



**UNIVERSITEIT VAN PRETORIA  
UNIVERSITY OF PRETORIA  
YUNIBESITHI YA PRETORIA**



**The effects of COVID-19 on practice habits: Exploring the experiences of senior undergraduate  
music students**

by

**Chloé Elaine Vermeulen**

**Student number: 17137587**

**A mini-dissertation submitted in partial fulfilment of the requirements for the degree:**

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**School of the Arts: Music**

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**Supervisor: Dr Phuti Sepuru**

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## DECLARATION

**Full name:** Chloé Elaine Vermeulen

**Student number:** 17137587

**Degree:** Master of Music (Performing Art)

**Title of the research project:** The effects of COVID-19 on practice habits: Exploring the experiences of senior undergraduate students

I declare that this dissertation is my own original work and that this research has not been submitted for degree purposes at any other institution of learning. All references are provided and acknowledged throughout the research, based on guidelines by the University of Pretoria, School of the Arts: Music. I understand what plagiarism is and the implications thereof.

SIGNATURE:

DATE:

## **ETHICS STATEMENT**

All research conducted for this study was only done so after approval had been obtained from the University of Pretoria's Humanities Ethics Committee and the universities Survey Committee. Ethics guidelines stipulated by the University of Pretoria were strictly adhered to.

## ABSTRACT

The study explored the experiences of senior undergraduate music performance or first instrument majors (third and fourth year in 2020) at the University of Pretoria during the COVID-19 pandemic. The COVID-19 pandemic, which resulted in a national lockdown, led to the closure of all tertiary education institutions in South Africa. As it became evident that the lockdown would need to last significantly longer than the initial three weeks, the University of Pretoria implemented online learning models for the academic year to be completed, and campus remained closed to students for the remainder of 2020. The study was conducted using a qualitative research methodology and it was guided by a collective case studies research design. Music students who were senior undergraduate in 2020 and that were enrolled for the modules *Musiek Eerste Instrument 400* (First Instrument), or *Musiek Eerste Instrument 403* (Performance) were recruited to participate in the study. Semi-structured interviews were used to engage participants. The interviews gathered data on the students' experiences of practice and motivation during the COVID-19 pandemic. The study also explored the perceptions of students regarding their practicing and motivation before and during the pandemic. The research found that students were able to overcome the hurdles of campus closure and remain motivated and somewhat consistent in their practice. The importance of well-developed practice routines and strong student-teacher relationships in retaining motivation to practice was also highlighted. However, strain was experienced due to inexperience with online learning, connectivity issues, and a perceived decline in relationships, making access to campus and campus facilities a necessity for successful music studies. The implications of the study are towards the continued development of online learning and assessment models for tertiary music education. It is also recommended that further studies at different institutions in South Africa may be beneficial, as well as investigation into students' experiences at the first- and second-year level of study during the COVID-19 pandemic.

**Keywords:** COVID-19; case study; motivation; music students; practice; online learning; wellbeing

## TABLE OF CONTENTS

<b>ACKNOWLEDGEMENTS</b> .....	i
<b>DECLARATION</b> .....	ii
<b>ETHICS STATEMENT</b> .....	iii
<b>ABSTRACT</b> .....	iv
<b>TABLE OF CONTENTS</b> .....	v
<b>LIST OF ACRONYMS</b> .....	viii
<b>Chapter 1: Introduction</b> .....	1
1.1 Background to the study .....	1
1.2 Research problem .....	3
1.3 Research questions.....	4
<i>1.3.1 Main research question</i> .....	4
<i>1.3.2 Secondary research questions</i> .....	4
1.4 Chapter outline.....	4
<b>Chapter 2: Literature Review</b> .....	5
2.1 Introduction.....	5
2.2 Practice and motivation .....	5
<i>2.2.1 Deliberate practice</i> .....	5
<i>2.2.2 Motivation</i> .....	6
<i>2.2.3 Practice and motivation during COVID-19</i> .....	8
2.3 Music students and mental health .....	9
2.4 Learning environment.....	11
<i>2.4.1 Online learning</i> .....	11
<i>2.4.2 Music and online learning</i> .....	13
2.5 Conclusion .....	14
<b>Chapter 3: Research methodology</b> .....	16
3.1. Introduction.....	16
3.2 Research paradigm.....	16
3.3 Research design .....	17
3.4 Selection of participants.....	18

3.5 Data collection .....	18
3.6 Data analysis and interpretation.....	20
3.7 Ethical considerations .....	22
3.8 Research quality.....	23
<b>Conclusion .....</b>	<b>23</b>
<b>Chapter 4: Data analysis .....</b>	<b>24</b>
4.1 Introduction.....	24
4.2 Themes.....	24
4.3 Main theme 1: Environmental factors as a determinant of practice behaviours.....	25
4.3.1 <i>Subtheme 1: Practice environment</i> .....	25
4.3.2 <i>Underlying theme: Living situation</i> .....	25
4.3.2 Subtheme 2: Practice routine.....	26
4.3.3 <i>Subtheme 3: Experiences of online learning</i> .....	28
4.3.4 <i>Subtheme 4: Access to instruments</i> .....	32
4.3.5 <i>Subtheme 5: The role of the accompanist</i> .....	34
4.4 Theme 2: The relationship between motivation and practice.....	36
4.4.1 <i>Subtheme 1: Sources of motivation</i> .....	36
4.4.2 <i>Subtheme 2: Shifts in motivation</i> .....	39
4.5 Theme 3: Wellbeing and practice .....	41
4.5.1 <i>Subtheme 1: Physical health</i> .....	41
4.5.2 <i>Subtheme 2: Mental health</i> .....	42
4.7 Conclusion .....	43
<b>Chapter 5: Discussion .....</b>	<b>45</b>
5.1 Introduction.....	45
5.2 Practice and motivation .....	45
5.2.1 <i>Practice quality</i> .....	45
5.2.2 <i>Motivation</i> .....	47
5.3 Mental health and practice .....	48
5.4 The learning environment.....	49
Conclusion .....	51
<b>Chapter 6: Conclusion .....</b>	<b>51</b>

6.1 Introduction.....	52
6.2 Addressing the research questions .....	52
6.2.1 <i>Secondary research questions</i> .....	52
6.2 Main research question .....	54
6.3 Limitations of the study .....	55
6.4 Recommendations for future research .....	55
6.5 Conclusion .....	55
<b>References</b> .....	57
<b>Appendix A: Letter of information</b> .....	65
<b>Appendix B: Letter of informed consent: Reply slip</b> .....	78
<b>Appendix C: Letter to the survey committee</b> .....	79
<b>Appendix D: Interview schedule</b> .....	81



## LIST OF ACRONYMS

COVID-19	: Coronavirus disease 2019
SDT	: Self Determination Theory
WHO	: World Health Organisation
MEI	: <i>Musiek Eerste Instrument</i> (Music First Instrument)

## **Chapter 1: Introduction**

### **1.1 Background to the study**

In late December 2019, an infectious respiratory and highly contagious disease called the coronavirus disease (COVID-19) was first detected by health experts in China. Within a short period, the virus had spread to other parts of the world. On 11 March 2020, the World Health Organisation (WHO) declared the virus as a global pandemic (Nhamo et al., 2020). There were no therapeutics for the virus yet (Ndhlovu & Dube, 2023). The immediate reaction to the virus by countries across the world included national lockdowns; restrictions on movement and gathering, adoption of self-isolation; and mandatory quarantines (Dube, 2022). The aim was to flatten the curve of the spread of the virus until medication is discovered. In South Africa, the first COVID-19 case was identified on the 5<sup>th</sup> of March 2020. On the 26<sup>th</sup> of March, South Africa entered a national lockdown which confined people to their homes. Travelling was allowed only for the purpose of acquiring or offering essential services. The COVID-19 pandemic and the subsequent national lockdown resulted in universities across South Africa and the world shutting their campuses and turning to online learning models. The University of Pretoria was not exempted from the disturbances caused by the pandemic and the associated response mechanisms adopted by the South African government. All face-to-face classes were discontinued. The university did not re-open at all for the remainder of 2020. Teaching and learning later resumed using various online platforms.

As a final-year performance student in 2020, my experience of studying music was significantly impacted. Aside from the new learning curves of online learning, preparing a final performance recital with almost no prospects to perform appeared impossible. However, one of the most significant changes to my usual learning experience was the change in practising due to losing access to the university practice rooms. My usual practice time (early morning and late night) was no longer feasible as I was home where noise had to be reduced. My practice environment now included many more distractions and, often, less-than-ideal weather conditions (no air conditioning in a sweltering Pretoria summer). Despite all of this, I felt that I grew a lot as a musician. I was more kind to myself, and my previous practice-related injuries did not flare up. I think this might have been due to feeling less rushed in my practice. I believe that having access to a space that was physically comfortable to practice in was also beneficial. A larger practice space with better lighting and a music stand enabled me to practice at the correct height and to maintain the correct posture throughout my practice. I am aware that I

was privileged to have my own instrument and home to practice in, but many of my classmates had neither, yet still, every one of us graduated. I became interested in these COVID-19-related changes and how other students had experienced these changes. This provoked an interest in me to the significance of practice environments, habits, and motivation in these unprecedented times.

Practice is possibly one of the most important aspects of success, musically and in other areas such as sports (Silverman, 1990). Focused or intentional practice is the key to obtaining desired results. The more time spent on practising, the higher the levels of achievement that can be obtained (Madsen, 2004). Madsen also notes that in the music industry, practice is considered more beneficial than talent especially in terms of output.

Achieving the standard required to pass a Bachelor of Music (BMus) degree is a lengthy process that takes years of practice and commitment. This process involves motivation, both intrinsic and extrinsic. Intrinsic factors include passion a strong inclination toward a self-defining activity people love. In also involves a sense of self-efficacy (Woody, 2004) and spending significant amounts of time and energy on in practice. Extrinsic factors include the support and encouragement of people close to students. Woody highlights that these people may include parents and teachers. Many students and professionals experience lower intrinsic motivation, which is closely linked to an individual's self-determination (Evans & Bonneville-Roussey, 2016). Instead, many students and professionals rely more on visual forms of motivation, specifically, the driving force of an upcoming performance (Woody, 2004).

Mental health must also be considered when discussing learning and motivation since a person's mental health may impact their motivation (Campbell et al., 2021). Wristen (2013) found that many music students reported battling mental health issues such as anxiety and depression. Sternbach (2008) also found that music students experienced a high-stress environment that required them to balance work and personal life, which most young adults only needed to deal with after graduating from university. The researcher also found that students also needed to spend sufficient time practising whilst still meeting academic requirements. Students' mental health during the COVID-19 pandemic has also been the subject of recent research (Galea et al., 2020). Existing studies show that teachers and students lacked the means and skills to compensate for the time lost due to the COVID-19-related restrictions. Teachers and students lacked adequate digital skills to use online teaching and learning platforms. Students reported less educational satisfaction, increased class time to

compensate for the lack of face-to-face learning or lost time and learning of skills to learn using online platforms (Chaturvedi et al., 2020). This study concluded that there was a need to obtain the infrastructure needed to deliver and receive adequate online instruction. Load-shedding (power cuts) in 2020 also worsened the stress and anxiety which many students in South Africa experienced during this time. Chaturvedi et al. noted that students also reported negative effects on their sleeping patterns, exercise routines and social activities, and increased time spent on social media.

The practice and learning environment of students may affect their motivation and well-being. The 21<sup>st</sup> century has witnessed the rise of online forms of education even before the outbreak of COVID-19. While the online classroom can be useful and certainly became necessary during the COVID-19 pandemic, research conducted shows that it was a cause of psychological distress for many tertiary students (Hasan & Bao, 2020; Chaturvedi et al., 2020). It can be argued that this was especially the case for students who were enrolled at institutions where online or distance learning had never been previously offered, and notably, for students enrolled in practical-based degrees such as those in performing arts.

## **1.2 Research problem**

The literature on the importance of practice and motivation in music abounds. Research by Ericsson (2008), Ericsson and Lehmann (1997), Jørgensen & Hallam, (2016), and Miksa and Tan (2015) focuses on deliberate practice and its significance in determining musical achievement, over natural ability. Bonneville-Roussey et al. (2010) discuss the psychology of autonomous needs fulfilment and motivation to practice. Several aspects of deliberate practice, including feedback, are investigated by Jørgensen and Hallam (2016). Wieser and Müller (2022), Rucsanda et al. (2021), Adnan and Anwar (2020), and Ozer and Ustun (2022) research the experiences of learners or musicians during the Covid-19 pandemic. However, according to my knowledge, none of this literature deals explicitly with the experiences of South African music students learning in the environment created by COVID-19 and the national lockdown.

## **1.3 Purpose of the study**

The study aims to explore the experiences of senior undergraduate music performance or first instrument majors (third and fourth year in 2020) at the University of Pretoria during the COVID-19 pandemic.

### **1.3 Research questions**

#### ***1.3.1 Main research question***

In what ways were the practising habits of senior music students at the University of Pretoria influenced and affected by the COVID-19 pandemic?

#### ***1.3.2 Secondary research questions***

- What role did motivation (intrinsic or extrinsic) play in their practice?
- In what ways, if at all, was practice duration affected?
- In what ways were the learning outcomes and assessment strategies affected, if at all, by the change of practice environment?
- What was the overall impact of a new practice and learning environment on the students?

### **1.4 Chapter outline**

Chapter 1 provides the background and rationale, the aim of the study, and the research questions. Chapter 2 reviewed the literature that is related to the study. The literature review is divided into three themes: practice and motivation, music students and mental health, and the online learning environment. The third chapter outlines the research methodology that was adopted for the study. The chapter presents the philosophy, research design, data collection and analysis methods, ethical considerations, and discusses quality criteria issues. The fourth chapter presents the data analysis of the collected data, followed by a discussion of the findings in the fifth chapter. The conclusions, limitations of the study, and recommendations for future research are outlined in chapter 6.

