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Motivational Factors of Collegiate Instrumental Music Practice during the Covid-19 Pandemic

Ong Wen Bin, Braxter Chong Hong Liang, Hairun Alif Ariffin Hairun Anuar

College of Creative Arts, Universiti Teknologi MARA, Shah Alam, Malaysia

ongwenbin@uitm.edu.my, 2020955829@student.uitm.edu.my, 2020991949@student.uitm.edu.my
Tel: +6014-234-2068

Abstract
The purpose of this study is to analyse the commitment level and motivational factors of collegiate instrumental music practice during the Covid-19 lockdown. The study sample consists of 58 subjects (Male=31, Female=27), who are collegiate students pursuing diploma and bachelor's degrees in music at a local university in Malaysia. The collection of data was conducted through a survey questionnaire developed from The Behavioural Regulation in Sport Questionnaire (BRSQ). The results have showed a low commitment level to musical practice, where students are motivated by internal factors of accomplishment, knowledge, and the importance of musical practice in their music studies.

Keywords: motivation; music practice; COVID-19; self-determination theory

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1.0 Introduction

Following the World Health Organization's (WHO) (2020) declaration of a global pandemic caused by the widespread Covid-19 virus, many countries have implemented restrictions on population movement known as "lockdown". On March 16, 2020, the federal government of Malaysia issued a Movement Controlled Order (MCO) until May 31, 2020. By the Prevention and Control of Infectious Diseases Act 1988 and the Police Act 1967, restrictions on movement, assembly, and international travel were encompassed. Mandatory closure of business, industry, government, and educational institutions was also implemented (Sukumaran, 2020).

Due to the campus closure and travel restriction order at the university, the process of teaching and learning for the semester had to be conducted through alternative learning methods. The adaptation is especially challenging for music students as most of their curriculum and music-making activities involve face-to-face interaction and live audiences. Orchestra and ensemble group rehearsals, workshops, and concerts are cancelled. Individual instrumental lessons are taught through digital online learning in synchronous and asynchronous settings. Moreover, music students had to make separate arrangements for their musical practice, as compared to a standard semester due to the closure of the music practice facility provided at the university.

Since music practice was restricted at the university during the Covid-19 lockdown, there is an inevitable change to the established practice routines and required infrastructure such as musical instruments and practice rooms, which leads to adaptation and change in the music students' practice behaviour. Previous studies have shown that music students' participation in musical activities can be affected by environmental and internal factors (McPherson & Davidson, 2002; Davidson & Burland, 2006; Evans, McPherson, & Davidson, 2013).

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The impact of the Covid-19 pandemic on music students has been examined through recent studies done by researchers as it is a current and ongoing issue. However, only a few studies investigated the motivational factors of their musical practice during the lockdown.

Motivation research is essential as it helps music educators to understand how students come to value musical practice, especially in this unprecedented pandemic, and the processes whereby they view it as important to them or to their own goals (Pintrich & Shunk, 1996). This study aims to examine the practice behaviour and motivational factors of collegiate music students during the lockdown. The research questions for this study are: (1) Where do the collegiate music students conduct their musical practice during the lockdown? (2) What is their commitment level to the musical practice? (3) What are the motivational factors of their musical practice during the lockdown? (4) Are there any differences in the motivational factors of their musical practice based on gender and commitment level?

2.0 Literature Review

Musical practice plays a fundamental role in the development of musical expertise. Through effective musical practice, music students can acquire aural, technical, cognitive, communication, performance, and learning skills (Jørgensen and Hallam, 2016). The process of musical practice is associated with a certain level of autonomy, where the student is motivated by their desire to plan and organize the practice content as well as focus on the important elements that need to be learned (McPherson and Zimmerman, 2011). To achieve practice goals, music students need to balance the time-consuming components of practice such as preparation, decision-making, and reflection (Nusseck and Spahn, 2021).

Motivation refers to being moved to do something. Unmotivated individuals lack the drive or inspiration to act, whereas motivated people are inspired or activated toward a certain goal (Ryan & Deci, 1999). Motivation is a vital part of musical practice as the process is often associated with self-regulated learning and self-efficacy (Nusseck and Spahn, 2021).

The self-determination theory (SDT), developed and articulated by Deci and Ryan (1985), is a theory that illustrates the process of motivation within a continuum of three levels, which are intrinsic motivation, extrinsic motivation, and amotivation. Intrinsic motivation refers to a behaviour that a person engages in even when there is no advantage or control (Deci & Ryan, 1985). When a person is intrinsically motivated, they are driven by their own interest, enjoyment, and satisfaction, and their actions will be completely self-determined. Extrinsic motivation is the belief that a person will conduct any action and attain desired outcomes that are unrelated to the activity. Amotivation represents the state where a person is lacking the intention to act on their own and is least self-determined.

