of novice music teachers in conjunction with their career-related challenges during the pandemic.

Stress is an emotional state when facing a challenging situation. This type of emotional tension can be caused by everyday circumstantial factors at home, workplace, and interpersonal relationships. Both

positive and negative emotions arise in response to stress (Bigg et al., 2017). Positive stress is when the perceiver can see it as meaningful and useful to overcome certain difficulties, while negative stress can be overwhelming and detrimental to physical and mental health if it is not handled properly (Mandel, 1996).

COVID-19 pandemic has caused stress and panic around the world, and Malaysia is not an exception. The ongoing news in the media managed to keep people informed about COVID-19 but subcon-

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sciously caused more fear and anxiety among people with exaggerated and fake news (Neria & Sullivan, 2011). People who are unable to make ends meet struggled to survive with little or no income. Meanwhile, those with better financial stability exhibit lower anxiety symptoms than those who suffer from financial difficulties (Cao et al., 2020). People who are more vulnerable and considered as high risk are more likely to be anxious such as the elderly, people with hypertension, heart problems, and so on (Shahid & Kalayanamitra, 2020).

Online music education in Malaysia began when Movement Control Order (MCO) was implemented in Malaysia in March 2020 (Bunyan, 2020). Music teachers suffer from various career challenges and financial threats. This leads to considerable stress due to a sudden change of lifestyle and adapting to a life without or with minimal work at home. Fortunately, music teachers can continue to teach online without traveling to work. Although online education has been around for more than a decade, it is not widely studied and accepted in Malaysia, especially at the beginning of the pandemic, as teachers are not equipped with sufficient knowledge on how to conduct online lessons. Music teachers are pressured to conduct online lessons even though it is an unconventional approach as compared to teaching music in a normal classroom setting. For instance, music teaching requires aural perception, but an unstable internet connection could cause lag and disrupt the playing of the student (Deshmukh, 2020). Therefore, teaching music online can be stressful for teachers who are not familiar with teaching virtually.

According to Lazarus' theory of stress, humans constantly receive external stimuli that are considered a form of stress from the environment, and these are processed into an emotional response (Biggs et al., 2017). A prolonged stressful situation can worsen the mind and body, and people may exhibit poor stress management and lack of control over their emotions.

The new working norm in music education has caused new career and professional difficulties and dissatisfactions. There are limited social interactions, and most time is spent indoors which inhibits physical inactivity. There are people who experience different kinds of personal situations that also contribute to stress. Many emotional aids suggested overcoming mental health challenges for many years, but all understand its seriousness. Mental illness is harder to detect in society due to public stigma and the tendency to overlook the importance of maintaining mental health (Henderson et al., 2013).

These unexpected situations particularly stress novice music teachers who lack teaching experience. Senior music teachers may not find this pandemic as stressful as novice music teachers because they can afford to take a break from teaching or have enough teaching experience to adapt to the new teaching approaches. Novice music teachers who are working away from home may be mentally affected due to limited emotional and financial support during this tough time.

In brief, stress tolerance differs for each music teacher based on teaching experiences and financial stability. Music listening and progressive muscle relaxation routines were introduced as one of the effective therapies available to calm stress and anxiety in people. Thus, this study aims to help in further validate the effectiveness of this intervention in novice music teachers.

Novice music teachers have only less than five years of teaching experience. They are still learning to handle work problems and grow to be better teachers (Ingersol & Smith, 2003). More challenges arise from teaching online. Novice music teachers fall into the category of young adults. They are mostly tied to financial commitments during their first few years of working, such as house rentals, cars, and other living expenses. There are personal and societal expectations to sustain their lifestyle. Therefore, these big responsibilities come with immense stress.

Music listening and progressive muscle relaxation (PMR) was used as an intervention to test its impact on the stress levels of novice music teachers during Conditional Movement Order (CMCO).

