

**An Investigation into Taiwanese  
Music College Students'  
Self-Management of Musical  
Performance Anxiety**

**WEI-LIN HUANG**

**Royal College of Music**

**Thesis submitted for the degree of Doctor of Philosophy (PhD)**

**Submit date: July 2018**

**Word count: 87511**

**Acknowledgements, abstract, table of contents, references, and  
appendices are excluded from the word count.**

## **Acknowledgements**

This thesis would not have been possible without the support of many lovely people. Firstly, I would like to express my gratitude to my amazing supervisor Dr Jennie Henley for her continuous support and guidance from my Masters' through to my Ph.D. She not only offered professional comments on this dissertation but also gave me huge encouragement. She always put herself in the shoes of the doctoral student, thinking about the difficulties I might encounter and sharing her experiences. She helped me to understand that doctoral study is not just about completing research or a dissertation; it is about becoming an independent scholar and a good teacher as well. I consider myself extremely fortunate to have worked and learned from her.

Secondly, I would like to give my special thanks to professor Ya-Ping Wang and the students from National Pingtung University who participated in and contributed to this research. Furthermore, I would like to thank Professor Graham Welch and Dr Natasha Loges, who never failed to offer their time and always gave their expertise whenever I needed it. In addition, I would also like to thank my lovely Viva examiners, Professor Andrea Creech and Dr John Habron, for their help, advice and constructive comments, which improved this dissertation and made it more complete.

I would like to thank my parents for their love, understanding

and constant support emotionally and financially. Learning music, studying abroad and pursuing a higher degree is my dream. It would have been impossible to complete the dream without them. Words cannot express my appreciation for the sacrifice and dedication of my parents. I would also like to thank my two brothers, Ramen Huang and Yankee (a handsome and naughty Maltese), who always made me smile and brought me happiness when I was struggling to study and feeling down.

Last but not least, I would like to give my deepest thanks to my husband, Dr Hui Yu, for all his support and encouragement. In the past few years, we were often writing our dissertations together at various coffee shops in London and debating everything to practice our critical thinking. If my academic journey is like running a marathon, he is the one who brings me motivation, helps me to persevere, supports me through my entire journey, and has taken me to the finishing line. I cannot imagine what my academic journey would have been without him.

## Abstract

Taiwan has many high-level music colleges that prepare students for performance and teaching careers. These music colleges are competitive environments in which students are potentially learning to cope with musical performance anxiety (MPA). MPA has been widely researched in recent years. Studies have found that college musicians use their own unique coping strategies or rely on past experiences of coping with MPA to manage it. Nevertheless, literature that focuses on MPA self-management is still limited. The aim of this thesis is to fill this gap by investigating the ways in which MPA is self-managed by Taiwanese college musicians (TCMs). The research questions are:

- 1) How do TCMs define and perceive MPA?
- 2) How do TCMs self-manage MPA?
- 3) What strategies for managing MPA do the TCMs believe they will use with their students when they carry out teaching as part of their future portfolio careers?

Fifty-three undergraduates were recruited from a music college in Taiwan. Each participant was interviewed before all of their performances taking place in one semester: formal concert, exam, and graduate recital. The data was analysed through a qualitative approach by using thematic analysis in order to examine the

strategies used and the process of managing MPA. The findings are presented as four themes:

- 1) Strategies used in preparation for different types of performance, during different time periods of preparation and performance.
- 2) Strategies in context: people and places.
- 3) Understanding the strategies: metacognition in musical learning and managing MPA.
- 4) MPA self-management and the teaching–learning cycle.

Results revealed that it is possible for TCMs to self-manage their MPA through developing metacognitive processes with support networks in the conservatoire environment and with various external resources. However, information on MPA-coping strategies are like pieces of a puzzle that are scattered rather than being coherently fitted together. Therefore, recommendations for further research and applications to practice are made.