## Chapter 2: Literature Review

### 2.1 Introduction

The previous chapter introduced the study. The current chapter reviews the existing literature that is related to the study. The chapter reviews literature on the COVID-19 pandemic and the responses by countries. Focus is placed on how South Africa responded to the pandemic. The literature also reviews literature on music, mental health, and motivation. The chapter begins by reviewing literature on motivation. This is followed by a discussion on music and the mental health of students, and the learning environment. Lastly, conclusions are drawn from the discussion.

### 2.2 Practice and motivation

#### 2.2.1 *Deliberate practice*

The *Cambridge Online Dictionary* (2021) defines practice as “the act of doing something regularly or repeatedly to improve your skill at doing it.” However, simple repetition of an activity is not always sufficient to create art or achieve mastery. For practice to result in continuous improvement, several factors must be in place. These factors include practicing with a set goal in mind, motivation for improvement, feedback (from an instructor, or oneself using critical and analytical listening), adequate repetition, and the gradual correction of errors (Ericsson, 2008; Jørgensen & Hallam, 2016). This type of practice (called “deliberate practice” (Lehmann & Ericsson, 1997, p. 44)) appears to significantly impact the level of achievement obtained (Ericsson, 2008; Lehmann & Ericsson, 1997; Silverman, 1990). Deliberate practice can be defined as practice with the intention of achieving a certain goal, improve overall skill, to obtain and implement feedback, whether from one-self or an instructor or audience, and emphasis on sufficient repetition and incremental improvement over a period. Deliberate practice makes use of cognitive engagement and stratification (Ericsson, 2008; Lehmann & Ericsson, 1997). It requires sustained effort from the person’s practicing routine (MacPherson & McCormick, 1999; Miksa & Tan, 2015; Sloboda, et al., 1996). Consistency and focus on deliberate practice are also presented as a factor that influences achievement in music (Sloboda et al., 1996; Hallam 2016).

Quantity and quality are two key aspects when considering practice and achievement. A student who started their musical tuition at a younger age would have attained more total hours of

practice than a student who started at an older age, for example (Jørgensen & Hallam, 2016). According to Lehmann and Ericsson (1997), fewer accumulative hours of optimal practice is likely to result in the same amount of progress as more hours of sub-optimal practice. These authors claim that even the so-called ‘talented’ individuals require around ten years of effort before they can reach an international standard in their specific domain. Deliberate practice requires sustained effort and concentration. This is not easy to do, and it is the reason why even expert performers typically do not practice more than 4-5 hours a day. Studying music at a tertiary level presents several difficulties. These include developing a relationship with a new teacher, coping in a competitive social environment, preparing for an uncertain career, sustaining many hours of practice, and developing a method of practice with little guidance (Miksza & Tan (2015). The researchers further note that sustained practice requires complex motivational structures. This is because practice is not inherently enjoyable. It involves long hours of isolation, is cognitively taxing, and requires constant focus. Performance skill increases gradually over time, rather than in sudden, large increments (Sloboda et al., 1996), and therefore needs to be developed as part of the deliberate practicing/learning process. The careers of artists typically only peak later due to steady progress, for instance (Lehmann & Ericsson, 1997).

Practice quality can be improved by setting specific goals for each practice session and the organisation of practice sessions, as well as incorporating variety in practice using techniques. The techniques include mental practice, memorisation, visualisation, the division of practice sections, and preparing specifically for performance (Jørgensen & Hallam, 2016). Apart from concentration, Lehmann and Ericsson (1997) also identify several prerequisites for deliberate practice. These prerequisites are access to training facilities, appropriate exercises and instruction, sustained attention, and motivation.

### ***2.2.2 Motivation***

Achieving the amount of sustained and consistent practice necessitates a significant amount of motivation. Motivational factors start long before tertiary level music education. Most music players who study music at university have been playing instruments for several years (Lehmann & Ericsson, 1997). Woody (2004) observed that several factors that influence the motivation of young musicians. These include early musical exposure, intrinsic enjoyment, parental support and encouragement, their teachers, musical subcultures, being labelled as talented and, of course, practice. These factors may also influence a person’s enjoyment of

participating in music, resulting in them setting goals for themselves and engaging in deliberate practice. Over time, external factors such as parental support or teachers may become less significant as autonomous motivation begins to become stronger because of enjoyment and the acquisition of skill (Bonneville-Roussey et al., 2010; Hallam, 1998). Autonomous motivation and psychological needs fulfilment can produce more frequent practice as well as more enthusiasm for more challenging tasks (Bonneville-Roussey et al., 2010). Lehmann and Ericsson (1997) also point to the historical pattern of musical ‘prodigies’ which originate from musical families (environment). They state that the first teachers of musicians are often found to be members of their household who provide support and encouragement. This support provided by household members becomes a source of personal motivation.

Self-Determination Theory (SDT) is a theory of intrinsic motivation developed by Edward Deci and Richard Ryan, first published in 1980 (Deci & Ryan, 2019). SDT considers the balance between intrinsic and extrinsic motivations and a person’s actions being determined by a combination of motivations to fulfil their human needs. According to Deci and Ryan (2014) SDT suggests that a person aims to incorporate both their external and internal environments into their sense and understanding of self. Furthermore, it indicates that the amount of time which a person spends practicing is determined by their motivation. SDT identifies the specific circumstances under which people experience wellbeing. Rather than only looking at intrinsic or extrinsic motivating factors, SDT considers the alignment of activities with one’s sense of self (Evans & Bonneville-Roussey, 2016). These authors conducted a study in 2015 to assess whether psychological satisfaction was a determinant of autonomous motivation to practice. The study involved 410 participants all of which were music students at various tertiary institutions in Australia and New Zealand. The results showed that psychological needs satisfaction was, in fact, a predictor of autonomous motivation. This type of motivation resulted in frequent and quality practice.

Lehmann and Ericsson (1997) also identified motivation as one of the prerequisites for deliberate practice. Since deliberate practice requires sustained effort and concentration, it is difficult to engage in it without motivation (Ericsson & Ward, 2007). MacPherson and McCormick (1999) also studied 190 pianists aged 9-18 years old. They found that those that achieved higher scores in their music examinations had higher levels of intrinsic motivation. They also observed that these students regularly engaged in more technical work and informal practice (improvisation, playing by ear), which resulted in these students being more



cognitively engaged during practice. Thus, the key lies with the quality of practise, and not the quantity.

The concept of innate musical talent is often accepted by teachers who cannot explain the differences in progress between students who receive the same instruction and practice (Lehmann & Ericsson, 1997). The teacher's beliefs on this may have an impact on students' motivation. The Attribution Theory propounds that a person's performance on a task is determined by their beliefs on the causes of success and failure. This consequently determines their response to different situations. This also results in how they experience pride and shame depending on the outcomes of the task (Weiner, 1972). These causes can be organised into four major categories: ability, task difficulty, luck, and effort (Asmus, 1986). These categories of causes depend on the efficacy of the practise. Asmus also highlights that students who are encouraged through effort-related statements are more likely to believe that they can achieve more through effort. This leads to increased practice, which consequently leads to higher achievement. However, students who are made to believe that ability is the primary determinant for achievement are likely to practice less, since they believe that there are limits to what they can achieve through effort (Asmus, 1986; Weiner, 1972). Students that believe they can achieve the desired results through practice are likely to be more motivated to practice than one who are who believe that achievement is based on having 'talented' or not (Lehmann & Ericsson, 1997). During the COVID-19 pandemic, the removal of many extrinsic motivational factors (examinations and performances), made the intrinsic motivation more significant.

### ***2.2.3 Practice and motivation during COVID-19***

During the COVID-19 pandemic, many tertiary institutions (including the University of Pretoria), introduced online learning. A recent study by Rahiem (2021) investigated the motivation of students during this time. The participating students reported that obstructions created by online learning resulted in more commitment to learning. This enabled students to maintain or improve their grades. Rahiem also found that fulfilment was a motivational factor as students took pride in their completed work. The findings in this study also revealed religion played a role. All the students who participated were of the Muslim faith, and they believed that learning was a Muslim responsibility and gift from God. Rahiem further showed that students drew on their relationships with their families, as well as their friendships with their classmates to enable them to continue learning. The importance of social connections was also observed by Zaccoletti et al. (2020) who found that the reduced social interactions due to

COVID restrictions resulted in reduced motivation in school-aged students in Italy and Portugal during 2020. Students also demonstrated a responsibility for others' well-being in that while they did not always enjoy online learning, they felt responsible by staying at home to help curb the spread of COVID-19 (Rahiem, 2021).

The environment was also found to be a key determinant of motivation (Rahiem, 2021). This study further revealed that some students preferred a quiet and peaceful environment, while others preferred to listen to loud music as they worked. The conclusion of this study was that despite COVID-19 and the transition to online learning, students retained a positive relationship and commitment to their education. This was linked to innate factors such as self-determination, the desire to achieve personal goals, religious devotion, and the triumph of overcoming challenges.

Self-determination was shown in the students' decisions to remain physically active and take initiative in completing work assigned to them (Rahiem, 2021). Similar findings were discovered by Leyton-Román et al. (2021) in their study which explored the motivations and commitments of adults to sport and physical exercise during the lockdown. The researchers concluded that self-determination and intrinsic motivation played a significant role in the participants' commitment to remaining physically active.

In their study, Subakthiasih and Putri (2020) found that students who continued to pursue their studies in English language during 2020 had higher levels of intrinsic motivation. They randomly selected 90 students who were studying at Mahasaraswati University, in Bali, were requested to complete a questionnaire. The study found that the students remained motivated by personal goals such as personal fulfilment, improving their self-confidence, and the desire to learn. Extrinsic motivators such as examinations, earning money, and a desire to study further were also important although they contributed less to general motivation. However, Wieser and Müller (2022) found that internal motivators were lower during COVID-19. In their study, the scholars compared the motivation levels of two groups of music students before and during the pandemic. The groups reported lower basic needs fulfilment, lower satisfaction, and lower intrinsic motivations during COVID-19 when compared to a similar sample group before the pandemic.

### **2.3 Music students and mental health**

The literature on student mental health abounds. According to Wristen (2013) much of the literature, however, focuses specifically on the aspect of performance anxiety, and not on

general mental health disorders on a broader spectrum. Wristen found that while the occurrence of anxiety and depression was not necessarily higher amongst music students than other college students, the number of students who did not receive treatment for either disorder was cause for concern. Many music students deal with the struggle of a busy class schedule and academic workload as large as those in other courses. This is in addition to their musical activities, such as practicing, rehearsals, performances, and lessons (Sternbach, 2008). Moreover, Sternbach notes that there is the challenge of maintaining a personal life as an adolescent. For most people, the balancing act of work and personal life only truly begins after university. It was also observed that music students are often required to be expert jugglers before they are out of their teenage years.

The COVID-19 pandemic and subsequent lockdowns resulted in a negative effect on the mental state of young people (Galea et al., 2020; Savage et al., 2020). Sameer et al. (2020) found that women and young adults reported more psychological stress than older adults and men. The study also found that participants from developing countries such as India and Pakistan experienced higher levels of depression, anxiety, and stress than those who were in developed countries, such as the United States or Great Britain. Participants were asked about coping mechanisms utilised during isolation. The most common mechanism mentioned were watching television/Netflix, social networking, listening to music, sleeping, mundane house chores (cleaning, tidying), and eating well (Sameer et al., 2000).

An online study by Gazmarian et al., (2021), in rural America, revealed that high school students experienced poor mental health, felt lonely and isolated, and were concerned about the negative financial impact of COVID-19. Older students were more concerned about the financial impact of the pandemic. The younger students experienced more anxiety and depression. Girls reported higher feelings of anxiety and depression. Minority students (Black and Hispanic) were more worried than other categories of students. According to Gazmarian et al., the coping mechanisms used included listening to music. Several studies also produced evidence of increased stress and depression of university students due to long periods of isolation, separation from family, concern for their own health and that of their family, as well as the transition to online learning (Chaturvedi et al., 2020; Hasan & Bao 2020; Savage et al., 2020).

Habe et al. (2021) conducted a study which examined the relationship between wellbeing and flow in music and sports students during COVID. They mention the many similarities between

musicians and athletes, such as, prolonged training, perfectionism, high self-regulation, endurance, strategic decision making, improved social skills, and ability to express emotions. However, there are differences as well. Musicians are generally more anxious, sensitive, and more vulnerable to stress. Conversely, athletes often have access to sports psychologists to assist them in managing psychological stress, while musicians seldom have this support. The researchers studied 314 students. About 198 of the students came from the Academy of Music and 116 in the Sport Faculty, in Slovenia. The study found that athletes experienced flow more regularly and were more assured that they had the necessary skills to face challenges. Physical activity had a positive effect on emotional state. This explained why the athletes reported little negative emotions surrounding COVID-19. Musicians were more intensely affected by the pandemic as most could not practice or perform.

The deterioration of mental health during the lockdown resulted in many people using music as a coping tool during the COVID-19 pandemic. Most people used live streamed concerts, virtual ensembles, performing on balconies, and co-creation of music online (Howlin & Hansen, 2022). Calderòn-Garrido et al. (2021) found that music teachers encouraged their students to play for enjoyment, rather than only practicing the pieces they had been instructed to work on. This also points to the importance of music as a coping tool during a stressful period.

## **2.4 Learning environment**

### ***2.4.1 Online learning***

Even before the advent of the COVID-19 pandemic, online learning was beginning to gain traction in the educational sphere (Crawford, 2013). Some advantages include flexibility in learning, accessibility from any location, and affordability (Dhawan, 2020). A 2020 study conducted by Rahiem (202) in Indonesia found that students maintained both their grades and their desire to learn even though they believed online learning to be less effective than contact learning. The study found that curiosity and the desire to learn also remained strong with many students mentioning the new experience and new challenges of online learning (Dhawan, 2020).

Cleveland-Innes and Campbell (2012) and Dhawan (2020) identified a variety of obstacles for both educators and learners. These obstacles and challenges included a lack of two-way interaction and practical implementation of concepts, as well as the new task of balancing

personal life with studies. From a technological standpoint, challenges such as poor video and audio aspects or limited internet connection need to be overcome.