Previous studies had indicated that a combination of music listening and progressive muscle relaxation (PMR) as an intervention can decrease stress, anxiety and improved life quality (e.g., Clarkson, 1991; Choi, 2010; Dewi et al., 2018; Finlay & Rogers, 2015; Gladfelter, 1992; Memmott, 2002; Ogba et al., 2019; Robb, 2000; Scheufele, 1999; Smith, 2008; Zhou et al., 2014). Their findings also support the act of listening to sedative or meditative music for a certain time can greatly influence the physiological arousal in humans, such as heart rate, temperature, skin response, and stimulations and mental state such as emotions and mood (Jia et al., 2016; Yehuda, 2011). Other previous studies have also shown the use of PMR in the research to help with anxiety, depression, stress, fatigue, and other health-related conditions. It also helps to improve the ability to cope with depression, stress, and anxiety during certain situations such as a university, work, driving on-road or during a period of receiving medical treatment (Deberry, 1981; Essa et al., 2016; Gangadharan & Madani, 2018; Isa et al., 2013; Li et al., 2015; Maharjan & Baby, 2019; Priyanka & Tamilsevi, 2013; Vaughn et al., 1989). Therefore, the purpose of this research is to investigate the challenges that caused stress among music teachers during the pandemic and to compare the effect of music listening and PMR on the stress levels of high-moderate and low-stress music teachers. The research questions were:

What are the stress-related challenges among novice music teachers in Malaysia during Movement control order (MCO) and Recovery movement control order (RMCO) in terms of their music teaching career?

What are the effects of music listening and progressive muscle relaxation (PMR) routine on novice music teachers with high-moderate and low-stress levels?

METHOD

A pre-test questionnaire was administered to novice music teachers online by purposive sampling to collect their participant information and well-being condition and assess their reliability and validity to participate by calculating their stress scores based on the Perceived Stress Scale (PSS-10).

Thirty participants with less than five years of individual music lesson teaching experience and below age 30 were selected. Fifteen participants were assigned equally into two groups according to their stress scores. High-moderate stress participants had more than 13 points, while Low-stress group participants had less than 13 points.

Participant information indicated that there were 25 female and five male participants. There were 25 out of 30 participants who conducted online lessons. There were 23 piano teachers, with two of them teaching recorder and vocal as a second instrument, three violin teachers, one vocal teacher, one drum teacher, and one guitar teacher who also teaches electric bass. The average teaching experience was 2.5 years.

Ten participants were selected from the total participants and were interviewed to investigate their career stress-related challenges. They were comprised of seven piano teachers which were P1, P2, P3, P4, P5, P8, and P10, while P6 teaches the violin, P7 on electric bass and P9 on the drum. Eight of them conducted online lessons while the other two participants, P9 and P10, did not conduct online lessons. In this study, challenges as music teachers during the pandemic are discussed. The challenges are associated with their profession as music teachers.

The intervention was done by the participants individually. Therefore, a self-reported questionnaire was sent each day to each participant to ensure that they had completed the intervention. After the intervention, participants were required to fill in the post-test questionnaire to calcu-

late their PSS-10 stress scores to determine the effect of the intervention.

Music selection is important to ensure that participants achieve an optimum level of relaxation during the intervention. The musical features that were considered in the music selected for this intervention were slow tempo with 60-80 beats per minute, more string sections, minimal instruments, less rhythmic and absence of percussive instruments, sustained and legato melodic lines, and repetitive passages (Gaston, 1951; Hanser, 1985). Hence, the music chosen for each day was non-lyrical instrumental music with string music in each set. The music selection ranges from two to four pieces of music which are then arranged and compiled in 15-minute audio.

RESULT AND DISCUSSION

The qualitative results are categorized into two types of challenges: (1) professional; and (2) non-professional. Professional challenges consist of (1) online teaching and learning, (2) time management, and (3) financial issues. Music teachers in their careers face these challenges during this pandemic. Non-professional challenges are comprised of: (1) physiological issues and (2) emotional issues. An outbreak not only affects the public but also on a personal basis. These challenges can only be identified through physiological and psychological perspectives (See Table 1).

Online Teaching and Learning

According to the eight interviewees, they had to comply with the trend of online

teaching when the unexpected lockdown confronted them. This teaching approach was not a new method, but it was new and unfamiliar to both teachers and students in Malaysia. Participants were not equipped with adequate knowledge on how to teach music online as music learning is a practical experience that stimulates our senses such as sight, auditory, and touch while students must adopt technology in their daily lives.

Music education is a social experience between the teacher and the student where they communicate to build connections and interpersonal relationships (Schafer et al., 2013). However, learning music online does not encourage such an experience. This unusual situation may cause occupational stress among music teachers. Therefore, extra effort was needed to learn how to conduct lessons through online platforms and explore the settings such as share screens. P4 commented that:

Teaching online is eye-straining. I must pay attention to the audio and watch their video very carefully if they have placed their fingers or hands position.