## Contents

<b>ACKNOWLEDGEMENTS.....</b>	<b>2</b>
<b>ABSTRACT.....</b>	<b>4</b>
<b>CHAPTER 1. BACKGROUND AND KEY ELEMENTS OF STUDY .....</b>	<b>11</b>
1.1. INTRODUCTION.....	11
1.2. RESEARCH BACKGROUND/CONTEXT (TAIWANESE MUSIC EDUCATION) .....	15
1.2.A. TAIWANESE MUSIC EDUCATIONAL CONTEXT.....	15
1.2.B. CURRICULUM STRUCTURE OF TAIWANESE MUSIC EDUCATION .....	21
1.3. FUTURE CAREERS .....	30
1.4. AIM OF THE THESIS .....	31
1.5. STRUCTURE OF THE THESIS.....	32
<b>CHAPTER 2. MUSICAL PERFORMANCE ANXIETY (MPA) .....</b>	<b>36</b>
2.1 WHAT IS MUSICAL PERFORMANCE ANXIETY (MPA)?.....	36
2.1.A. THE TYPES OF ANXIETY.....	45
2.1.B. SYMPTOMS OF MPA .....	46
2.1.C. THE POSITIVE AND NEGATIVE EFFECTS .....	47
2.1.D. WHAT FACTORS CONTRIBUTE TO MUSICAL PERFORMANCE ANXIETY?.....	52
2.1.E. COMPARISON LEVEL OF MPA .....	58
2.2 CURRENT PRACTICES OF MPA MANAGEMENT IN HIGHER EDUCATION.....	64
2.3 THE ROLE OF MUSIC EDUCATOR .....	71
2.4 WHAT CAN THE PERFORMING ARTS LEARN FROM SPORT AND OTHER DOMAINS REGARDING ANXIETY MANAGEMENT AND COGNITIVE ENHANCEMENT?.....	75
2.4.A. SIMILARITIES.....	77
2.4.B. DIFFERENCES.....	86
2.4.C. SELECTED ANXIETY-CONTROL INTERVENTIONS IN SPORT .....	92
2.5 SUMMARY .....	98
<b>CHAPTER 3. WHAT ARE COGNITIVE THERAPY, BEHAVIOURAL THERAPY, AND COGNITIVE BEHAVIOURAL THERAPY (CBT) AND HOW ARE THESE THERAPIES USED IN APPROACHES TO MPA? .....</b>	<b>101</b>
3.1 WHAT IS COGNITIVE THERAPY?.....	104
3.1.A. THE FUNCTION OF COGNITIVE INTERVENTION IN MPA .....	108
3.1.B. SELECTED COGNITIVE STRATEGIES OF MPA .....	110
3.2 WHAT IS BEHAVIOURAL THERAPY? .....	128