Regarding students' responses to the learning environment in relation to academic achievement, a notable factor was workload. Students showed lower academic achievement in courses which they perceived as having a higher workload (Lizzio et al., 2002; Motz et al., 2021). This is particularly the case since online learning is sometimes viewed as an increased workload due to its unfamiliarity and higher requirements of effective time management. Students who achieved high grades for courses that are perceived as having a higher workload appeared to be more diligent at time management (Lizzio et al., 2002). In their 2011 study, Ruiz-Gallardo et al. (2011) showed that a change in teaching methods, to a system which students are not familiar with, results in a perceived increase in workload for students, and subsequently, poorer academic achievement. The flexibility of online learning requires students to manage their time well in the face of many distractions (Dhawan, 2020).

The advantages and challenges of online teaching and learning from lecturers' perspectives are discussed by Simamora et al. (2020). These scholars found that while there are advantages of online learning such as independent learning for students, improved accessibility, and opportunities to meet individual needs, the disadvantages for a developing country are significant. These include, lack of infrastructure, technological disadvantages, less interaction in lessons, insufficient computer skills and the cost of internet. An additional factor in the success of online learning is examined by Kibici and Sarikaya (2021). The researchers found that male teachers were more confident in their readiness for online teaching than female teachers. Less experienced teachers (those with six or less years of teaching experience) were found to be better able to adapt to a new style of teaching. Teachers working in private institutions were also found to be better prepared and capable of using digital technologies to teach. However, on the contrary, Hash (2021) observed that more experienced teachers were more successful at engaging learners using online learning. This was attributed to being more established in their teaching abilities and stronger pre-existing relationships with students. Hash (2021) and Kibici and Sarikaya (2021) found that teachers at private institutions or schools located in more affluent areas experienced less interruptions to online teaching than those located in more rural or high-poverty schools. The causes of this are mentioned as being lack of access to technology, poor technological literacy, slow internet or high data costs, and lack of parental support.

#### ***2.4.2 Music and online learning***

The technical difficulties of online teaching are of particular significance to teaching music online. The quality of sound is very important in the teaching of music. Therefore, the disruptions caused by technical challenges present a significant challenge (Biasutti et al., 2021; King et al., 2019; Rucsanda et al., 2021). This fact is also recognised by Biasutti et al. (2021) as a major challenge for people from poor socio-economic backgrounds or those living in remote or rural areas. In online teaching, there is also limited opportunity for ensembles, choirs, orchestras, and jazz ensembles. This makes assessment methods challenging particularly when these are staple elements of the curriculum (Biasutti et al., 2020; Rucsanda et al., 2021). Biasutti et al. reported that many teachers had never been taught how to teach online. These teachers found it time consuming to learn to work efficiently. Limited or no access to instruments also presented a challenge. Only a few students had access to instruments such as percussion instruments, pipe organs, or even pianos (Biasutti et al., 2021; Samarasinghe & Netsinghe, 2023).

De Bruin (2021) and Dye (2015) reported that more verbal communication was used during online instrumental lessons and less demonstration was used by teacher and pupil. De Bruin additionally mentions the importance of connection and positive relationships between teacher and student, which can be made difficult in an online environment where the monitor-analyse-assist cycle cannot be used in the same capacity as it can be in a face-to-face environment. The study by de Bruin found that teachers continually self-assessed the quality of their connection with students. These teachers reported more two-way discussions of ideas between themselves and their students. The teachers also revealed the need for both parties to work as a team. This would generate strong positive relationships built on mutual trust. However, Dye (2015) found that instructors believed that the lessons delivered online were less evenly balanced in terms of power, with instructors choosing the course of each lesson. In de Bruin (2021) it was observed that many of the teachers interviewed were positive about their online teaching experiences.

Calderòn-Garrido et al. (2021) found that teachers relied on the creation of video recordings, the use of recorded accompaniments, and the exchange of recordings as a necessary adaptation for online learning. This form of communication was used in conjunction with synchronous learning such as the use of videoconferencing platforms. Music theory was found to be less affected by the transition to online learning. Although applied courses were more challenging and ultimately, the interviewed teachers found online learning less satisfactory than face-to-

face lessons. The study corresponds with that of Ozer and Ustun (2020) who found that students experienced more difficulties with applied courses than theoretical courses due to poor internet connection and technological shortcomings.

A student in the final years of their undergraduate degree is generally expected to be in the final levels of the New Bloom's Taxonomy: evaluate, check, critique and create, generate, plan, and produce (Hanna, 2007). A performance major at this stage should then be able to self-evaluate their performance and demonstrate creativity therein. Kahn et al. (2017) consider how this can be done in an online learning environment with few to no opportunities for performing and necessary changes in practice habits. This study suggests that online learning should be carefully designed to ensure that the work aligns with the educational outcomes desired using Bloom's Taxonomy and the method of assessment used. The more interactive teaching methods discussed by Biasutti (2021) and de Bruin (2021) may be helpful in assisting students to reach these higher levels of understanding. Online learning, however, places the responsibility of learning on students who need to do more of self-evaluation, communicate ideas and problems, and innovate to overcome certain challenges.

There is also the question of music examinations to be considered. Many institutions simply postponed examinations during the COVID-19 lockdowns. Some institutions introduced pre-recorded examinations or mandatory isolation periods for examinees (Biasutti et al., 2021). The researchers found that participants did not find it difficult to examine technical aspects of playing from a recording but were not able to assess expressive or interpretational aspects as well.

Accompaniment is also not always possible from a remote location. This presents an issue for instrumentalists who have ensemble playing as a point of assessment (Biasutti et al., 2020). Difficulties with conveying expression *via* recordings and the lack of interaction between performer and audience is also mentioned highlighted by Rucsanda et al. (2021). The difficulties of presenting standardised assessment methods for music with online learning are also discussed by several scholars (Adnan & Anwar, 2020; Calderòn-Garrido et al., 2021; Pokhrel & Chhetri, 2021).

## **2.5 Conclusion**

This chapter reviewed the literature related to the study. The chapter shows that for a musician to excel, many hours of practice and commitment are required. For music students to maintain these hours, motivation is an important factor. The chapter also reveals that during the COVID-

19 pandemic, many students had to rely on different motivational factors to continue their studies. Music students experienced a high level of stress and anxiety, and the mental health of students was shown to have worsened during the long periods of isolation caused by lockdowns. The transition to online learning has also been shown to be a stress factor. Studying music online was found to have specific challenges that require some changes to the learning process. The literature suggests that motivation and learning are closely linked, and that both aspects were affected in some way by the COVID-19 pandemic response strategies. There is, however, paucity in the literature focusing on the effects of the lockdown on the practice habits of music students due to changes in motivational factors and learning environments caused by the COVID-19 pandemic.

The next chapter presents the research methodology for the study.



## **Chapter 3: Research methodology**

### **3.1. Introduction**

In the previous chapter, the literature related to the study was reviewed. The current chapter outlines the research methods and materials used. The chapter discusses the research paradigm, research philosophy, design, sampling strategies, data collection instruments, quality criteria issues, and ethical considerations. The central argument in the chapter is that the type of research methodology adopted for the study determines the quality of the results that can be gathered, interpreted, and discussed. As a result, it was important that the most suitable methodology that was appropriate in satisfying the research objectives set out in chapter 1 be applied.

### **3.2 Research paradigm**

Research is built on three pillars: philosophy, praxis, and ethics. The philosophical element includes the paradigm (Leavy, 2017). The research paradigm is the researcher's world view. It encompasses the way in which researchers look at the world, their belief system and principles, the way in which they seek knowledge, and what they study certain topics (Cohen et al., 2018). A research paradigm comprises of the researcher's ontological and epistemological beliefs. Ontology refers to a belief system around the social world and what we can learn from it (Alegbeleye & Jantchou, 2019). Epistemology is the belief system of what research is and the relationship between researcher and participants, as well as the nature of knowledge and how this knowledge is gained (Enas et al., 2021).

The interpretivist paradigm places reality and meaning in the social world through daily interactions and communication. The individual's unique interpretation and subjective experience of their lives and circumstances is valued by researchers in an interpretivist paradigm (Sheppard, 2021). In an interpretivist paradigm, the researcher acknowledges bias and subjectivity, rather than objectivity, since the emphasis is on a person's perception and interpretation of phenomena such as individual behaviour or cultural practices (Leedy & Ormrod, 2021). The interpretivist paradigm holds to the notion that we construct and interpret our own reality using our social understanding and past interactions to ascribe meaning to what we see and experience (Leavy, 2017). The current study was built on the interpretivist paradigm since the intention was to explore and discover each participant's individual experience studying music during the pandemic. The use of interpretivism enabled participants to speak

about experiences and personal perception of events during COVID-19. The study was based on a qualitative research approach as discussed in the next section.

### **3.2. Qualitative research approach**

Qualitative methods of research focus on social phenomena, and the researcher collects data in natural settings - not in a controlled environment (Cohen et al., 2018). The researcher is the instrument used for data collection through the examination of audio/visual sources, the conducting of interviews, and first-hand observation (Stacks et al., 2019). Qualitative research asks questions that aid in understanding how people make meaning of their own unique contexts (Nieuwenhuis, 2019). According to Leavy (2017), data collected during qualitative research enable the researcher to gather detailed descriptions and a more in-depth understanding of the subjects being studied. The current study was conducted using a qualitative research method due to its primary focus on the individual participants' experiences. Participants expressed their unique experiences with practicing and learning during the lockdown (predominantly during the year 2020).

### **3.3 Research design**

The study adopted a collective case study research design. According to Yin (2018), a multiple case study is a variation of a single case study. A case study approach is suitable for this study as this design is appropriate for answering research questions focusing on contemporary events (Cohen et al., 2018). Furthermore, a case study helps to explore a real-world scenario and allows room for context, unlike other methods such as experimental research, which strive to separate phenomenon from context (Samuels & Garbati, 2019). When dealing with individual experiences, context is necessary and desirable (Leedy & Ormrod, 2021, Yin, 2018). Case studies can encompass a situation in which there are several variables, and they rely on several different sources of interest (Yin, 2018).

Cohen et al. (2018), however, note that case studies are in danger of producing irreplaceable results, not being truly representative, or transferable. However, Leedy and Ormrod (2021) state that the inclusion and description of context within a case study can help participants to reach their own conclusions. There is also a lack of control over variables outside of the researcher's realm of influence, as well as a strong potential for bias on the researcher's part (Roller, 2019). For a case study to be a viable research design, the method must be clearly designed and strictly followed, and bias must be acknowledged and limited to the greatest

extent possible (Yin, 2018). As a senior undergraduate student during the 2020 lockdown, the author acknowledges personal potential for bias and subjectivity in the research process. The author tried as much as possible to guard against infusing results with personal opinions.

The use of multiple case studies in this research allowed for the collection of contrasting data which dealt with the participants' experiences during the pandemic. This enabled further inquiry into each student's views of practice, motivation and studying during the COVID-19 pandemic.

### **3.4 Selection of participants**

Sampling methods can be divided into probability and non-probability sampling (Etikan, 2016). Probability sampling encompasses sampling methods such as random sampling, wherein every member of the population has the same chance as another, of being selected. Variations of random sampling are stratified random sampling, cluster sampling, and systematic sampling (Leedy & Ormrod, 2021). Non-probability sampling does not guarantee that every member of the population has the same chance of selection. This type of sampling can be classified into convenience sampling, quota sampling, and purposive sampling. The study utilised purposive sampling, which is commonly used in qualitative research, and involves the selection of participants according to a specific purpose (Devers & Frankel, 2000; O'Neil, 2019). More specifically, criterion sampling was used, which is the purposeful selection of cases to fit a specific set of criteria (Cohen et al., 2018). The selection criteria for the research were as follows:

- Participants had to be senior undergraduate music students (third and fourth year) at the University of Pretoria during the year 2020, at the height of the COVID-19 pandemic.
- Participants had to be students who took either First Instrument (MEI 300/400) or Music Performance (MEI 403) as a final year subject (any instrument).
- They had to be willing to participate in the study.

### **3.5 Data collection**

Data was collected using semi-structured interviews which consisted of open-ended questions asked from an interview schedule. The interviews were conducted between June and July 2022. The interviews took place in person or on an agreed upon online platform which permitted the recording of meetings. An interview guide was used to guide the data collection process. Semi-structured interview were used to gain a deeper understanding of each individual's experience.

This method of data collection was considered since participants could have had different experiences under the COVID-19 lockdown. Semi-structured interviews would allow the researcher to capture and explain the differences in experiences. Semi-structured had also the advantage that the research questions could be modified during interviews (Cohen et al., 2018). Semi-structured interviews are, however, not without weaknesses.

Cohen et al. (2018) note that one of the weaknesses of semi-structured interviews is the possibility of missing important aspects. If the interviewer probes the participant, their changes in wording may result in the interviewee interpreting a question differently than other interviewees. This could result in incomparable answers (Cohen et al., 2018; Leedy & Ormrod, 2021). Therefore, in the current study, it was necessary for the researcher to be cautious so as not to share personal thoughts that would influence the responses of participants. The author also adhered as closely as possible to the interview guide. The interview questions were only rephrased when participants communicated that they did not understand a question. It was important for the interviewer to remain neutral and free of judgement during the interview and not expose personal bias. This was important to encourage the interviewees participate honestly and freely. This was in line with the recommendation by research methodology experts who post that the researcher should aim to establish good rapport with interviewees, and keep in mind that the interview is a social interaction (Cohen et al., 2018; Yin, 2018).

Three interviews were conducted in person and four online. All the online interviews were conducted using Zoom. COVID-19 guidelines and regulations at the time were adhered to. The interviews were transcribed verbatim, using Temi, which is a digital transcription software. Temi enabled the transcribing process to be completed faster and more effective than manual transcribing. The transcriptions were then checked using the original recordings. Following this, participants who wished to review the transcriptions were given a chance to do so. However, no participant came forward. The interview lengths varied. The shortest interview was under ten minutes. The longest interview was over forty-five minutes. This specific interview exceeded the time limit on Zoom for interviews and the call had to be ended and a new one begun. The interviews went smoothly for the most part, and all but one of the participants was very forthcoming and willing to reflect on and discuss their experiences. The student who was less willing to share had to be asked several follow up questions. The student was concerned about his English. This resulted in his interview being the shortest. Table 1 provides information on the participants, their instruments, and subjects.