Correctly. It is more difficult to identify their mistakes through a video call.

Additionally, P8 expressed that: There are a lot of things that I cannot control, like internet problems, student’s behaviour, and attention during the class.

However, P3 made a positive remark and said:

Online teaching is a good alternative for teaching because this is the only choice to continue their music education and

Table 1. Career and Stress-related Challenges

Challenges	Theme	Data
Professional	Online teaching and learning	Internet instability, Communication Digital Tools, Minimal Demonstration Students Focusing Ability
	Time management	Irregular teaching schedule
	Financial issues	Lack or no income due to student dropout
Non-professional	Physiological issues	Sleep quality, Muscle tension
	Emotional issues	Stress and anxiety

sustain our career as a music teacher.

Moreover, unforeseen circumstances such as internet instability and lack of digital tools among teachers and students were the few technical challenges from teaching online. Internet instability was one of the most common factors that affected the quality of online lessons, as mentioned by all interviewees. Different households have different internet speeds and coverage, while internet connection is not always stable, especially for those who stayed in remote areas. P1 mentioned that:

I experienced unstable internet connection when I conduct online lesson after I went back to my hometown which is further from the city. I had to stay until I can travel back to the city.

Therefore, both teacher and student had the possibility to experience a slower response from both sides, and teachers may not adequately respond to their students in time (Hebert, 2007). P6 shown much frustration and distress:

The speed of the internet is extremely slow; during the teaching-learning session, it lags all the time.

He indicated that this undesirable situation greatly affects P6 in his experience in teaching violin, especially in correcting intonation. With much disappointment, P7 had to stop doing online lessons due to internet problems. He stated that:

Due to the bad internet connection, the parents decided to stop doing online lessons after a month. Therefore, I was left with no income during that period.

Equipment to conduct a good quality and effective online lesson requires a smartphone or laptop, a good microphone, and a speaker for better audio projection, and if necessary, a phone stand as well. Alam (2020) stated that a lack of awareness of how to handle digital tools, smartphones, or online apps like Zoom seems challenging for people with no prior experience. Due to the sudden lockdown, not many people managed to set up online

music lessons, and some could not afford better digital tools and set up Wi-Fi installation. As mentioned by P3 and P4, not all students were suitable to continue lessons online because they do not have stable internet and proper equipment such as having a tripod to adjust the phone or a good gadget with good microphone quality.

It is important to have good digital tools such as smartphones and laptops with a good microphone and speaker quality. P1 mentioned that her new smartphone had better audio and mic quality. When she taught online, there was no issue with the input and output of audio. P3 shared that students with older smartphones or laptops tend to have technical problems such as blurry video and audio-unclear production. Older smartphones also have the tendency to have a weaker internet connection. As emphasised by the interviewees, the placement of the gadget is also a crucial factor that determines the quality of the online lesson. P4 mentioned that:

My student uses a tablet, and she placed it at the corner of the furniture near the digital piano. The gadget fell a few times during the lesson, and it was quite disturbing.

This situation is related to the absence of proper digital equipment which is the tripod, a useful tool to hold the smartphone in a stable position. Another participant, P5, expressed that she struggled to conduct demonstrations to students with suitable video angles, especially to younger children who were unable to understand unless guided physically. Certain music teachings such as displaying musical techniques or expressing different tone qualities were more suitable to be done in a normal classroom setting. P5 added that:

The pedal was not visible in the video call as the angle of the camera was mainly focused on their hands. The distance from the digital tool had to be near enough to be heard clearly by both teacher and student.

The technology was not yet developed to address this issue. Thus, teachers

are not able to guide using the demonstration method online, and students are required to be more independent in learning it by themselves. Based on piano pedagogy research, observation and imitation learning greatly benefits students' musical knowledge (Simones et al., 2015). Through online teaching, there is a lack of performance demonstration compared to normal music learning. For some students, it can be difficult to grasp musical technique and performativity.

The next interview question was related to the focusing ability of their students. Most interviewees found that their students could not focus completely during online lessons than normal classroom settings. The main difference was teachers were not physically present to guide the students. P4 expressed that one of her younger students did not understand the instructions given and stayed quiet throughout the lesson. The communication between teacher and student was also affected through this teaching approach because of social isolation.