3.2.A. SELECTED BEHAVIOURAL STRATEGIES IN RESPONSE TO MPA .....	130
3.3 WHAT IS COGNITIVE BEHAVIOURAL THERAPY (CBT)?.....	146
3.3.A. THE UNIQUE/EFFECTIVE COMPONENTS OF CBT .....	147
3.3.B. IS CBT EFFECTIVE FOR MPA?.....	150
3.3.C. HOW DOES CBT WORK? .....	152
3.4 SUMMARY .....	154
<b>CHAPTER 4. SELF-MANAGEMENT.....</b>	<b>156</b>
4.1 THEORY OF SELF-MANAGEMENT.....	156
4.2 STRESS MANAGEMENT.....	165
4.3 SELF-HELP WITH CBT.....	169
4.4 SUMMARY .....	173
<b>CHAPTER 5. METHODOLOGY AND RESEARCH DESIGN .....</b>	<b>176</b>
5.1. INTRODUCTION TO QUALITATIVE AND QUANTITATIVE RESEARCH .....	176
5.2. THE PHILOSOPHICAL ASSUMPTIONS OF QUALITATIVE RESEARCH: ONTOLOGY, EPISTEMOLOGY, AND METHODOLOGY.....	177
5.2.A. THEMATIC ANALYSIS.....	181
5.2.B. WHY TAKE A QUALITATIVE RESEARCH APPROACH TO MY RESEARCH QUESTIONS? .....	183
5.3. RESEARCH DESIGN (OVERVIEW OF RESEARCH DESIGN: AIM, RESEARCH QUESTION, PARTICIPANT NUMBERS AND YEAR LEVEL, RESEARCH PROCEDURE).....	184
5.3.A. OVERVIEW OF RESEARCH DESIGN (PHASE 1).....	185
5.3.B. PERFORMANCE DIARY (PHASE 2).....	187
5.3.C. FIELD WORK (PHASE 3) .....	188
DESCRIPTION OF PILOT STUDY .....	188
DESCRIPTION OF THE MAIN STUDY.....	191
RESEARCH PROCEDURE AND TECHNIQUE OF THE MAIN STUDY.....	192
DESCRIPTION OF CONCERT PERFORMANCE CONTEXT AND SITUATION IN THIS STUDY.....	198
5.3.D. DATA ANALYSIS (PHASE 4) .....	200
5.4. ETHICAL ISSUES AND THE CONSENT FORM .....	205
<b>CHAPTER 6. STRATEGIES USED IN PREPARATION FOR DIFFERENT TYPES OF PERFORMANCE DURING DIFFERENT TIME PERIODS OF PREPARATION AND PERFORMANCE.....</b>	<b>208</b>
6.1 INTRODUCTION .....	208
6.2 COGNITIVE STRATEGIES .....	213

6.2.A.	SELF-TALK.....	213
6.2.B.	ACCEPTING MISTAKES/ERRORS .....	226
6.2.C.	MENTAL REHEARSAL AND VISUAL REHEARSAL .....	231
6.3	BEHAVIOURAL STRATEGIES.....	238
6.3.A.	CONTRIVED PERFORMANCE SITUATION .....	238
6.3.B.	BREATHING AND MUSCLE RELAXATION.....	244
6.3.C.	FOLLOWING A PRE-PERFORMANCE ROUTINE .....	247
6.3.D.	VARIOUS PHYSICAL AND ABSORBING ACTIVITIES.....	249
6.3.E.	DIET.....	258
6.3.F.	TAPERING OFF PRACTICE.....	261
6.3.G.	COGNITIVE RESTRUCTURING .....	264
6.4	SUMMARY .....	267
<b>CHAPTER 7. STRATEGIES IN CONTEXT: PEOPLE AND PLACES .....</b>		<b>270</b>
7.1	INTRODUCTION .....	270
7.2	SOLITARY .....	273
7.2.A.	PRE-RESEARCH SITUATION .....	273
7.2.B.	CONCERT PREPARATION.....	278
7.2.C.	EXAM PREPARATION.....	280
7.2.D.	RECITAL PREPARATION (YEAR 4).....	282
7.3	WORKING WITH PEERS.....	284
7.4	TEACHER ASSISTANCE .....	293
7.4.A.	PRE-RESEARCH SITUATION .....	294
7.4.B.	CONCERT PREPARATION.....	296
7.4.C.	EXAM PREPARATION.....	299
7.4.D.	RECITAL PREPARATION .....	303
7.5	PRACTICE IN SOLO AIDED CONDITION .....	305
7.6	SUMMARY .....	312
<b>CHAPTER 8. UNDERSTANDING THE STRATEGIES: METACOGNITION IN MUSICAL LEARNING AND MANAGING MPA.....</b>		<b>318</b>
8.1	INTRODUCTION .....	318
8.2	YEAR ONE STUDENTS.....	323
8.3	YEAR TWO STUDENTS.....	336
8.4	YEAR THREE STUDENTS .....	345
8.5	YEAR FOUR STUDENTS.....	353