**Table 1: Information on participants**

<b>Participant</b>	<b>Instrument(s)</b>	<b>Year</b>	<b>Genre</b>	<b>MEI 400 or MEI 403</b>
Participant 1	Voice	Final year	Classical	MEI 400
Participant 2	Voice	Final year	Jazz	(Initially MEI 403) MEI 400
Participant 3	Piano	Third year	Classical	MEI 403
Participant 4	Piano	Final year	Classical and Jazz	MEI 403
Participant 5	Orchestral percussion	Final year	Classical	MEI 403
Participant 6	Voice	Final year	Jazz	MEI 400
Participant 7	Violin	Third year	Classical	MEI 400

### **3.6 Data analysis and interpretation**

Once the data required by the researcher has been collected, it must be analysed and organised for some meaning to be derived. The data must also be interpreted and meaning given to it. Data analysis and interpretation should not occur as separate phases. They should rather be interlinked (Leavy, 2017). It is important for the researcher to determine the purpose of the research so as to be able to select the most relevant data analysis strategy (Cohen et al., 2018). Miles et al. (2014) suggest that data analysis occurs simultaneously with the data collection so as to avoid missing any important information which often results from back-and-forth approaches. In the current study, the author ensured that the process of data-analysis commenced at the early stages of the data collection process. This involved taking notes and drawing up tables to begin identifying themes and later assigning codes.

Leedy and Ormrod (2021) suggest the use of Creswell's (2013) data analysis process. This data analysis model allows the researcher to go over the research several times and moving forward slowly in a recurring spiral. The first step of the data analysis spiral is the organisation and preparation of the data gathered. In the current study, this was done through transcribing the interviews and organising the information into smaller sections. The interviews and their transcriptions were labelled by name and sorted into individual folders along with the audio recordings of the interviews to make it easier to check transcriptions and retrieve data. The next step that Creswell recommends is the perusal of the data, or a process of reading through the information and noting any preliminary thoughts or comments the researcher might have. This was done exactly as suggested by numerous readings and re-reading of the data to familiarise myself with the participants' thought and emerging ideas.

The third step of the spiral is the process of coding all the data. Coding is the assignation of codes to index or categorise themes and ideas identified in this stage (Cohen et al., 2018). Coding was suitable for this research as the list of codes, once organised, helped to develop further questions, and enable comparisons between cases (Gibbs, 2007). The interviews were descriptively coded, sentence by sentence and were read and re-read multiple times. Information that was determined as belonging to a theme was highlighted and added verbatim to a table containing the identified codes. The final step involved using the results of the coding process to integrate, describe, and condense themes and categories in the data. The researcher then took the verbatim quotes that were added to the table and analysed them and put them into own words to ensure that they belonged to code to which they had been assigned. The data was then analysed and following the coding, emerging themes and sub-themes were identified. Cross-referencing between the interviews also helped in the identification of themes and ideas as participants used different language and words to describe similar experiences to other participants.

The most recent version of this data analysis spiral was used as found in Creswell and Poth (2018). While the 2013 data spiral consists of four stages, the 2018 version expands more on the first three steps, and in a sense, divides the former final stage into two separate stages: "Developing and assessing interpretations" (Creswell & Poth, 2018, p. 264) and "Representing and visualizing the data" (p. 265). This places greater focus on the analysis and discussion of the data. This final step was completed with the sorting of data into tables as shown in chapter 4. This entire process is very important in thematic analysis which was deployed the study. Each identified theme is then assigned a code as previously established (Creswell & Creswell,

2022). This data spiral is cyclical, with the final step leads back to the first one. This process was repeated several times to validate the findings. This required multiple re-readings of the interviews. Any new information was added to the table as the findings began to take shape.

Inductive reasoning was used throughout this process since it emphasises observation, rather than an established truth. The researcher used observation to draw conclusions about the students' experience of practice during the COVID-19 pandemic (Leedy & Ormrod, 2021). Inductive reasoning is a key element of research which is constructed within the interpretivist paradigm because this paradigm involves the researcher assigning meaning to the data collected, rather than using the data to prove a theory (Creswell & Creswell, 2022). When using inductive logic, the researcher first poses an observation or ideas based on literature or experiences. The researcher then looks for patterns or theories from categories. After themes or categories have been established, the researcher analyses the data to confirm these themes and form new ones. To do this, the researcher asks participants open-ended questions and gathers information. Inductive reasoning was appropriate for this study because the study began with an observation. It was based on personal experience, and therefore, it allowed for open-ended conclusions (Leedy & Ormrod, 2021).

### **3.7 Ethical considerations**

Ethics determine a researcher's behaviour according to what is deemed right or wrong in research (Wiles, 2013). It is important to consider whether the research may cause participants any physical or psychological harm, as well as whether any benefits that may arise (Leedy & Ormrod, 2021). The participants were selected on a volunteer basis - completely of their own volition. They were free to discontinue the study at any time, without being required to give an explanation. All participants were also explicitly informed of everything that would be required of them throughout the study through the letter of information (Appendix A). It was also explained to participants that the study would not directly benefit them in any way. Once the students had agreed to participate in the study, they signed the letter of informed consent (Appendix B). The research involved students from the University of Pretoria and thus, approval from the university's Survey Committee was sought and obtained (see Appendix C). All participants were recruited through methods appropriate under the terms of the POPI Act, and their contact information was provided only with their knowledge and consent.

There were no risks reported by the participants. All interviews and responses were kept confidential, and this will remain so. No identifying information was included on the transcripts

and in the write up. The confidentiality of participants was ensured by assigning each participant a pseudonym. Participants were informed that the interviews, transcripts, and findings of the study would be securely stored at the University Pretoria in an electronic and password-protected document for 10 years. This is in alignment with the data storage conditions of the POPI Act.

### **3.8 Research quality**

The quality of research is determined by several factors. Validity and trustworthiness address the methodological rigor in the research. It enables readers to identify the methods used by researcher to establish confidence (Leavy, 2018). The chosen methodologies were strictly adhered to in the current study. There were no changes to research methods used. Triangulation, or the confirmation of several sources on one question, is another way to prove the validity of the study. This can be done by examining correlating research or previously existing research and comparing findings (Creswell & Creswell, 2022). Investigator triangulation was used for this study. The study was reviewed by the research supervisor which required another researcher to review the data to see if they arrived at the same conclusions as the first researcher (Leedy & Ormrod, 2021). All data was reviewed by the research supervisor and the findings were discussed to compare and confirm conclusions drawn from the data.

Reflexivity is essential in ensuring trustworthiness. It is important to identify the researcher's role in the study and acknowledge personal experience and potential bias (Creswell & Creswell, 2022). As a final year performance student at the University of Pretoria in 2020, I had my own unique experience with the impact of COVID-19 and lockdowns on my own practice habits. I made an on-going effort throughout the study not to allow personal opinions to impact my analysis of other students' experiences.

### **Conclusion**

The study made use of qualitative research design in the form of a case study. Semi-structured interviews were conducted with participants selected using purposive sampling according to certain requirements. The collected data was then analysed using thematic analysis and codes were assigned to each identified theme. All participants were informed that there would be no direct benefit to them as a result of participating and were assured of their anonymity.

The next chapter presents and interprets the research findings.



## Chapter 4: Data analysis

### 4.1 Introduction

This chapter presents the data that was collected for the study. The first summarises the major themes and sub-themes for the study. This is then followed by detailed descriptions of these themes in the subsequently sections. The three main themes emerged from the findings. These are 1) Environmental factors as a determinant of practice behaviours, 2) The relationship between motivation and practice, and 3) Wellbeing and practice. The chapter presents the main themes alongside their corresponding subthemes. The overall aim was to explore the effects of the COVID-19 lockdown on the practice habits and motivation of senior undergraduate music students at the University of Pretoria during the pandemic.

### 4.2 Themes

The main themes, along with subthemes and several related underlying themes are presented in a Table below.

**Table 2: Themes and sub-themes**

Main theme	Subthemes	Underlying themes
<i>Environmental factors as a determinant of practice behaviours</i>	<ul style="list-style-type: none"><li>• Practice environment</li><li>• Practice routine</li><li>• Experiences of online learning</li><li>• Instrument access</li><li>• The role of the accompanist</li></ul>	<ul style="list-style-type: none"><li>• Living situation</li></ul>
<i>The relationship between motivation and practice</i>	<ul style="list-style-type: none"><li>• Sources of motivation</li><li>• Shifts in motivation</li></ul>	<ul style="list-style-type: none"><li>• Extrinsic versus intrinsic motivation</li></ul>
<i>Wellbeing and practice</i>	<ul style="list-style-type: none"><li>• Physical health</li><li>• Mental health</li></ul>	

### **4.3 Main theme 1: Environmental factors as a determinant of practice behaviours**

An analysis of the interview results led to the construction of several sub-themes, namely: practice space, practice schedule, experiences of online learning, instrument access, and the role of the accompanist.

#### ***4.3.1 Subtheme 1: Practice environment***

All participants expressed that prior to the closure of campus due to the national lockdown; they preferred to make use of the practice rooms on campus. This preference was due to several factors, including, their living situations, need for distraction-free places in which to focus, access to instruments, and camaraderie with other music students who would also be practicing on campus.

#### ***4.3.2 Underlying theme: Living situation***

Most interviewees explained that they shared a living space with other people. Participant 3 was a university resident during the week, and went home over the weekend, while Participant 2 lived in a community. Participants 1 and 7 mentioned that their neighbours were close enough to complain about the noise. Participants also mentioned that apart from being considerate of those they lived with or nearby to, the people whom they lived with could also be a distraction from focused practice. This distraction was mentioned more when participants were asked about the change in their respective practice environments upon the closure of the campus. Participants who returned home to stay with their families during lockdown (five in total) mentioned that sharing a living environment with others was distracting. All the students acknowledged that they did have access to a practice space during lockdown. However, they reported that environment was not always ideal. Unsatisfactory acoustics was an issue mentioned by two participants, with one of them explaining that the placement of her piano at home was less than ideal.

*“...the piano sound kind of filters throughout the whole house, which isn’t a problem for my family members. It just became a problem when I practiced in the evenings, because, for example, my dad would wanna watch the news or some TV [sic]. And so, I’d have to be a little bit more considerate about what my family was doing, whereas when I was practicing on campus, it, it was very isolated, and I could do my own thing” (Participant 3).*

Participant 6 admitted to having strong feelings against practicing at home since she felt uncomfortable with people listening to her as she practiced and felt that she would have progressed better and further with access to a practice room on campus. The participant explained that her practice improved when final year students were granted access to campus towards the end of the year.

*“It was very different. I felt like I couldn't practice properly at home as I could in a practice room. Um, (be)cause I wasn't alone and yeah. It's, it's like your mindset changes in a practice room as opposed to at home. It's very different for me. I hate practicing at home. It sucks ... then towards the end of the year, when we were allowed on campus ... I could get to the practice room again, which was much better”* (Participant 6).

Interestingly, two other participants stated that they felt more comfortable practicing on campus as they did not feel that anyone was listening, and therefore, no one was judging them.

*“I felt like practicing on campus was a very safe space and because the practice rooms are mostly soundproof. You feel like it's that you can be in your own little bubble, and you can practice as many times as you want and if it sounds ugly, you don't have to worry, and you can just continue”* (Participant 1).

The responses indicate that participants felt more focused and secure in their practice when they were able to practice on campus as no one preferred to practice at home before lockdown.

#### **4.3.2 Subtheme 2: Practice routine**

The participants were all able to articulate the times of day during which they usually practiced before lockdown. While these exact times differed between students, one common denominator was the fact that these specific times of day were chosen to work around other activities, rather than being chosen purely due to productivity levels or personal preferences. This was particularly an issue for the students in third year at that time, as they had more class time and subjects than the fourth years. So, their practicing was structured around their established schedules.

*“I think practicing in the morning and like between classes in the afternoon and then, (be)cause we had things later at night, like orchestra and ensembles, stuff like that”* (Participant 7).

*“I would; honestly, I would sneak in the hours between my lectures” (Participant 3).*

Due to practice times being slotted in between other commitments, the times that students practiced varied, with some practicing in the morning, others in the afternoon, and some in the evening. Some of the participants practiced more than once during the day, in the morning and afternoon, for example. Participants 5 and 7 mentioned that they did not practice in the evening due to circumstances such as orchestral rehearsals, and participant 7 also mentioned that she was unable to practice at night due to her living in a complex. Only participant 4 stated that he enjoyed practicing in the evenings.

During COVID-19 and lockdown, the change in environment resulted in changes in practice routines. Three of the participants mentioned that their practicing became less structured and more erratic during the lockdown.

*“Um, during lockdown, there was definitely a period in lockdown where my practice became quite erratic and that’s just because every day was sort of the same as the previous day, because we were all just hanging around, waiting to see what would happen. So, my practice routine was not quite as structured in lockdown as it normally was during well before lockdown, because before lockdown, you had to manage your schedule quite well to fit in practice time, and what little time you had to practice, you had to do it very efficiently. And when I was just hanging around at home, I had actually too much time” (Participant 4).*

*“I mean, I tried my best to sort of just work with the voice notes that I was given, because that was only accompaniment I could have, and I practiced my pieces like that. So, I had to practice improv(isation) just as I could” (Participant 6).*

*“Well, before the pandemic, it was a lot more structured, and I had my specific time that I was going to practice, but then during the lockdown, I kind of just practiced whenever and I didn't have a set routine, which kind of messed up... I felt like that influenced my practicing because I didn't have a schedule that I stuck to” (Participant 1).*

Participant 7 explained that her practicing routine increased during lockdown as she enjoyed it more on her own terms. She was the only participant who expressed this feeling, and the only participant to find the flexibility as a result of the lockdown.

*“My practicing was more spread out like an hour and then did some work and then an hour again. So, it was I think the same amount of time, but just spread out in a different way, and it would be morning, afternoon, and evening. So, it wouldn't just be in the mornings or just in the afternoons, and then because I liked practicing so much, I would naturally do it more. So, it just became natural to practice more”*  
(Participant 7).