Age is also an important factor. Music teachers require different teaching approaches to tackle different challenges when they teach students of different age groups (Burić, Slišković, & Penezić, 2019). One of the findings indicated that it was more difficult to teach younger students online. P2, P4, and P5 mentioned that hyperactive and talkative students were the hardest to control during the online lesson. P5, P6, and P8 expressed that there was a need for parents to be by their side during the online lesson.

Music learning includes social interaction and enjoyment between the teacher and student. Since music schools could operate, there are SOP procedures that enforce social distancing, reducing social interaction and social proximity between students and teachers. It is common for teachers to guide them hand in hand with younger students, especially when they are not independent yet. P4 explained that teachers need to be cautious of how they approach their students. But it is difficult

as some students need help from the teacher. As indicated,

It is difficult not to guide younger children physically because they are still too young to position their hands independently on the piano.

The practice of wearing masks in the classroom has eliminated one of our most important social elements: our facial expression. According to Frith (2009), it was found that people with positive facial expressions are more likely to be trusted. The relationship between teacher and student depends on how they interact with each other through verbal and non-verbal communication. Spitzer (2020) raised concerns about face masks that lead to decreased face recognition, emotional signaling, and communication. P5 shared her concern:

I notice whether my students are enjoying my class through their facial expressions. But now that we have our masks on, sometimes it gets awkward, especially when interacting with quiet students who usually use their expressions to show their feelings.

P8 mentioned how wearing masks prevents her from communicating effectively:

I must speak more clearly with my mask on and make sure the students understand my instructions without guiding them physically.

Both teacher and student became socially restrained and cautious due to the safety procedure, affecting how a normal music lesson is conducted.

Time Management

Throughout the pandemic, there was a huge change in schedule. Thus, teachers and students have to deal with time management issues. Despite the reopening of music school during Recovery Movement Control Order (RMCO), four out of eight interviewees who are P2, P3, P4, and P8 continued teaching online for some students as requested by parents. Most participants mentioned that parents were still

worried about the outbreak. So, they decided to continue lessons online or to resume physical class when they feel safe.

When asked if students who were doing online classes return to music school or continued online, P3 responded that:

Parents are not willing to send their kids back to music school. I received text from parents saying that they rather continue online than going back to music school.

The sudden lockdown started on the mid-month of March 2020, most music teachers were left with approximately two weeks of replacements to arrange after the partial lockdown. Thus, music teachers temporarily had to cope with extended working schedules for a few weeks during RMCO and continue adapting to both online and classroom lessons. P2 expressed that:

I had to work till night-time and wake up early for work the next day to replace classes from March.

P8 added that:

Our schedules need to readjust to suit students' time. Ever since MCO, everyone's schedule has changed.

Moreover, most interviewees also shared a list of guidelines to be adhered to in the music school to ensure social distancing and good hygiene. Teachers were responsible for sanitizing the instruments and furniture. Every lesson, teachers had to make sure all students have washed their hands thoroughly. Both teacher and student had to get their temperature checked, wear masks, ensure a proper social distance and avoid physical contact. P3 shared that:

The principal advised us to inform parents to send and fetch their children punctually to and from the music school to avoid overcrowding in the premises.

Hence, only students were able to enter the premises to ensure that the crowd is controlled. It was also a suggestion to prevent children from playing in groups while waiting for their parents to fetch.

Therefore, parents were encouraged to be punctual in picking up their children.

Financial Issue

Both participants from the high-moderate stress and low-stress group were susceptible to the pressure to handle their financial difficulties during the pandemic. But both groups have different stress tolerance. Despite the financial pressure, low-stress participants may be better at managing stress. Most participants were only in their first five years of teaching. Some of them were already tied with commitments such as rental, car, and other bills. Thus, having financial responsibilities during an outbreak can be overwhelming. All interviewees expressed that the pandemic had severely affected their finance due to students who stop temporarily. P2 added that:

Although I have resumed work, nevertheless there will be a waiting time for the income to recover. Only if the situation improves ... if it gets worse later, we won't be able to earn much income till next year.

P10 shared her situation:

I usually teach piano and perform in hotel. But apparently, none of my students are continuing music lessons during MCO, and I also lost my performing job. It is quite a difficult situation to deal with.

P8 sadly expressed that:

Some students stopped temporarily until further notice. I am unsure when they will be back for music classes or stop permanently because none of us can predict when the pandemic will end.