8.6	SUMMARY .....	359
<b>CHAPTER 9. MPA SELF-MANAGEMENT AND THE</b>		
<b>TEACHING-LEARNING CYCLE..... 363</b>		
9.1	INTRODUCTION .....	363
9.2	PARTICIPANTS TRANSFER THEIR OWN COPING STRATEGIES TO THEIR TEACHING CONTEXT.....	365
9.3	PARTICIPANTS LEARN STRATEGIES FROM PD AND APPLY THEM TO THEIR TEACHING CONTEXT.....	369
9.4	PARTICIPANTS LEARN STRATEGIES FROM TEACHERS AND TRANSFER THEM TO THEIR OWN TEACHING CONTEXT.....	375
9.5	PARTICIPANTS ARE UNABLE TO TRANSFER OR APPLY THEIR OWN MPA-COPING STRATEGIES IN TEACHING CONTEXT.....	378
9.6	SUMMARY .....	381
<b>CHAPTER 10. LIMITATIONS OF THE RESEARCH, IMPLICATIONS,</b>		
<b>SUGGESTIONS FOR FUTURE RESEARCH, AND RECOMMENDATIONS FOR</b>		
<b>PRACTICAL APPLICATION ..... 384</b>		
10.1.	INTRODUCTION .....	384
10.2.	LIMITATIONS OF THE RESEARCH .....	385
10.3.	DISCUSSION OF FILLING CURRENT RESEARCH GAP .....	387
10.3.A.	DETAILED ACCOUNT OF STRATEGIES USED .....	390
10.3.B.	THE CONCEPTUAL CHANGE OF MPA MANAGEMENT AND THE ROLE OF PERFORMANCE DIARY.....	395
10.3.C.	LEARNING ENVIRONMENT IN THE MUSIC COLLEGE.....	398
10.4.	SUGGESTIONS FOR FUTURE RESEARCH .....	404
10.5.	RECOMMENDATIONS FOR APPLICATIONS.....	405
<b>REFERENCES: .....</b>		<b>411</b>
<b>APPENDIX 1: PERFORMANCE DIARY .....</b>		<b>459</b>
<b>APPENDIX 2: CONSENT FORM (IN CHINESE) .....</b>		<b>473</b>
<b>APPENDIX 3: INTERVIEW SCHEDULE .....</b>		<b>475</b>
<b>APPENDIX 4: OVERVIEW OF STRATEGIES USED .....</b>		<b>479</b>
<b>APPENDIX 5: OVERVIEW OF STRATEGIES USED BY TYPES OF PERFORMANCE.....</b>		<b>480</b>

**APPENDIX 6: OVERVIEW OF STRATEGIES USED BY TYPES OF  
PERFORMANCE IN RELATION TO YEAR GROUP ..... 481**

## **Chapter 1. Background and key elements of study**

### **1.1. Introduction**

'Music performance anxiety (MPA) is a widely acknowledged condition in the field of music performance' (Patston, 2014: p. 85).

Andrea Bocelli, a world-famous tenor, suffers from serious stage fright.

In an interview with *New York Parade* magazine, he said, 'I'm not that shy. Not in life – only on the stage. I've often felt stage fright', adding that 'fear is never useful, because it weakens you. But a certain tension can help you become more expressive onstage' (Nov. 26, 2011).

Although he has considerable performance experience, he still feels nervous when he is singing on stage until the end of the performance.

He has stated that he prefers not to use drug treatments, and he knows that there are other tenors who share the same problems. MPA is not only a serious issue for professional musicians but is also frequently reported by college musicians (Spahn, Walther & Nusseck, 2016). However, some students may not be aware of what MPA is and how to manage it. Taiwanese researchers have found that there are many college musicians with MPA issues and there is widespread lack of knowledge about MPA and relevant coping strategies (Huang, 1999; Huang, 2005; Liu, 2016; Wang, 2001; Yen, 2006).