Participants 1 and 4 appear to have had contrasting experiences. The sudden increase in flexibility caused them to practice less as they were accustomed to having limited time to practice.

The participants' responses when asked about how many hours per day they practiced before COVID-19 also varied. Some participants seemed reluctant to state a figure. The participants who were able to provide details on practice routines reported higher total hours of practice before COVID-19 generally. The figures ranged from one to five hours a day. The students found it much more difficult to articulate a specific number of hours of practice during lockdown. This seems to relate to the lack of structure in practice hours during that time.

Participant 3 continued with a very similar routine during the lockdown and thereafter. This participant mentioned that:

*“And so even though like the actual content of my practicing hasn't changed that much, I still do my stretches. I still do my finger warm-ups, and then my pieces”*  
(Participant 3).

Generally, the participants were quite vague about their practice routines and habits before and during the lockdown. This could, however, possibly be attributed to the passing of time since then, rather than a true lack of intention or structure.

#### **4.3.3 Subtheme 3: Experiences of online learning**

When asked to compare their experience of online learning and the format in which lessons took place, and their experiences with in-person lessons, participants had different responses regarding the structure of their lessons. Participant 7 reported that online lessons lacked the familiarity that she usually experienced in a lesson with her teacher. This was something she missed as she has a personal relationship with her teacher.

*“But for me, my lessons have always been about like, uh, like a time that you get to spend with that person, um, who gives you guidance and all those things. And that’s part of the lesson, but online, it was just like, okay, we’re here to work and do this stuff. And there wasn’t that like intimacy of a normal lesson”* (Participant 7).

The relationship between students and teachers was reiterated as having much influence on the participants’ motivation, practice, and wellbeing. Most of the participants (five out of the seven) reported that they were still able to connect well with their teachers online. Participant 3 attributed this to having built a good relationship with her lecturer prior to the lockdown.

*“I definitely was able to connect with her very well. Uh, but I think one thing that helped is that I’d already been having lessons with her for two years. Yeah. So, we already understood each other pretty well”* (Participant 3).

Whilst Participant 7 appreciated still being able to receive lessons online from her teacher, she felt that online lessons lacked the intimacy of in-person lessons and this participant missed the connection and rapport that she experienced with her lecturer during in person lessons.

*“To a certain extent, I guess, but I just preferred in person lessons. I don’t know. There was something like - there was a block. It was like the person on the other side of the screen wasn’t real; it was just like a person and in person was just way better for like that connection to happen. It was like an online lesson is like all about business. But for me, my lessons have always been about like, uh, like a time that you get to spend with that person, um, who gives you guidance and all those things”* (Participant 7).

Participant 4 felt that his personal connection with his lecturer was not an issue during online learning because a good relationship had already been established prior to the COVID-19 outbreak. There were, however, technical difficulties that hindered the teaching and learning experience. This affected the ability of student to connect.

*“It was fine online. It was still very much the same as in person. The only, it was only like a, a really physical challenge, like a technological challenge, in terms of connecting with the lecturer? I think we got on fine with online lessons. It was just; we would always just run into problems. Actually, there were no issues with the lecturer and me; it was mostly what we were using. [sic]”* (Participant 4).

Participant 5 shared a different view from the other students. He found that his lecturer was more available and easier to engage during COVID-19 since the lecturer was less distracted by his other professional commitments, and thus, was more focused on teaching.

*“I do believe I was able to connect very well with my lecturer funny enough, I think, uh, because, well, I think different to contact lessons where our lecturers were much busier, it was easier for me to get feedback quicker, schedule times, and whatever the case may be. [sic]”* (Participant 5).

In contrast to these positive experiences, two participants stated that they felt completely unable to connect with their lecturers online. Participant 1 attributed this missing connection to the physical challenges of having singing lessons online.

*“...the things that my lecture gave me, she needed to do in person, which she couldn't do over zoom or whatever platform”* (Participant 1).

Participant 6 experienced almost no rapport with her lecturer during online lessons since she felt that her lecturer did not make any effort to provide her with instruction, especially in comparison to what other lecturers were doing.

*“Um, in, in my experience it just felt like she had given up on everything. Like she wasn't trying as hard as what I know other teachers were trying to do practically”* (Participant 6).

Interestingly, however, participant 2, who also received lessons from the same lecturer, held a different opinion. He felt that his connection with his lecturer remained a positive one and acknowledged that any lack of connection was due to his own unwillingness to ask for as much assistance as other students.

*“Yeah, it just was good. I did not necessarily reach out so much as probably other students would, but they (lecturer) were available”* (Participant 2).

When participant 6 was probed about her lesson format during lockdown, it appeared to be much the same as most of the other participants' lessons - either a video call or sending recordings and then receiving feedback.

*“Um, occasionally we would have, uh, like Skype call and that was another thing, like finding a platform that worked was difficult, (be)cause they all have their, their drawbacks, but occasionally we would do a video call and I think once my teacher*

*got more and more frustrated with that process, our lessons were just exchanging voice notes” (Participant 6).*

Participant 6’s experience with the growing frustration with online platforms and the lack of sustained connection between her and her teacher led to them abandoning online video call platforms, and switching to using voice notes. Participant 6 seemed to have felt that this was an insufficient substitution for in-person lessons and that even occasional video calls would have been better, despite their difficulties.

Another challenge was the changes in the format of lessons to accommodate online learning. Other participants mentioned that while their lecturers frequently employed the use of demonstration or hands-on approaches during in-person lessons, this became difficult or even impossible with online lessons. It was an adjustment for both students and teachers. Lessons involved more talking and less playing when online.

*“They were just so many issues. Um, and it’s almost like it just turned into a lesson of like talking...” (Participant 7).*

*“Singing was my first instrument. It is a very hands-on thing to do because many times my, um, lecturer would have, in the past, helped me. They would correct how I was standing or how I was moving my jaw. And they would, um, position my jaw with their hands...And that was also very difficult because many times in my lessons, my lecturer would’ve demonstrated something for me” (Participant 1).*

Participant 1’s response indicates a level of intimacy found in in-person lessons that online lessons lacked. It also speaks to her being accustomed to a certain teaching method - one that relied more on physical demonstrations than on verbal explanation. The lack of an opportunity to make demonstrations made online learning even more challenging since online learning is dependent on verbal communication from both parties.

Another participant also noted that online lessons involved longer sections of playing followed by longer sections of feedback from her lecturer. This was found by the student to be less spontaneous than her in-person lessons had been. This is because the lecturer had time to prepare feedback in between listening to the recording and discussing it.

*“I would say that I noticed a difference because in-person lessons, I could easily stop and start certain sections and she would give feedback in between, for example, whereas with this new setup, it was very much I played all the way*



*through and then, and then it would just be her talking through things” (Participant 3).*

Before the COVID-19 pandemic, none of the participants interviewed had ever received any instrumental lessons online. Their individual experiences differed based on factors such as the ability to connect with their lecturers, the workload of online learning, and obstacles to online learning. While they all stated that they preferred in-person lessons, this seems to have been a result of obstacles to online learning.

One obstacle mentioned was the technological challenges of online learning - a reliable internet connection being one. One participant explained that due to his family staying in a rural area, his internet connection was not consistent enough for online lessons.

*“My parents live on a farm and the internet connection is not that great. Um, it fluctuates a lot” (Participant 4).*

Another participant mentioned that even if the internet connection was more stable, latency or delay made it very difficult to have a ‘live’ online lesson. The same participant also mentioned the difficulty of having load-shedding while learning online. Although this participant was one who reported having been affected by internet connection, the other participants were likely also affected by frequent power cuts.

*“There were many moments where internet was not great. There was also load-shedding and stuff like that in that time. And, and back then our household didn't have fibre. So, we experienced throttling a lot, which did not work for literally anything - let alone practical lessons” (Participant 5).*

The issue of technology was also two-sided, with one participant also explaining that his lecturer was also ill-equipped to teach online. This resulted in the student rather sending recordings to his lecturer and then receiving feedback *via* a phone call.

#### **4.3.4 Subtheme 4: Access to instruments**

Access to a suitable instrument was another hurdle for some students during the COVID-19 lockdown. Several participants mentioned access to instruments being a reason why they preferred to practice on campus. This was most notably an issue for the pianists and percussionist. However, participant 7, a violinist, also mentioned this as having been an issue for her.

*“But I guess, uh, in the practice rooms it was nice (be)cause there was a piano and I liked sometimes just like checking my intonation on the piano and I didn't have that at home” (Participant 7).*

Of the two pianists, participant 3 explained that although she had an upright piano, the location of her piano (in the entrance hall of her family home) occasionally hindered her practice. Moreover, having access to campus provided her with a variety of different pianos to become accustomed to, including the piano on which she would ultimately perform her final examination.

*“Well, at my home, I have an upright piano and there are many different pianos on campus that I had access to. For example, there was my piano lecturer's piano in her studio, which is a Steinway baby grand. And then in the various practice rooms, there were different uprights. Yeah, different uprights in the different practice rooms. So, I would say that there was a lot more variety on campus that I could practice on. I, I could sort of get used to different touches on the piano, whereas at home, even though there wasn't like a radical difference from like the pianos in the practice rooms, I didn't quite get as used to maybe how a concert grand Steinway - my piano in the Musaeon concert hall - would feel like” (Participant 3).*

Participant 4 only had access to an electric piano for a portion of the lockdown. This participant reported that it was challenging to prepare the classical repertoire required for a final year recital since the keyboard is quite different from the concert grand piano exams would be performed on.

*On campus, I had access to acoustic pianos, the practice pianos, and in my lecturer('s) studio, there was a grand piano, which was ideal for practicing, uh, the repertoire on that I was playing because it was quite difficult repertoire. So, I really needed, uh, proper instrument to practice it on. And, uh, all I had at home was, uh, a keyboard, which still has weighted keys, but it doesn't – it's not quite the same (Participant 4).*

However, the most significant impact was likely on the percussionist who was interviewed. As a final year percussion performance major, no access to campus meant that he had no access to any of the instruments or the university facilities that he would need to practice for his final recital.

*“I don’t. I own my own mallets. I don’t own my own instruments. Instruments are too expensive at this point for me [...] the difficulty with me having my instruments at the university is that when all of these buildings locked down, I wasn’t able to leave my, um, my suburb, first of all, let alone be able to get onto campus and practice. So, um, for a very long part of the lockdown, I was unable to practice at all, which was very stressful - it being my final year and a performance recital - (be)cause I had no opportunity to practice and that was very stressful me”* (Participant 5).

When it became apparent that the campus would be closed much longer than the three weeks initially proposed, participant 5 was able to arrange with the University of Pretoria to loan the instruments he needed to work on. This provided him with the means to practice closer to his recital, but only after a few stressful months.

*“I was able to practice at home towards the time when lockdown levels were starting to ease a little bit. Um, that's when I managed to speak to the HOD to, to, uh, loan the instruments at the university and take them home”* (Participant 5).

#### **4.3.5 Subtheme 5: The role of the accompanist**

During the pandemic, music students were not able to rehearse with their accompanists, and yet this is an important aspect of preparation for an examination. Although the frequency of rehearsals with accompanists varied among students, the overarching feeling of the value of these rehearsals was clear.

The vocal students’ collaborative pianists were able to record the accompaniment for the students to practice with. Participant 1 was used to rehearsing with her accompanist on a weekly basis. So, she found it to be difficult to no longer have frequent rehearsals. Her accompanist recorded her accompaniments at different speeds and with her melody included for her to practice with.

*“So, what my accompanist did is, um, he recorded all of my songs for me, and he did about three. He did three recordings with each. First of all, he recorded the melody that I was going to sing, and then he recorded the accompaniment, but a little bit slower than what it's usually played. And then only did he send me the full accompaniment on speed and what it was supposed to sound like if you were going to perform it live”* (Participant 1).

While she found this to be helpful especially as she could practice with the recordings whenever she wanted to, and not just in her scheduled rehearsals, she missed the musical input and advice that she received from her pianist. She felt that he helped her to understand the music better and articulate the nuances therein.

*“I would get a lot of feedback also from the accompanist, like, how the piano music should influence my singing and what the piano music is trying to portray and how I should portray that in my singing as well”* (Participant 1).

The two jazz vocalists did not explicitly state that they also missed the musical input from their accompanists, but when asked what their rehearsals consisted of, they mentioned that accompanists aided them with timing, structure, and interpretation. During COVID-19, the accompanists recorded the parts for the students to rehearse with. However, this would not have necessarily allowed for the same level of contribution and guidance for the students. Within a jazz context, where ensemble playing and collaboration are core elements, this would have been particularly challenging.

*“We would just sing through the songs and talk about structure of songs, and she would have some input as well, like musically for the jazz stuff [...] I think just jazz wise, playing with other people had an effect on my playing, especially like, yeah. It, it was difficult”* (Participant 2).

The violinist participant that was interviewed explained that although she was initially not able to rehearse with her accompanist, when restrictions eased, they were able to practice together while wearing masks and social distancing.

*“I think we just rehearsed like normal. Yeah, obviously with masks and with social distancing and stuff like that”* (Participant 7).

This participant also mentioned that her accompanist gave her advice and guidance on interpreting the music, improving intonation, and making music together.

*“(Accompanist) would help me with her interpretation of the piece. And then we'd talk about my interpretation of the piece, and it wasn't so much just playing the notes together, but we'd talk about like the style and how it's supposed to be played”* (Participant 7).

The responses by participants suggest that they relied on their accompanists for more than just accompaniment. It also suggests that accompanists were viewed as figures from which to learn and look to for guidance in playing and performing music. While recordings were helpful and a solution for the time, students missed the input and mentorship from these older, more experienced musicians.

#### **4.4 Theme 2: The relationship between motivation and practice**

The amount of practice expected of a senior undergraduate music student (third- or fourth-year student), requires great motivation. Students were asked to name what they identified as their motivational factors before and during COVID-19, as well as whether they experienced shifts in their motivation. The data showed that there were changes in motivation for most students during the lockdown. The data, however, also showed that the students had resilience in overcoming these shifts in motivation and finding new sources of motivation to continue practicing.