The fear and anxiety of the public were lingering even when Malaysia's outbreak seem to be under control. Although participants experienced a huge loss of income, most of them had financial assistance from their family. P1 and P5 had financial relief but they expressed guilt of adding financial burden to their family. P1 willingly shared her personal concern:

Thankfully, my dad is still working du-

ring MCO. But I am still worried. I was able to relieve his burden when I started working last year and I have to depend on him again. Not sure when the pandemic will end.

P5, who had a similar experience, added that:

I was finally able to treat my family with the money I earn, but now I have to depend on them again during this outbreak.

Physiological Issues

The pandemic had caused global chaos that created fear and anxiety in many people. As a result, many people continued working at home and studying online even when schools and businesses resumed back to normal. This pandemic affected lifestyle and working habits and made an impact on the health and mentality of many people.

Sleep is a necessary routine to keep a healthy body, and stress can indirectly affect sleep quality. People with better sleep indicated lower stress (Blaxton et al., 2017). Based on the interview data, P1 and P10 both mentioned there was not much change in their sleeping patterns while P6 disciplined himself to sleep before midnight and wake up early. Other interviewees expressed that they had irregular sleeping habits. P2 elaborated that:

My sleeping time varies every day. Sometimes I sleep later, sometimes earlier. I do not have a fixed sleeping time. Every day feels the same because I am always staying indoors.

P5 shared that:

Sometimes I play on my phone till five in the morning and wake up extremely late the next day.

The lack of movement and low productivity during quarantine can cause muscle tension or muscle rigidity. Stress can also increase the severity as it affects our muscles and our usual bodily functions. Muscle tension issue was brought up in the questionnaire considering that music teachers spent more time at home and on

digital tools to conduct online lessons and preparing online teaching materials. From the interview data, it was found that three muscle groups were mentioned by the interviewees: the neck, eyes, and shoulders. Only P6 and P10 responded that they did not feel any muscle tension.

Out of ten interviewees, six were P1, P2, P3, P7, and P8 pointed out that their neck felt the most tense. This indicates that digital tools and gadgets such as smartphones greatly affected their neck posture. A past study examining the neck flexion while using a smartphone found that it can lead to extreme neck pain and fatigue (Alfaitouri & Altaboli, 2019). The duration of how long they use their smartphones also determines the severity of neck and shoulder pain (Al-Hadidi et al., 2019). P4 expressed that:

Looking at computer screen for long hours made my neck so tensed that I have to keep stretching it back.

Other participants expressed that their eyes were very tired due to excessive use of digital tools. P4 who also had neck pain added that:

My eyes feel so tired looking at my laptop every day and I always stay indoors, so I seldom look at far objects.

Incidentally, P8 who had shoulder pain explained that:

Since there is not much work and I have so much free time, I spent a lot of time watching movies on my smartphone and laptop. At one point, I realised I was tensing my shoulders while facing the laptop.

Emotional Issues

Other than physiological issues such as sleeping problems and muscle tension, stress also indirectly affects mental health. The emotional stress was accumulated from professional challenges faced due to the pandemic, such as adapting to a quarantined lifestyle, teaching online, struggling with the loss of income, having student dropouts, and odd working schedules. All these contribute to their fi-

nancial status and job satisfaction as music teachers. This induces emotional responses such as fear, worry, anxiety, and insecurities.

The findings indicated how their career as a music teacher has an impact on their emotions and feelings. P5 revealed that she had zero income in the first two months into MCO but have financial commitments such as paying for insurance, tax, and house loan. P5 added that:

I taught few online lessons with just a handful of students as requested by some parents. But it is stressful to conduct online lessons with no prior online teaching experience.

She expressed her guilt due to her lack of experience in conducting online lessons with the same teaching quality as in normal class settings. During RMCO, she managed to resume back to work but had a few dropouts due to students who refused to continue piano lessons until further notice. Majority of participants also had similar experience when they resumed back to work. This finding indicated that participants go through fear and worries due to financial instability. One of the consequences of not working during quarantine leads to low productivity and lack of motivation. P1 responded that:

I often read novel on my smartphone and I feel like I am just doing nothing all the time.

In addition, P2 also expressed her anxiety of the covid-19:

Every day, I am checking on how many cases are there because it is really worrying, and I hope the situation gets better so I can resume to work.

P8 commented that:

I have been watching a lot of dramas online since I do not have many students at the moment.