The lockdown caused by the Covid-19 pandemic has had a major negative psychological impact on most people. Specifically, music students experienced negative effects on their flow and well-being, including satisfaction with life, satisfaction with study and the impact of Covid-19 (Habe, Biasutti & Kajtna, 2021; Rosset, Baumann & Altenmüller, 2021). Recent studies have also shown that there is a decrease in practicing hours during the lockdown (Rosset, Baumann & Altenmüller, 2021; Nusseck and Spahn, 2021). It is notable that there are no existing reports of the motivational factors behind the practice routines of music students during the lockdown.

3.0 Methodology

An empirical, quantitative study was performed, using a descriptive population-based study based on surveys.

3.1 Participants

The participants of this study were 58 students attending the Faculty of Music in a local university. The selection criteria were that they are existing students and plays a major instrument for their study.

3.2 Instruments

A questionnaire was developed from the Behavioural Regulation in Sport Questionnaire (BRSQ) (Lonsdale, Hodge, & Rose, 2008) to determine the motivational factors in the music context. Originally designed for the sport context, the BRSQ was based on the theory of SDT, looking into intrinsic motivation, extrinsic motivation, and amotivation. The intrinsic motivation (IM) was further elaborated into IM-to know (for the pleasure that one experiences while learning), IM-to experience stimulation (for the experience of pleasurable sensations), and IM-to accomplish (for the satisfaction one feels while attempting to accomplish something) (Valleran, 1997). Similarly, extrinsic motivation can be categorized into four types, which are external regulation (to obtain rewards, avoid punishment, or satisfy an external demand), introjected regulation (to avoid feelings such as guilt or shame, or to enhance ego and feelings of self-worth), identified regulation (values and judges the separable outcomes as being personally important), and integrated regulation (values the activity not only as important, but also in congruence with deeply held values and his or her sense of self) (Ryan and Deci, 2002).

With three to four descriptive statements for each of the motivational factors, the questionnaire contains 35 items. The students were asked to evaluate their level of agreement with on a 7-point Likert scales, where 1 means “not at all true”, 4 means “somewhat true”, and 7 means “very true”. In order to adjust the questions for music context, the beginning of each descriptive statement “I participate in my sport…” was replaced by “I practice my music instrument… ”. The reliability of the developed questionnaire was proved in a pilot study, with the Cronbach’s alpha coefficients ranging between 0.836 and 0.976.

3.3 Procedures

The instrument and demographic questions were designed into a Google Form format and distributed to the participants through messaging applications such as WhatsApp and Telegram. The majority of participants completed the survey in December 2021, where

they were informed of the study's purpose and gave informed consent before taking part in the study. This study was granted ethical approval for data collection by the research ethics committee of Faculty of Music, Universiti Teknologi MARA.

4.0 Findings

Table 4.1: Profile of Respondents

Demographic characteristic	Frequency (N=58)	Percentage (100%)
Gender		
Male	31	53.4
Female	27	46.4
Programme		
Diploma in Music	25	43.1
Bachelor of Music Education	19	32.8
Bachelor of Music Performances	14	24.1
Places of practice		
Parent's home	54	93.2
Rented Residence	2	3.4
Within campus	2	3.4
Day of practice per week		
One day	10	17.2
Two to three days	36	62.1
Four to five days	10	17.2
Six to seven days	2	3.4
Duration of Practice per day		
Less than 1 hour	14	24.1
1-2 hours	32	53.2
2-3 hours	7	12.1
More than 3 hours	5	8.6
Mean practice time per week (Hour)		
.50	5	8.6
1.25	9	15.5
1.50	5	8.6
3.75	21	36.2
6.25	5	8.6
6.75	5	8.6
8.75	1	1.7
11.25	4	6.9
15.30	1	1.7
22.75	1	1.7
23.45	1	1.7

Table 4.1 represents the demographic profile of the 58 respondents. In terms of gender, the results indicated that there are slightly more male respondents (53.4%) than female respondents (46.4%). In relation to the study programme, a total of 25 respondents (43.1%) were students from the Diploma in Music. Nineteen of the respondents (32.8%) were from the Bachelor of Music Education and a total of 14 of the respondents (24.1%) were from the Bachelor of Music Performance. Regarding places of practice, almost all of the students (54) practice in their parent's home (93.2%) due to MCOs, whereas only 2 students (3.4%) practice in rented residences and within campus respectively. For day of practice per week, a majority (36) of the respondents (62.1%) practice 2-3 days per week. Ten (17.2%) students practice one day and 4-5 days per week respectively. Only 2 students (3.4%) practice 6-7 days per week. In terms of hour of practice per day, 32 respondents (53.2%) practice 2-3 hours per day. Fourteen of the respondents practice only 1 hour (24.1%), while seven respondents (12.1 %) practice 2-3 hours per day. There were 5 respondents (8.6%) who practice for more than 3 hours per day.