##### ***4.4.1 Subtheme 1: Sources of motivation***

The participants named both intrinsic and extrinsic factors of motivation before COVID-19. Extrinsic factors included mainly performance related goals such as upcoming performances, examinations, and lessons. There was also mention of not wanting to disappoint lecturers and concern over what their peers might think, or the feeling of being in healthy competition with other students.

*“(Students in) the years above me, like X and Y and Z and all those sort of people were sort of motivation to practice a lot because they were high standards above me [sic]. So, I sort of felt pressure to practice a lot as well”* (Participant 7).

One student, when asked what motivated her to practice, simply said:

*“Passing?”* (Participant 6).

Others expressed more factors which were related to a desire to please their teachers.

*“I think, healthy competition between other students was really a good thing for me. And then, also the motivation of my lecturers really motivated me to keep on practicing as not to disappoint them”* (Participant 1).

*“...just to be prepared for your next lesson would be more than enough motivation”*  
(Participant 4).

Participants also mentioned intrinsic factors such as the desire to be great musicians, playing the music to the best of their ability, and seeing their personal growth, as well as experiencing enjoyment in the process of music making and performance. One participant mentioned that:

*“I mean, obviously I wanted to like, be a good sort of jazz singer”* (Participant 6).

*“Personally, it was just seeing my own growth with the practice sessions and if I didn't get something right and I was really practicing and I got it right. It just gave me a lot of satisfaction”* (Participant 1).

*“So, the thing that really motivated me was that I liked the music that I was playing, and I really wanted to perform it the way that I heard it”* (Participant 5).

However, despite the removal of many of these extrinsic motivators during lockdown, there appeared not to be any significant differences in the motivation of those who were more extrinsically motivated versus those who were more intrinsically motivated. The students seemed to have an easier time verbalising and naming their extrinsic motivations than doing so for any intrinsic motivations. This leads to the perception that they were more extrinsically motivated. However, this could have not been the case. While participants were not directly asked to share whether their views on practice had changed, some mentioned a change in their attitude and approach to the art of practicing in the passing time since 2020.

Participant 3 experienced a shift in her approach to practicing. While exactly what she practiced did not a change, she began to aim to be more intentional in her practice and more aware of time management, as well as setting more specific goals for her practice sessions. Another participant reported that:

*“I've tried to be a bit more specific about the intervals that I use to practice. So, for example, now I have a timer app then I use for, so I'll say, okay, I'm gonna practice this for 25 minutes. And then it's a little bit more deliberate time wise”*  
(Participant 3).

Participant 7 found that being away from campus and other students allowed her to become more confident in her playing and focus more on her own practice and growth without being distracted by what others would think or say.

*“I think I was very psychologically affected by a lot of things that I didn't realise. And then I just improved like a lot by just focusing on practicing in my own time and not being surrounded by like the things people said” (Participant 7).*

Participants also expressed that they felt differently about the outcomes of their end of year assessments. The differences in experiences were attributed to aspects such as lack of access to campus, insufficient communication, or insufficient rehearsals with accompanists. However, a notable aspect was that those students who were able to articulate a practice routine and were intrinsically motivated seemed to be more satisfied with their results than those who admitted to being very demotivated during the lockdown and not sticking to a practice routine.

Participants 6 and 2 stated that they were unhappy with the outcome of their degrees and felt that they would have had a better outcome had the circumstances been ‘normal.’

*“Yeah, I think I could have done a lot better. Um, had it been normal times. Um, but considering what we had to do, I think I did okay. Like I still came out of it with a degree cum laude. Um, despite that, like, I'm not saying I did badly for first when I did it, but I could have done whole lot better [sic]” (Participant 6).*

*“With my results? Yeah. It could've been better. I, yeah, I would've appreciated like at least the distinction...” (Participant 2).*

When asked about her practicing during COVID-19, participant 6 explained that while she did have access to a space to practice, she did not practice since she felt too demotivated. Her only motivation for practicing was passing her examinations.

*“I mean, I, I could practice at home. I do have a piano. Um, so yeah, technically I, I could have, I think why I didn't was because of the, of how unsure I was about what was actually happening” (Participant 6).*

Participant 3 also admitted to only practicing out of fear of failing during that time.

*“Yeah, I would say so. That year was difficult because yeah, it's a lot of stress and stuff and anxiety and stuff. So, I would normally practice like when I had to” (Participant 2).*

Participant 4's issues with his results related predominantly to the mode of assessment and lack of communication he experienced leading up to this. This was exacerbated by not having access to campus and the instrument he would need to perform on for his exam.

*“And I think pianists have a particular sort of issue with this is that we don't practice on the instrument we play the exam on. So, for me especially, as we got closer to the recital, I was not happy with how things were handled because we would inquire about when we would be able to go and rehearse on the instrument, you know, would we have a chance to play before?”* (Participant 4).

Participant 3 experienced a similar dilemma with regards to instrument access. However, this participant was ultimately satisfied with her marks. It is worth noting that participant 3 was not in her final year during 2020 and did have a slightly different experience.

*“...when I started, uh, playing at the Musaion, again, it took a little while for me to start getting used to the feel of all those different pianos again, which also contributed to a bit of anxiety”* (Participant 3).

Both Participants 3 and 4 had set practice routines and expressed good motivation levels and relationships with their lecturers.

#### **4.4.2 Subtheme 2: Shifts in motivation**

All participants acknowledged that they observed a shift in their motivation during lockdown, with the final-year student reporting more discouragement than the third-year students of 2020. One participant explained that she found recording for her lesson less pressurising than an in-person lesson, as she always had the option to re-record, which in turn, led to her being less motivated to practice, other than on the days when she needed to record.

*“How our lessons worked is, um, the day before your lesson, you had to record yourself playing or singing the songs that you had to practice that week and then send it in to your lecture. So that means you can do it as much as you want and rerecord it as many times. So that kind of gave space for not having to practice so much because you can kind of just wangle it a little bit”* (Participant 1).

However, this was not the case for everyone. Participant 3 felt more pressure when recording because of her desire to make a high-quality recording which resulted in her practicing more.

*“But yeah, so I would say having those recordings to prepare for really made me want to have as polished a recording as possible. So, I would really put even a bit more effort into my practicing to make sure that the recording went smoothly”* (Participant 3).



This may be related to the student's ability to connect with their practical lecturer and their relationship with their lecturer and practicing. As mentioned by participant 3 earlier, some students' practices were developed around the advice and recommendations on practice by their teachers. This suggests the value and respected which students assigned to their teachers.

The final-year students remained motivated by examinations since they knew they would eventually have to be examined by an external examiner for their final examination but were unsure in what format these examinations would take place. This uncertainty with regards to assessment appears to have had a negative effect on motivation as it was mentioned by three out of the five-final year students who participated in the study.

*“So, that was the main motivating factor, was that the recital is still going to happen at the end of the year. We don't know how, or, or if it's going to pan out, but as far as we knew it was still happening. So that was a major motivational factor [sic]” (Participant 4).*

*“And that's the thing that motivated me throughout the degree, but especially in the final year, especially because when you hear that, what you've been waiting for three years might not happen, then it is going to happen” (Participant 5).*

*“I think all of us were so like, as I said, we were so confused. We didn't know if we were even going to be performing anywhere or if our like final performances were going to be a video or on campus” (Participant 6).*

Ultimately, most students stated that although their motivation declined during the COVID-19 pandemic, remained with some motivation to keep practicing. Participant 3 explained that she found online performance opportunities to keep her motivated. Participant 5 stayed motivated by the desire to finish his degree. Participant 4 returned to Pretoria where he was supported by his classmates and had access to a better instrument to practice on. The only student who expressed not having any motivation at all during this period was participant 6 who stated that uncertainty and the absence of her teacher contributed to her feeling completely unmotivated to practice.

*“I just like kept practicing the same pieces over and over again because what else was I going to do? I, I was not motivated at all, especially (be)cause my teacher sort of disappeared during that time. I, I basically didn't have one, to be very honest” (Participant 6).*

In a contrasting view, participant 7 mentioned that having regular online lessons helped keep her motivation up as her lecturer's feedback and encouragement gave her more reason to practice and made her feel supported and challenged.

*“(Lecturer) said just come for a lesson like once every two weeks. And I think that motivated me to keep practicing as well. Um, and just having her like as a support system as well, probably motivated me, she's a very supporting person and kind of intimidating. So, that, I think, also kept me practicing right till the end”* (Participant 7).

This suggests again that the relationship between teacher and student has an important impact on motivation. Participant 7 also felt that she became more motivated during the lockdown as she was able to practice more for enjoyment and personal fulfilment.

*“And when I was alone at home, I was like, nothing really matters (be)cause it's just me and I just get to practice and then I'll go do my exam”* (Participant 7).

#### **4.5 Theme 3: Wellbeing and practice**

Several students mentioned aspects of their mental and physical health in relation to their practicing and motivation - particularly during the lockdown. These changes were not always entirely related to their studies but were also due to the stress of living environment changes and feeling isolated, as well as feelings of concern over global events.

##### **4.5.1 Subtheme 1: Physical health**

Only one participant spoke about changes in physical health, but her experience is worth noting. While on campus, she needed to arrive early in the morning to find parking on campus, leading her often to not getting enough sleep, and thus, feeling tired and sleep deprived. This affected her concentration while practicing. She also suffered from frequent debilitating migraines which she was unsure of the cause of, but according to her, they were possibly related to stress or tension in neck muscles while playing the violin.

*“I don't know if you know that I get very bad migraines. So, when I get them, I lose my sight and my ability to speak. So, when it was still on campus, I was getting those a lot. Um, I don't, I still don't know if they're stress related or if there's like a muscle in my neck that gets affected by playing the violin or whatever that is”* (Participant 7).

Participant 7 also found it necessary to cram longer practice sessions in between classes and rehearsals so as to fit in enough hours of practice while on campus. Interestingly, she observed a reduction in migraine attacks during lockdown when practicing at home. Again, although not entirely sure, she attributes this possibly to having less immediate stress and more sleep which allowed for better concentration, as well as more flexibility with her time. This permitted her to have shorter and more spread-out practice sessions.

*“And like spread my practicing out instead of doing it, um, in longer sessions. So that might have also been why I didn't get so many headaches because I wasn't straining my neck for so many hours at a time. I think when I was at university, if I had three hours off, then I would practice for three hours because that's all I had. But at home we, I just had so many hours in the day, so I would practice and then do something else and then practice again” (Participant 7).*

In essence, the student found that her physical health improved in lockdown as she was better able to formulate a routine that supported her physical wellbeing.

#### **4.5.2 Subtheme 2: Mental health**

When asked about their practicing during lockdown, most students admitted that their emotional and mental state played a role in their motivation to practice. Uncertainty and concern over what was going to happen resulted in a lack of motivation to practice and more feelings of anxiety with regards to assessments and the future. Participant 5 spoke about this anxiety over the unknown and aspects of life he was used to being lost during lockdown and all these feelings leading to rethinking his chosen life path and dealing with episodes of depression due to this.

*“It was a very difficult time for me because someone who, well back then, only knew how to function when I was surrounded by music, in everything that I do and everything that I hear and all the conversations I had, and all of that was taken away from me and my future was in jeopardy and... That was very, very scary for me. And, yeah, I went through some depressive states and, and I think anyone would when their literal path that they chose for their life is put in question and that makes you really rethink a lot. So that was a bit of a scare (Participant 5).*

In addition to uncertainty over the future, participants also mentioned distractions, personal issues, and feelings of isolation. One student admitted that she found that she developed a

greater awareness of certain distractions, specifically social media, which negatively impacted her ability to concentrate.

*“So, I sort of found that during lockdown, I struggled to concentrate and, and maybe social media also had a role to play in this”* (Participant 3).

Another participant stated that he found himself distracted by what was going on in the world around him and was not able to focus completely on music any longer when there was a global pandemic occurring, which admittedly was stressful.

*“Your focus shifts a bit from music to like what's going on in the world now. Yeah. Like following everything”* (Participant 2).

Participants 1, 4, and 7 also mentioned that they found being cut off from their friends detrimental to their emotional wellbeing. The loss of community sense resulted in feelings of sadness and isolation.

*“It was really hard for me. I think I strived off like being with my friends on campus and I was like, I love my degree, but it was actually, I just loved the, the moments where I got to spend with my friends. Um, so I really missed that a lot. Like in the beginning, I cried when the lockdown got extended. I was so sad. I think like our music department's so small; we all knew one another. We all used to sit with one another. Like we were so connected and all of a sudden, we were just all by ourselves doing our own thing”* (Participant 7).

*“I really missed, um, the healthy competition between students and also the support of other students - just knowing if they are coping, are you coping and just helping each other and being there. So, I missed that emotional support.”* (Participant 1)

*“Later on in lockdown, I came back to Pretoria and that, that helped me a lot, (be)cause then I was, you know, around people and I got to see some of my friends now then, uh, about six months or so into lockdown when things started loosening a little bit and just being sort of in the area again”* (Participant 4).

#### **4.7 Conclusion**

This chapter presented and analysed the data collected from the music students and the University of Pretoria. Data collection was in line with the research objectives that had been set out in the first chapter. The data revealed that music students experienced and relied on both

intrinsic and extrinsic motivational factors. It also showed that the changes in practice environment brought about by the closure of campus had an impact on these motivational factors, as well as presenting certain difficulties for some students. These difficulties were environmental, such as the lack of access to instruments, or personal, such as feelings of isolation. Relationships with peers and teachers also appeared to have impacted motivation and practice habits, as well as adjusting to online learning.

The next chapter presents a discussion of the collected data and its relation to existing literature.

## **Chapter 5: Discussion**

### **5.1 Introduction**

In this chapter, the findings of the results presented in the previous chapter are discussed. The findings are discussed in consideration of the primary research question. The primary research question was centred on how the COVID-19 pandemic influenced the practice habits of senior undergraduate students at the University of Pretoria. During the exploration of this question, several factors relating to practice were brought forward. In this chapter, the discussion is structured as follows: Practice and motivation, mental health and practice, and the learning environment. These will be discussed alongside existing scholarly literature on these themes.