I suffered from MPA when I was an undergraduate student majoring in cello performance at National Pingtung University (NPU) in Taiwan. At that time, I had no knowledge of MPA and I was

unaware of how to manage it. I remember feeling very nervous, not only performing on stage, but also in one-to-one instrumental tuition, especially in the weeks prior to a performance. The symptoms I experienced included cold, shaky hands, wobbly legs, shortness of breath, and negative thoughts, and I still remember them vividly. I do not remember how I survived during my performances onstage. I only remember that my feelings of nervousness disappeared once I had finished the performance and walked offstage. Indeed, it was like I had dreamt being on stage. During my entire period of undergraduate study, I did not realise that such feelings of nervousness and my physiological symptoms were related to MPA. I thought it was because of lack of practice and that I was insufficiently prepared for my performance. As a result, I attempted to manage it by increasing my practice hours and distracting my focus from my anxiety through activities such as shopping with friends. However, when it came to actual performance situations, the feelings of nervousness and the symptoms returned to affect my performance quality. Interestingly, the positive and negative effects of MPA often came together in my performances. For example, I was able to conquer the most difficult passages, which I never achieved in practice. But I also experienced bad bow control at the beginning of a slow movement owing to cold and shaky hands. Even though MPA causes both positive and negative effects, I was afraid of living with MPA for the rest of my performing

life. Owing to my fearful experiences of MPA, I did not continue to a performance degree at postgraduate level, and I did not pursue a career in performance: I believed that I was not suited to a career as a professional cellist. Nevertheless, I did not give up finding out more about these feelings of nervousness and how to manage them. The turning point occurred while I was studying for my Masters' degree at the Institute of Education, University College London. I took a module in the Psychology of Music and Music Education. One of the lectures, 'musical performance,' discussed the issue of MPA. I started wondering what MPA was, how other people perceived MPA, and how they managed it, especially those who were studying at the same college as I was. This was because I did not have access to any MPA-coping strategies, nor had I found related courses when I was an undergraduate at NPU. As a result, I sought to answer these questions as the beginning of my research into MPA and how TCMs in particular self-manage it.

In a review of existing Taiwanese literature about MPA, I found that many Taiwanese researchers have studied the issue of MPA among TCMs, but there are few studies focusing on MPA self-management. Yen (2006) investigated the prevalence and management of MPA through questionnaires distributed among 168 music students ranging from high school to doctoral level in professional music institutions in Taiwan. She found that 42% of

participants had MPA issues and 22% participants had not heard of coping strategies for MPA. She provided examples of coping strategies in the questionnaire in order to understand participants' knowledge of such strategies. The participants were asked to tick all of the strategies they had heard of. She found that 76% (128 participants) had heard of some MPA-coping strategies and wanted to learn more about them (Yen, 2006). The MPA-coping strategies that these 128 participants had heard of were drug treatments (fifty-seven participants), meditation (fifty-four), yoga (fifty-three), psychological consultation (thirty-nine) Alexander Technique (thirty-nine), aerobic exercises (thirty-eight), muscle relaxation techniques (thirty-one), cognitive restructuring (fifteen), CBT (fourteen), and systematic desensitisation (thirteen). Yen mentioned that the MPA-coping strategies that her participants reported and used to manage their MPA varied from individual to individual and depended on participants' past experiences of coping with MPA. Liu (2016) investigated MPA among 122 college pianists in southern Taiwan by employing multiple case studies with questionnaires and interviews. She found that the participants who had debilitating performance anxiety did not seek professional help, and each of the participants had his or her own techniques and particular coping strategies to deal with MPA before going onstage and performing. Most of her participants spoke of the need for utilising a variety of techniques and

the addition of further coping methods combined with training programs for building the ability to perform (Liu, 2016). Both Yen and Liu found that TCMs were using their own unique coping strategies or relying on past coping MPA experiences to manage their own MPA. Yet they did not explore in detail how TCMs adopted the strategies and what the impact of self-management using psychological strategies were. My research will explore these questions further in order to fill this gap.

## **1.2. Research background/context (Taiwanese music education)**

In order to understand this research context, it is important to outline the curriculum structure of Taiwanese music education.