Mean practice time per week (commitment) was determined by the product of mean of 'day of practice per week' and mean of 'practice hour per day'. Many (21) of the respondents (36.2%) have a mean practice time of 3.75 hours per week. Nine respondents (15.5%) have 1.25 hours of mean practice time. There were 5 respondents (8.6%) who have mean practice time of 0.5 hours,1.5 hours, 1.5 hours, 6.25 hours, and 6.75 hours respectively. Four respondents (6.9%) were having a mean practice of 11.25 hours. There was only 1 respondent (1.7%) with mean practice time of 8.75 hours, 15.3 hours, 22.75 hours, and 23.45 hours. In a summary, 40 respondents (68.9%) were having mean practice time of 3.75 hours or less. 11 respondents (18.9%) were found to have mean practice time of 6.25-8.75 hours, whereas only 7 respondents (12%) were having mean practice time of more than 11.25 hours.

Table 4.2 highlights the descriptive data of the motivation mean score according to gender. From the results, it is apparent that internal motivation-to accomplish (IMA) has the highest mean score (M = 5.89), followed by Internal motivation – to know (IMK) (M= 5.81) and Identified Regulation (IDR) with a mean score of M= 5.76, for male respondents. However, the three highest motivational factors for female respondents were Identified Regulation (IDR) with a mean score of M= 5.41, followed by internal motivation-to accomplish (IMA) (M=5.25)

and Internal motivation – to know (IMK) (M= 5.02). Overall, the result shows that male respondents have a higher motivational score (M=5.24) than female respondents (M=4.75). Nevertheless, both male and female respondents possess a higher intrinsic motivational score than extrinsic motivation.

Table 4.2: Mean Motivation score according to gender

Gender / Motivation Factors	Male N=32		Female N=26	
	Mean (M)	Rank	Mean (M)	Rank
IMG	5.49	5	4.94	5
IMK	5.81	2	5.02	3
IME	5.41	6	4.91	7
IMA	5.89	1	5.25	2
ITR	5.73	4	4.95	4
IDR	5.76	3	5.41	1
IJR	4.95	7	4.93	6
EXR	4.34	8	4.07	8
AM	3.75	9	3.25	9
AV. Mean	5.24		4.75	

Note: IMG=Intrinsic Motivation(general); IMK= I-M to know; IME=I-M to experience stimulation; IMA=I-M to accomplish; ITR=Integrated Regulation; IDR=Identified Regulation; IJR= Introjected Regulation ;EXR=External Regulation; AM= Amotivation.

Table 4.3: Mean Motivation score according to hours of practice per week (commitment)

Comt. (hr/wk) / Motv. Factors	.50 N=5	1.25 N=9	1.50 N=5	3.75 N=21	6.25 N=5	6.75 N=5	8.75 N=1	11.25 N=4	15.3 N=1	22.75 N=1	23.45 N=1	Av. mean
IMG	4.50	4.75	5.45	5.36	5.60	5.00	5.75	5.37	6.50	5.25	7.00	5.25
IMK	4.47	4.85	6.07	5.32	5.93	6.13	6.00	5.50	6.67	7.00	6.67	5.46
IME	4.55	4.78	5.45	5.39	5.35	4.65	5.75	5.50	6.00	5.00	6.00	5.19
IMA	4.55	5.17	5.70	5.71	5.75	5.80	6.75	5.69	6.75	6.25	7.00	5.60
ITR	4.40	5.11	5.75	5.57	5.40	5.15	5.00	5.19	6.00	7.00	7.00	5.38
IDR	4.65	5.11	6.20	5.65	6.05	5.45	5.50	5.88	6.50	6.50	6.50	5.60
IJR	4.15	4.94	4.55	5.48	4.80	4.95	5.25	5.13	1.25	7.00	1.00	4.94
EXR	4.30	3.61	3.30	4.74	4.00	3.65	5.75	4.81	1.50	6.50	3.75	4.22
AM	4.30	3.44	2.50	3.68	3.10	2.75	4.00	4.75	1.50	6.00	2.50	3.53

Note: IMG=Intrinsic Motivation(general); IMK= I-M to know; IME=I-M to experience stimulation; IMA=I-M to accomplish; ITR=Integrated Regulation; IDR=Identified Regulation; IJR= Introjected Regulation; EXR=External Regulation; AM= Amotivation.