### **5.2 Practice and motivation**

#### ***5.2.1 Practice quality***

There is a wealth of existing literature on practice and motivation, particularly in terms of deliberate practice and the process of achieving musical excellence (Ericsson, 2008; Ericsson, 2019; Kegelaers et al., 2022; Lehmann & Ericsson, 1997; Silverman, 1990). The results demonstrate that music students at a tertiary level were aware of this correlation as all participants stated that they were motivated to practice by a desire to achieve a certain goal such as passing an examination, pleasing their teachers, or self-satisfaction. They knew that to achieve these goals, they needed to practice. However, the changes in their practice environments due to COVID-19 caused changes in their practice habits, often resulting in less focused practice than before the lockdown. The students discussed their initial feelings around practice at the start of the pandemic and the impact of uncertainty around their futures and careers. They experienced concerns such as their own health and the health of their loved ones, financial concerns, changes in their routines, and the distraction of developing news around COVID-19. The result of these uncertainties was a negative effect on their practice time and quality. This study found that students who were able to adjust to the so-called 'new normal' were able to redevelop new habits and routines around their new environments and schedules. This resulted in an improvement in practice quality as students adjusted. This shows improvement in self-regulated learning, a finding which echoes that of Pelikan et al. (2021), who discovered that learners who self-identified as having strong self-regulated learning (SLR) abilities had higher intrinsic motivation and were more proactive in their learning during the COVID-19 pandemic.

Ericsson and Lehmann (1997) suggest that the ideal number of hours of practice required to achieve excellence is between four and five hours a day. Participants in this study recalled their practice hours before COVID-19 as being between one to five hours of practice a day, with vocalists reporting the lowest hours of practice and the two pianists and string player reporting the highest amount of daily practice at the instrument. The setting of intentional goals for practice is indispensable for having a fruitful practice (Jørgensen & Hallam, 2016). The study shows that students who were able to describe a set and well-developed practice routine were also reported higher practice hours both before and during COVID-19. However, it is notable to mention that all the participants felt that the quality of their practicing declined during COVID-19. This echoed the impact and importance of environment.

According to Lehman and Ericsson (1997), access to training facilities, appropriate instruction, sustained attention, concentration and effort, and motivation are necessary for deliberate practice. However, the current study found that the lockdown had a negative impact on at least one of these requirements for each student. The lack of access to the campus resulted in a complete lack of access to instruments for percussionists. Despite owning upright or electronic pianos, the lack of access to the type of instrument they would ultimately need to perform on (a grand piano) also presented a challenge for the pianists that were interviewed. The singers and violinist were not able to practice with their accompanists, due to location or regulations, which also caused stress. The result of this was insufficient access to training facilities, specified as a requirement for successful practice by Lehmann and Ericsson. All the participants who were in final year in 2020 mentioned that stress and feelings of uncertainty affected their ability to concentrate during practicing, thus having a negative impact on their ability to sustain the effort required for deliberate practice also noted by Lehmann and Ericsson. Participants also expressed issues with receiving instruction from their teachers online. These findings indicate that according to the existing research on deliberate practice, that the quality of the participants' practice was lower due to it not being able to meet the ideal requirements for practice.

Relationships with others are a key aspect of personhood and were mentioned to some degree in nearly every interview. Relationships with peers and teachers appeared to have an impact on the students practice habits, learning, and motivation. Good or strong relationships seemed to influence these subjects in a positive way. The one drawback to enjoying strong relationships with peers seemed to have been that it intensified negative feelings of isolation during the lockdown. This agrees with the findings of Wieser and Müller's (2022) research which found

that students experienced lower basic needs satisfaction, particularly with regards to social interaction during the COVID-19 pandemic. This, in turn, had a negative impact on practice quality as it reduced students' overall motivation.

### ***5.2.2 Motivation***

This study found that music students in 2020 experienced deterioration in their motivation during the COVID-19 lockdown. The removal or reduction of motivators such as lessons, their teachers' opinions, and competition with peers, examinations, and performances resulted in students feeling less motivated. This confirms the motivational factors of young musicians set out by Woody (2004). However, when considering the Self-Determination Theory and the concept of psychological needs fulfilment outlined by Evans and Bonneville-Roussey (2016), it appears that those students who had higher levels of self-determination (those who experienced greater psychological fulfilment from practice) ultimately overcame the initial decline in motivation and continued to practice and progress during the lockdown. These students also managed to find greater enjoyment in practicing than in the pre-COVID-19 period. The students who found less psychological fulfilment in the act of practice were not able to overcome this slump in motivation and were only motivated again by the confirmation that they would be in playing examinations.

The participants in this study provided many extrinsic motivators, including upcoming performances, examinations, and lessons. All the participants cited examinations as being a motivating factor. Unsurprisingly, the postponement of examinations and performances resulted in students feeling demotivated. This demotivation was also worsened by high stress and uncertainty. López-Iñiguez et al. (2022) also found that musicians who were more internally motivated were able to maintain their practice habits despite causes of uncertainty and threat, while those who were externally motivated perceived greater threat in uncertainties and were unable to maintain their pre-COVID-19 practice habits. Participants were less apt at verbalising intrinsic motivators. However, some participants mentioned enjoyment gained from music making, personal goals they aimed towards, and the satisfaction of achieving their objectives despite the obstacles they experienced. Subakthiashi and Putri (2020), Wieser and Müller (2022), and López-Iñiguez et al. (2022) all reported similar findings regarding motivation and achievement during COVID-19. Stronger internal motivators were needed for practice and successful studies to be maintained. While students did not directly mention intrinsic motivators, they were able to sustain a practice routine and develop a new routine to



suit their new environment. They did this for internal reasons such as self-satisfaction, long standing goals, and future plans. Students also sought online performance opportunities, which in themselves, are an extrinsic factor, but taking the initiative to look for opportunities suggests a high level of intrinsic motivation.

Another reason for reduced motivation was the isolation from peers experienced by students during the COVID-19 lockdown. The detachment from the support system of peers caused some students to feel less motivated. This study found that those students who were able to reconnect with friends when the restrictions had eased managed to experience an increase in their motivation. This agrees with the findings of Rahiem (2021) who found that during COVID-19, students relied on the support and inspiration provided by their social circle to remain motivated. The importance of social relationships and their impact on motivation is also mentioned by Adnan and Anwar (2020).

### **5.3 Mental health and practice**

The study found that students felt that their mental health was negatively impacted by the lockdown. They particularly expressed feeling anxious and depressed about their futures caused by uncertainty. This finding aligns with research by Savage et al. (2020), Galea et al. (2020), and Sameer et al. (2020) who highlighted the importance of mental health on the effectiveness of practice. This anxiety and uncertainty experienced by participants resulted in a loss of focus and motivations.

Students were also stressed by the transition to online learning. There were also concerns over internet connections being poor or load shedding which caused students to miss out on lectures or being unable to have practical lessons. This increased their anxiety as well as their sense of isolation which again impacted their motivation. Hasan and Bao (2020), Chaturvedi et al. (2020), and Savage et al. (2020) all found that the lockdown and isolation increased students' feelings of stress and depression during their studies as they relied on classmates, friends, and lecturers as a support system. The current study found that students' motivation increased again when restrictions were eased, and when they were able to see their classmates again and relocate back to Pretoria. The study also discovered that increased feelings of anxiety over external circumstances resulted in students having difficulties in concentrating when practicing and being more easily distracted by television or social media. This aligns with the coping strategies identified by Sameer et al. (2020). These feelings of distraction appear to have decreased as time passed and as the students became more accustomed to the so-called 'new

normal'. Access to the campus (towards the end of 2020 for the final-year students) also seemed to have had an uplifting effect on these students. However, it was found that there was a high level of dissatisfaction with the examination process (recordings), preparation time ultimately given to the students by the university, and subsequent outcomes of the examinations for those students in their final year. This finding relates to the following section.

#### **5.4 The learning environment**

Research on online learning shows that pre-COVID-19, online learning was already growing in popularity due to its advantages such as flexibility and affordability (Crawford, 2013; Dhawan, 2020). However, in South Africa, online learning has been infrequently utilised and none of the students interviewed for this study had ever received online instruction in any capacity. It was found that despite some initial challenges, they were able to adjust well to their theoretically-based subjects. The only challenges they experienced were related to technological gadgets and power cuts. This is reiterated in Cleveland-Innes and Campbell (2012) and Dhawan (2020), who also list technological obstacles as the most significant downside to online learning. The students overcame any difficulties around navigating different online learning or video call platforms with relative ease. The students did appear to have positive feelings regarding the increased flexibility around class time, although they seemed to have struggled with time management in the face of this new flexibility. The importance of time management in online learning is also mentioned by Dhawan (2020) when discussing the advantages and disadvantages of online learning.

The students' primary difficulty appeared in relation to their practical instrument lessons. They all experienced online practical lessons as being less fulfilling, less enjoyable, and less productive than in person lessons. Internet speed and the sound and video quality of the online platforms being used was a factor. This was particularly for those students who were living in rural areas during the pandemic. These findings echoed that of Biasutti et al. (2020) and King et al. (2019) who found that technological and inter-personal challenges were one of the most significant hurdles to online learning. This was found to be the case for the participants in this study, even with reliable internet and access to newer laptops, cell phones, and tablets. Pianists and percussionists experienced sound distortion or cutting out due to the loudness of their instruments. Singers found it difficult to have lessons without accompaniment and experienced sound issues when they attempted to play their recorded accompaniments while singing during a lesson. One student had no access to instruments for a significant portion of the year. There

was no consensus on a preferred platform for online lessons, and the music students revealed that most lecturers quickly abandoned 'live' online lessons and switched to a process of exchanging recordings and feedback. This is a similar finding to that of Calderòn-Garrido et al. (2021) which also reports that to facilitate online learning, more uses of recordings were made and other asynchronous forms of communication.

De Bruin (2021) and Dye (2015) explain that online lessons rely more on verbal communication and less on demonstration. This is exactly the case with sending a recording and the receiving feedback rather than demonstration as the lesson progresses. De Bruin (2021) further discusses the importance of connection and relationship between music teachers and their students for learning. Students varied in their abilities to connect with their lecturers online, with some connecting well and others having a poor connection with their lecturers. Students who already had an established and positive relationship with their lecturers prior to online learning experienced better connection with their lecturers online than those who did not have a good relationship with their lecturers before lockdown. The finding that a positive relationship with teachers/lecturers impacts motivation is also supported by de Bruin's (2021) research with experienced music teachers and adjusting to online music teaching.

The last obstacle in the online learning environment in relation to practical lessons is related to assessment. Final-year students were expected to perform at a certain standard and to demonstrate understanding in their playing. This study found that students did not feel that they could adequately display their interpretations and nuance *via* a recording. Biasutti (2020), de Bruin (2021), and Kahn et al. (2017) mention that for online learning to be beneficial, teaching methods and educational objectives should be defined and aligned with assessment methods. Final-year students of 2020 expressed that they did not feel adequately prepared for their practical examinations by the learning environment offered to them at the time. This may also be related to a lack of timely feedback as that is a key element in the success of effective assessments in online learning (Pokhrel & Chhetri, 2021). Students who completed their degrees in 2021 reported having fared better. However, this could be attributed to the development of a hybrid learning model as well as a greater adjustment period to online learning for both students and educators.

## **Conclusion**

The findings of this study indicate that students initially found that their practice quality was negatively affected by the lockdown, due to factors such as the mental stress of global events, isolation from classmates, loss of routine, and the loss of most of their extrinsic motivators. However, as the lockdown progressed, some students were able to form new routines and resume a regular practice schedule. Students who had already developed a consistent practice routine before COVID-19 were able to return to practicing more successfully than those who had not honed a practice routine before the pandemic. Access to facilities, instruments, and other musicians, remained a significant challenge for all participants throughout 2020, which resulted in a negative impact on overall practice quality. The student-teacher relationship was also significant in the return to consistent practice. Students expressed experiencing poor mental health during this time, caused by anxiety over their own and their families' health and safety, their futures, and feelings of loneliness. This frequently hindered them from maintaining focus during practice. Online learning also presented a host of new challenges to the participants, specifically those of a technological nature, and those relating to assessment.

The next chapter concludes the study.

## **Chapter 6: Conclusion**

### **6.1 Introduction**

This research set out to explore senior undergraduate music students' practice habits during the COVID-19 pandemic. The current chapter concludes the study. The chapter summarises all the chapters in the study, draws conclusions from the results and discussion, and makes recommendations. The first chapter presented an introduction to the research and background to the research, as well as the aims of the study, key terms and research questions. Chapter 2 provided an overview of existing literature relating to practice, motivation, mental health and COVID-19. The third chapter outlined the research methodologies used to obtain and analyse data to satisfy the research questions. This was followed by the analysis of these findings in Chapter 4. Chapter 5 discussed the analysed findings in relation to the reviewed literature. This final chapter presents a summary and conclusions of the research. The main research question and secondary research questions are discussed in this chapter, along with the limitations to the study and recommendations for future research.

### **6.2 Addressing the research questions**

#### ***6.2.1 Secondary research questions***

*What role did motivation (intrinsic or extrinsic) play in their practicing?*

The study found that students relied on a mixture of intrinsic and extrinsic motivators in their practicing (Woody, 2004). They mentioned extrinsic factors such as performances, examinations, and lessons pre-COVID-19 as predominant. During the initial stages of lockdown, students found that the removal of these extrinsic motivators resulted in them practicing less (Wieser & Müller, 2022). However, those students who were able to pivot and learn to rely more on intrinsic motivators, such as enjoyment, self-fulfilment and accomplishing personal goals, were ultimately able to re-establish their practice routines and obtain satisfactory (to themselves) examination result (Bonneville-Roussey et al., 2010; Leyton-Román et al., 2021; Rahiem, 2021). Those who were not able to make this adjustment did not succeed in continuing with energetic practice routines and reported less satisfaction with their final results (Ericsson & Ward, 2007; Wieser & Müller, 2022). The impact of this was more noticeable in students who were in their final year at the time. However, those in their third year had a longer adjustment period and did not play for examinations in 2020.