Depends on the amount of usage, social media can be both beneficial and detrimental to our emotional health. Glazzard and Stones (2019) indicated that it can

improve a positive identity among young people and an opportunity for networking. However, in recent studies of social media exposure during the COVID-19 pandemic, excessive exposure to media can create anxiety, stress, and negative emotions among the citizens (Gao et al., 2020; Garfin, 2020). P3 expressed her concerns:

Everyone is worried about the pandemic so do I as a music teacher. I understand their concerns as parents to keep their children safe, but I am also worried how I can sustain my life with my current income with just online lessons.

P7 further elaborated that:

During MCO, I was always checking on how many cases are there for the first few weeks and then I stopped because there was nothing I can do. Then when we can go back to work, I still have to worry about my income.

Several participants expressed their worries about their career, finance, and future due to financial instability. As the outbreak persists, doubts and worries can cause fear and anxiety among people. The outbreak is a threat to many jobs, and this includes the future of music teachers. P1 specifically stated that:

During MCO, I keep overthinking whether I should remain as a piano teacher or find another job. But changing jobs is also a difficult decision because the economy is not good. It was a big dilemma. So, in the end I stayed and wait for the situation to get better.

Music listening and Progressive Muscle Relaxation (PMR)

The quantitative results are based on the pre-test questionnaire. There were three aspects of well-being condition: (1) financial pressure, (2) sleeping quality, and (3) frequency of muscle tension. 86.67% of high-moderate stress participants and 73.33% of low-stress group participants experience financial pressure. While 23.3% of participants had sleeping problems, 36.7% of the participants had occasional sleeping problems, and 40% had no sleeping problems. Lastly, for frequency muscle tensi-

on, 33.3% chose "Yes", 26.7% chose "Sometimes" and 40% chose "No" to feeling muscle tension.

The post-test stress scores of high-moderate participants were (1) 60% with decreased stress scores; (2) 20% with increased stress scores; and (3) 20% remained the same. The stress scores result in low-stress group were: (1) 40% of participants with decreased stress scores; (2) 33% with increased stress scores; and (3) 27% remained the same.

Table 2 indicated a decrease in post-test scores compared to the pre-test. There was an improvement in perceived self-efficacy and a decrease in perceived helplessness. An increase in mean scores of positive items and a drastic decrease for some negative variables indicated an improvement in stress management among participants. Stress can cause people to lose control of their emotions and may get frustrated easily. As theorised by Bourne (2015), progressive muscle relaxation (PMR) can improve emotional control, leading to better anger management. A study by Choi (2010) has also indicated that music listening and PMR intervention effectively reduces anxiety.

The mean of pre-test stress scores for the ten individual items ranged from 2.00 (positives items 4, 5, and 8) to 2.73 (negative item six). Based on post-test scores, the mean ranged from 1.73 (negative items nine) to 2.40 (negative item ten). The mean difference ranged from -0.87 to 0.27. The one with the highest mean difference was item nine (-0.87), followed by item two (-0.67) and three (-0.47). This result supports the theory that the intervention is effective in managing anger.

Table 3 demonstrates the pre-test and post-test Perceived Stress Scores (PSS-10) of the low-stress group. There was only a slight difference in the mean difference of both positive and negative items. The mean of pre-test stress scores for the ten items ranged from 0.47 (negative item 9) to 3.27 (positive item 4). In the post-test scores, the mean ranged from 0.87 (negative items nine) to 2.87 (positive item four).

The mean difference between pre-test and post-test ranged from -0.47 to 0.27 which indicated a decrease in post-test scores of negative items and a slight increase in post-test scores of positive items 4, 7, and 8. Item 2 had the highest mean difference of -0.47.

There was also an improvement in stress management among low-stress participants, but the results were not as significant as the results of the high-moderate stress group. The mean difference between pre-test and post-test scores for the high-moderate stress and low-stress group ranged from -0.87 to 0.27 and -0.47 to 0.27, respectively.

Comparatively, among the six negative items, high-moderate stress and low-stress groups showed a decrease of -0.33 and -0.20 of mean scores in item one, -0.67 and -0.47 in item two, -0.47 and -0.26 in item three, -0.46 and -0.27 in item six, -0.87 and -0.20 in item nine respectively. There was no significant change for both groups for item ten with mean score results of 0.00 and 0.06, respectively.