Table 4.3 depicts the descriptive data of the motivation mean score according to hours of practice per week. The results indicated that the three highest rank motivation factors in relation to practice hours were internal motivation-to accomplish (IMA) (M = 5.60), Identified Regulation (IDR) with a mean score of M= 5.60, and followed by Internal motivation – to know (IMK) (M= 5.46).

Table 4.5: Relationship between Practice time (commitment) and Mean Motivation score

		IMG	IMk	IME	IMA	ITR	IDR	IJR	EXR	AM
Practice time	Pearson Correlation	.233	.337**	.140	.311*	.238	.281*	-.125	.085	.052
N=58	Sig. (2-tailed)	.078	.010	.294	.018	.072	.033	.348	.524	.696

*Note: *p < 0.05'; **p < 0.01*

The correlations of practice time and mean motivation score using Pearson Product Moment is depicted in Table 4.5. From the results, it is observed that three types of motivation showed significant correlation with practice time i.e., Internal Motivation-to know (r = .337, p = .010), Internal Motivation-to accomplish (r = 311, p = .018) and Identified Regulation (r = .281, p = .033). This implies that as the three related motivations increased, the practice hours will also escalate. However, the rest of the motivation factors only showed a weak relationship, but no significant correlation with practice time.

5.0 Discussion

The aim of this study was to determine the commitment level and motivational factors of collegiate instrumental practice during the Covid19 lockdown. The research questions proposed were (1) Where do the collegiate music students conduct their musical practice during the lockdown? (2) What is their commitment level to the musical practice? (3) What are the motivational factors of their musical practice during the lockdown? (4) Are there any differences in the motivational factors of their musical practice based on gender and commitment level?

In relation to the first question on the location of musical practice, a majority of the participants conducted their musical practice at their parents' home during the lockdown, which is similar with the findings of Nusseck and Spahn (2021). Due to the closure of practice facilities at the university and the switch to digital learning methods for the semester, most students decided not to stay in campus and returned home with their own instruments. As some instruments are difficult to be moved or possessed, several participants continued their musical practice in rented residences and in the campus. The second question explores the commitment level of musical practice, which can be answered through the mean practice time per week. 69% of the music students practiced less than 5 hours a week in average while only 12% of the music students practiced more than 10 hours a week in average. This shows that most of the music students were not committed to their musical practice during the lockdown, which can be caused by the difficulty to adapt to a new practice environment, distractions, and Covid-19 health issues.

Regarding the third and fourth research questions on the motivational factors and the differences between gender and commitment level, it is apparent that the music students were intrinsically motivated to practice during the lockdown in pursuit of competence, knowledge, and affect. Male students were slightly more motivated than the female students, with both gender showing high agreement level with the internal motivation-to accomplish and amotivation the lowest. This is consistent with the findings of Schatt (2022), which was conducted on secondary instrumental music students. Students who were highly committed to their musical practice during the lockdown were motivated by their desire to accomplish practice goals, gaining more knowledge on practice techniques and skills, and valuing the importance of musical practice in their instrumental studies.

6.0 Conclusion & Recommendations

Overall, the findings of this study provide certain understandings for the circumstances of practicing in music students during the Covid-19 lockdown. Students were forced to adapt and adjust their practice environment due to the lockdown situation, which causes the low commitment level in their musical practice. However, it was evident that the music students developed autonomy and are intrinsically motivated to practice in pursuit of knowledge and sense of accomplishment. They also value musical practice as a significant part of their musical studies.

However, this study presents certain limitations, thus the need to be cautious with the observations. For instance, the participant number was rather limited and selected from only one university. Due to the limited timeframe of data collection, there was no comparison of commitment level of musical practice before and during the Covid-19 lockdown. Thus, this study provides a direction for future research such as cross-cultural data collection and comparisons of different stages of the Covid-19 pandemic which is still ongoing.

In terms of implications, the result of this study shows that the practice facilities in higher education institutions that are available to the music students, including rehearsal spaces and practice rooms plays a significant role in the continuation of their musical practice. Therefore, it is important that the facilities are complete and fully equipped for the use of music students throughout the course of their study. For pedagogical implications, music students should be taught the appropriate and correct skills set to practice independently so that they can be more motivated to practice even without the presence of a teaching figure.

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Paper Contribution to Related Field of Study

This study provides insight into the circumstances of instrumental practice in music students during the Covid-19 lockdown. This study also explores the motivational factors behind the music students' practice under their adaptation and adjustment of practice environment.

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