*In what ways, if at all, was practice duration affected?*

The participants were reluctant to admit the duration of their practice sessions before COVID-19, with about half of them practicing less than two hours a day. Those students who had a detailed and regular practice routine practiced for more hours (up to five) than those who were not able to describe their practice routines. Being accustomed to fit practice hours in between classes and other activities such as rehearsals or gigs, students found that they struggled to adapt and make good use of the increased free time that the COVID-19 lockdown generated. Some students were unable to articulate their practice durations during lockdown even though they were very specific about their practice durations before lockdown. Students mentioned a lack of structure to their practicing during the COVID-19 lockdown and that this lack of a set schedule negatively impacted the amount of time they spent practicing. Practice sessions became more spread out and shorter, instead of the longer and more crammed pre-COVID-19 practice sessions.

There was, however, some positivity to this change. The spreading out of practice and increased time flexibility reduced one student's physical discomfort when playing. She had previously experienced frequent fatigue and migraines before the lockdown. This could possibly be attributed to overly lengthy practice sessions, poor lighting, stress and lack of sleep. The additional time and more comfortable home environment negated these factors, allowing her enough rest time and more sustainable practice habits.

*In what ways were the learning outcomes and assessment strategies affected, if at all, by the change of practice environment?*

This study found that students that there were mixed results over students' satisfaction with their final examination results. Four of the final-year students felt that they would have done better had they been able to stay on campus and play live examinations rather than recorded ones. One student had no access to instruments at all for an extended period of time during his final year and was forced to make several adjustments to the length and difficulty of his programme in order to compensate for less preparation time. Another student changed from MEI 403 (Performance) to MEI 400 (First Instrument) because he did not feel that he would be able to prepare sufficiently for a performance recital without access to campus. The third-year students stated that they were happy with their final results. It should, however, be pointed out that these had access to campus and in-person lessons, as well as some performance opportunities during 2021 due to relaxations in COVID-19 regulations. All the fourth-year

participants expressed doubts and frustrations over recorded examinations, questioning whether nuances in their playing would be transferred and pointing out that the amount of people required to make the recording was actually more than having examiners present (Adnan & Anwar 2020; Biasutti et al., 2021; Calderòn-Garrido et al., 2021; Pokhrel & Chhetri, 2021).

*What was the overall impact of a new practice and learning environment on the students?*

Students mentioned experiencing increased levels of uncertainty and anxiety over changes in their practice environments and the transition to online learning. They spoke about feelings of depression, isolation, and frustration. The perceived lack of connection with lecturers in online learning presented a major challenge for some students (Biasutti et al., 2021; King et al., 2019; Rucsanda et al., 2021). This impacted their motivation and subsequently, their practice habits. They felt abandoned and unable to learn. However, those who were able to overcome that lack of connection were able to take ownership of their learning and felt proud over their accomplishments in their examinations.

Students who needed access to campus to have access to instruments felt particular stress with regards to end of year assessments and their level of preparation (Biasutti, et al., 2021). This caused them to experience anxiety and doubt over their futures and career paths.

Another aspect was that of isolation. While all the students were at home with their families during the lockdown, the separation from their friends and classmates resulted in them feeling that they were without a support system. This also resulted in a decrease in motivation, as well as increased feelings of depression and anxiety (Chaturvedi et al., 2020; Gazmarian, 2021; Habe et al., 2021; Hasan & Bao 2020; Sameer et al., 2020; Savage et al., 2020).

## **6.2 Main research question**

*In what ways were the practicing habits of senior music students at the University of Pretoria influenced and affected by the COVID-19 pandemic?*

The study found that the practicing habits of senior music students during the COVID-19 pandemic were influenced by the change in practice environment, the loss of their routines, and the process of adapting to online learning. Motivational factors which had previously been primary motivators for practice were removed and students were required to discover new motivations (Leyton-Román et al., 2021; Weiser & Müller, 2022). Students' relationships with their teachers also influenced their practice habits during this time as those with better

relationships were able to maintain a more structured practice routine during the lockdown (de Bruin, 2021).

### **6.3 Limitations of the study**

This study provided some insights to the experiences of undergraduate music students during the COVID-19 pandemic. A number of limitations are evident in this research. Firstly, this study explored only the experiences of students at the University of Pretoria, and not those at other institutions in South Africa during this time (2020/21). It focused solely on 7 students who were in their final or third year at this time and enrolled for Performance of First Instrument. Therefore, the study does not represent the experiences of all music students in the department. Furthermore, this study focused only on students in the year 2020. The COVID-19 pandemic and regulations continued well into 2022.

### **6.4 Recommendations for future research**

Further research into the transferability of the findings of this study to students from other institutions within South Africa or other countries, or students in other performing arts-based programs, is recommended.

This study explores only the students' experiences and relationships with their teachers during online learning, but exploration into the lecturers' experiences with online learning would likely provide further insight into the importance of relationships between students and teachers within the learning environment. An exploration of whether students from this study changed career paths or pursued higher qualifications in music during the subsequent time since 2020 could also be suggested. Further research on experiences during 2021 and 2022 may be beneficial.

### **6.5 Conclusion**

The findings of the study suggest that practice habits are influenced by a complex web of learned behaviours, relationships, instrument access, motivations, resilience, and environment. Even prior to the COVID-19 outbreak, senior music students had complicated relationships with practice. Guilt and obligation to practice are a strong factor in the development of some routines, but those who practice out of enjoyment and to experience feelings of fulfilment ultimately seem to build a healthier perspective on practicing. These initial standings were exacerbated by the 2020 lockdown, with those who practiced out of fear of lessons or



assessments being unable to establish a new routine to accommodate the changes in practice and learning environments.

The study also found that senior undergraduate students rely heavily on routine and structure in their practice, and the removal of this routine due to the global shutdown caused them to feel adrift and unable to manage their schedules when so much time was now available to them. Those with better self-determination and introspective abilities were able to re-form their ideals and implement new practice routines with new goals and motivations to continue their studies and growth.

In addition to this, the current study found that an established relationship with their practical lecturer was also a predictor of resilience in the participating students. Those who experienced connection with their instrument lecturers were able to adjust better to online learning, and already had structured practice routines in place that they were able to build upon during and after the pandemic and experienced less anxiety and depression in general.

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## Appendix A: Letter of information



School of the Arts

Dear \_\_\_\_\_

My name is Chloé Botha. I am a student at the University of Pretoria, and I am currently enrolled for a Master's degree in Music. I am conducting research on the effects of COVID-19 on the practice habits of senior undergraduate music students, and I would truly appreciate it if you would agree to participate in the study by being interviewed.

**Research title:** The effects of COVID-19 on practice habits: Exploring the experiences of senior undergraduate music students.

**Rationale/Aims of the study:** The purpose of the study is to explore the experiences of senior undergraduate music students at the University of Pretoria during the COVID-19 pandemic. Aspects such as the duration of their practice, experience of online instrumental tuition, the environment in which they practiced, motivation (both intrinsic and extrinsic), and the outcome (examinations and assessment) will be explored in relation to their practice habits.

**What will be expected of you?** You will be asked to participate in an interview discussing your experiences of practicing and learning during the COVID-19 lockdown.

**Approval:** The study will only begin after ethical approval by the Research Ethics Committee of the Faculty of Humanities, University of Pretoria, has been obtained.

**Risks and benefits:** By participating in the research, your experience may help to increase knowledge/understanding of practice and students' experiences during COVID-19. Participation in the study is completely voluntary and you are free to withdraw at any time.

There are no risks in participating in this project, neither are there any direct benefits to the participants. If you decide to withdraw, there will be no negative consequences to you, nor will you need to explain your reason. You are encouraged to ask any questions you might have about the study. Should you agree to participate, your confidentiality will be ensured using pseudonyms. You will be provided with the opportunity to review the interview transcriptions should you wish to do so.

**Who will have access to the results of the study?** The research will be conducted by myself as principal researcher, under the guidance of my supervisor. It will be used for academic purposes only. The data will be archived at the department of music for a minimum of 10 years. If any other researchers would like to use this data during this time they may only do so with your consent.

Please feel free to contact me or my supervisor if you require more information about the study.

Kind regards

**(Signature of student required)**

**(Signature of supervisor required)**

**Researcher name:** Chloé Elaine Botha

**Email:** chloeelaineb@gmail.com

**Tel:** 062 890 4731

**Name of Supervisor:** Dr Phuti Sepuru

**Email:** Phuti.sepuru@up.ac.za

**Tel:** 012 420 4307

## Appendix B: Letter of informed consent: Reply slip



School of the Arts

**FULL NAME:** \_\_\_\_\_

**RESEARCH TOPIC:** The effects of COVID-19 on practice habits: Exploring the experiences of senior undergraduate music students

I hereby give my consent to participate in the research project and acknowledge that the data may be used in current and future research. I confirm that I understand what is required of me in the research project. I am aware that I may withdraw from the study at any time, should I wish to do so.

\_\_\_\_\_  
**Signature of participant:**

**Date:**

**Signature of student/principal researcher:**

## Appendix C: Letter to the survey committee



School of the Arts

### Letter to the Director: Student Affairs

Dr Matete Madiba

University of Pretoria Director of Student Affairs

Email: [matete.madiba@up.ac.za](mailto:matete.madiba@up.ac.za)

Dear Dr Madiba,

### REQUEST TO CONDUCT STUDY WITH UNIVERSITY OF PRETORIA STUDENTS

The following letter serves as a request for permission to conduct a study which will involve students that were in their third and fourth year in 2020 from the School of the Arts (Music) at the University of Pretoria. The details of the study are detailed in the following sections.

**Title:** The effects of COVID-19 on practice habits: Exploring the experiences of senior undergraduate students

**Aims of study:** The purpose of the study is to explore the experiences of senior undergraduate music performance or first instrument majors (third and fourth year in 2020) at the University of Pretoria during the COVID-19 pandemic. Aspects such as the duration of their practice, receiving practical lessons online, the environment in which they practiced, motivation (both intrinsic and extrinsic), and the outcome (examinations and assessment) will be explored in relation to their practice habits. The study will use in-depth semi-structured interviews focusing on the unique experiences of these music students.

**Research procedures:** Students will be invited to participate in the study. Should they consent, they will be asked to participate in an interview, in which they will be asked to share their experiences in a semi-structured interview format. The interviews will be around 30 minutes long and will be recorded. If the participants feel any stress or anxiety due to the subjects explored, they will be notified of UP's counselling services for students. Depending on COVID restrictions and participants preferences, the interviews may take place in person, or alternatively via an online platform which allows for recording. The interviews will be transcribed, and participants will be allowed the opportunity to review these transcriptions. Participants' confidentiality will be ensured with the use of pseudonyms. The participants will be selected completely of their own volition, and they may withdraw from the study at any time without explanation and they will be explicitly informed of what will be required from them. The data collected will be securely stored in the University Pretoria in an electronic, password-protected document for 15 years, and in alignment with the data storage conditions of the POPI Act.

**Sample questions:** The purpose of the study will be fulfilled through asking the participants questions such as:

- Did you have a routine around your practice? Please elaborate on this
- Do you feel that there was a shift in the amount of practice, compared to before lockdown?
- How would you compare your practice environment at the place where you spent lockdown to the practice rooms on campus?
- Would you say that online learning was, overall, more positive or a more negative experience? Why?
- Did you notice any changes in the structure or way that lessons happened, in comparison to contact lessons?

Thank you for your consideration.

Yours sincerely

Chloé Elaine Botha

17137587

MMus (Performing Art) student

## Appendix D: Interview schedule

### *1. Background questions*

1.1 What year were you in 2020?

1.2 Fourth years of 2020: Were you a music performance or first instrument major?

### *2. Instrument*

2.1 What is your first instrument?

2.2 Do you own your own instrument?

2.3 If yes, how does that instrument compare to the ones you had access to on campus? (*The Musaion has pianos, organs, percussion instruments for students to practice. There is also a jazz ensemble room for jazz instrumentalists and vocalists*)

2.4 Did the lockdown and closure of campus factor into your decision to take first instrument or performance? If yes, how so?

### *3. Practice - pre-COVID-19/lockdown*

3.1 How many hours a day did you practice on average before the lockdown?

3.2 Did you have a routine around your practice? Please elaborate on this

3.3 What would you have defined as your motivating factors to practice before lockdown?

3.4 At which times of the day did you normally practice?

3.5.1 Did you prefer to practice on campus or at home?

3.5.2 What motivated that choice?

3.6 How often did you practice with your accompanist? (*If applicable*) And may you please detail this process?

### *4. Practice - post-covid/lockdown*

4.1 Did you have access to a space to practice during the lockdown? Please speak more to this

4.2 How would you compare your practice environment at the place where you spent lockdown to the practice rooms on campus?

- 4.3 Tell me about your practice routine during lockdown, and how it has changed post-pandemic
- 4.4 What would you say your motivating factors were during this time?
- 4.5 Did you experience any shift in your motivation? If so, may you please elaborate
- 4.6 How often were you able to practice with your accompanist (*if applicable*), and may you please detail this process?
- 4.7 Tell me about how you felt you coped during lockdown?

#### 5. *Online instrumental tuition*

- 5.1 Before the lockdown, had you had any practical lessons online? If so, please discuss this
- 5.2 Tell me about your experience of online instrumental tuition during lockdown?
- 5.3 What did you find challenging? Can you tell me more?
- 5.4 In what ways, if at all, did the lack of access to campus affect you?

#### 6. *Practice environment*

- 6.1 Where were you based during the lockdown?
- 6.2 Did you have access to a reliable internet connection? If not, please elaborate
- 6.3 How were your practical lessons conducted during the lockdown?
- 6.4 Did you notice any changes in the structure or way that lessons happened, in comparison to contact lessons?
- 6.5 Did you feel that you were able to connect with your teacher/lecturer well online? and why is that?
- 6.6 Did you feel that the workload for online learning was the same or different from contact learning? Please elaborate on this.

#### 7. *Assessment and outcomes*

- 7.1 How did you experience the assessment and outcomes during 2020?