Among the four positive items, high-moderate stress and low-stress groups showed different results. The high-moderate stress group participants showed an increase of mean scores for all four positive items. However, only item five showed an increase in mean scores for low-stress group participants, while items four, seven, and eight showed a slight decrease in mean difference. The most significant decrease was item four, with a mean difference of -0.40. There was an increase in mean scores for all four positive items.

The workplace is where people face new challenges every day. Based on a study by Smith (2008), this research indicated that PMR helped to reduce occupational stress. It helps people gain confidence and become more aware of how to handle difficult situations in life. Thus, this intervention similarly benefits novice music teachers in handling their new challenges during this pandemic.

To summarise the data collected, the mean difference of the total results of pre-

Table 2. Means, Mean Difference, Standard Deviations, and Percentage increase of High-moderate Stress Group for Study Variables

Item	Pre-test		Post-test	
	Mean (SD)	Mean (SD)	MD (SD)	%
Upset of things happened unexpectedly	1.33 (.98)	1.13 (.74)	-0.20 (.14)	-15.04
Unable to control important things in life	1.27 (.88)	0.80 (.86)	-0.47 (.33)	-37.01
Felt nervous and stressed	1.53 (.83)	1.27 (.70)	-0.26 (.18)	-16.99
Confidence in handling problems	3.27 (.46)	2.87 (.74)	-0.40 (.28)	-12.23
Felt that things going your way	2.53 (.83)	2.80 (.41)	0.27 (.19)	10.67
Unable to cope with tasks	1.27 (.70)	1.00 (.53)	-0.27 (.19)	-21.26
Able to control irritations	2.73 (1.10)	2.60 (.91)	-0.13 (.09)	-4.76
Alert and aware	2.87 (.74)	2.67 (.82)	-0.20 (.14)	-6.97
Uncontrollable anger	0.47 (.52)	0.67 (.49)	0.20 (.14)	42.55
Unable to overcome difficulties	0.67 (.62)	0.73 (.46)	0.06 (.04)	8.96

Note: MD = mean difference; SD = standard deviation; % = percentage difference

Table 3. Means, Mean Difference, Standard Deviations, and Percentage increase of Low-Stress Group for Study Variables

Item	Pre-test		Post-test	
	Mean (SD)	Mean (SD)	MD (SD)	%
Upset of things happened unexpectedly	2.20 (.94)	1.87 (1.13)	-0.33 (.23)	-15.00
Unable to control important things in life	2.67 (.90)	2.00 (1.41)	-0.67 (.47)	-25.09
Felt nervous and stressed	2.67 (.90)	2.20 (.68)	-0.47 (.33)	-17.60
Confidence in handling problems	2.00 (.65)	2.27 (.59)	0.27 (.19)	13.50
Felt that things going your way	2.00 (.53)	2.27 (.88)	0.27 (.33)	13.50
Unable to cope with tasks	2.73 (.88)	2.27 (.96)	-0.46 (.33)	-16.85
Able to control irritations	2.13 (.52)	2.33 (.72)	0.20 (.14)	9.39
Alert and aware	2.00 (.65)	2.27 (.96)	0.27 (.19)	13.50
Uncontrollable anger	2.60 (1.06)	1.73 (1.28)	-0.87 (.62)	-33.46
Unable to overcome difficulties	2.40 (.63)	2.40 (.99)	0.00 (.00)	0.00

Note: MD = mean difference; SD = standard deviation; % = percentage difference

test and post-test in high-moderate stress group and low-stress group are (-1.79) and (-1.4) while the total percentages are (-8.0%) and (-7.8%). This indicates that the intervention was more effective on high-moderate stress participants than participants from low-stress groups.

CONCLUSION

COVID-19 pandemic is highly associated with career and financial struggles as well as physical adaptation. Novice music teachers are at the beginning of their ca-

reer, and with a lack of experience in teaching students physically, online education became an unexpected challenge to cope with. Other challenges that were discovered include financial, time management, physiological, emotional, and adaptation to the “new normal.” This study incorporates both music listening and progressive muscle relaxation (PMR). It stimulated different body parts and auditory senses to help individuals focus mainly on contracting and relaxing their muscle groups and allowing the music to lead the mind. Thus, the intervention was effective in reducing

stress, especially in high-moderate participants.

This present study has its limitations where the findings apply to a comparatively small sample of music teachers which may not address the general population. Larger sample size and longer experimental time period may be employed in future studies to validate the quantitative results further. A wider variety of music genres can be utilized and considered, including participants' musical selection according to their preferences.

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