### **1.2.a. Taiwanese music educational context**

Before entering undergraduate study, there are two systems of Taiwanese music education: the special music programme (SMP, known as *Yin Yueh Ban* in Chinese) for gifted young musicians, which is normally from grades three to twelve, aiming to foster professional musicians. The other system is called music class in general education (MCGE) from grades one to twelve, which aims to teach the foundations of music. Table 1, below, shows these two Taiwanese music educational systems, including ages, grades, and the aims of the curriculum.

Table 1: Taiwanese music educational system

System	The special music programme (SMP)	Music class in general education (MCGE)
Age	6 – 18 years old	
	Grades	Age
	Elementary school (6 years)	
	No SMP in Grades 1 and 2	Grade 1: 6-7 Grade 2: 7-8
	Grade 3	8-9
	Grade 4	9-10
	Grade 5	10-11
	Grade 6	11-12
	Junior high school (three years)	
	Grade 7	12-13
	Grade 8	13-14
	Grade 9	14-15
	High school (three years)	
	Grade 10	15-16
	Grade 11	16-17
	Grade 12	17-18
Undergraduate (first year to fourth year level)	four years, aged 18 and up	
Age	6 – 18 years old	
	Grades	Age
	Elementary school (6 years)	
	Grade 1	6-7
	Grade 2	7-8
	Grade 3	8-9
	Grade 4	9-10
	Grade 5	10-11
	Grade 6	11-12
	Junior high school (three years)	
	Grade 7	12-13
	Grade 8	13-14
	Grade 9	14-15
	High school (three years)	
	Grade 10	15-16
	Grade 11	16-17
Grade 12	17-18	
Undergraduate (first year to fourth year level)	four years, aged 18 and up	
Curriculum aims	Focusing on performance and music study in specialist classes (Liu, 2016).	General music classes in which students learn the basic foundations of music (Liu, 2016).

These two music educational systems are strongly related to the history of Taiwan. Music education in Taiwan is deeply influenced by its colonial history. From 1624 to 1662, the Netherlands and Spain colonised Taiwan. Missionaries influenced Taiwanese music education deeply by teaching religious folk songs and popular hymns. Although the Ming dynasty ruled Taiwan from 1662 to 1683, Taiwanese music education was still influenced by foreign missionaries. The missionaries established many schools in Taiwan. They taught the Bible and incorporated religious music into the classroom (Taiwanese executive Yuan, 2017). From 1683 to 1895, the Qing Empire ruled Taiwan. In 1860, owing to the Second Opium War, the Qing Empire signed the Treaty of Tianjin, which included the right of foreigners to trade and permitted missionary activities and religious liberty to all Christians in China. Owing to the Qing emperor's rule over Taiwan in this period as well as the treaty, some Taiwanese ports had to open for foreign trade and missionary activities. As a result, the Presbyterian Church of England and the Presbyterian Church of Canada established schools and taught academic subjects such as English and maths as well as Western classical music in Taiwan (Lin, 2008). However public schools were focused on classical learning (known as *Shuyuan* in Chinese) and the teaching of reading, writing, and maths.

Between 1895 and 1945, Taiwan was under Japanese rule,

during which time the island of Taiwan (including the Penghu Islands) was a dependency of the Empire of Japan, after the Qing Empire lost the First Sino-Japanese War and ceded Taiwan in the Treaty of Shimonoseki. Accordingly, Taiwanese music education followed and was subsequently influenced by Japanese music education.

Elementary schools, junior high schools, and Taiwan normal colleges (teacher-training schools) were established and incorporated the subject of music into the curriculum. This is also regarded as the first time formal music education was introduced to public schools (Hsu, 1998). Interestingly, the Japanese music education curriculum was also deeply influenced by Western music education. The Japanese chief of the education bureau (Shuji Izawa) in Taiwan was not primarily a music educator. However, he worked on the development of the first Japanese school music curriculum, which focused on introducing Western-style singing into Japanese schools and exerted a great influence on the development of music education (Kou, 2001).

With the advent of new technology, such as the phonograph, the music education curriculum added criteria called 'music appreciation' (Hsu, 2011). Singing was also introduced into the curriculum. The six-year compulsory education system officially established in 1943 required all children to attend public school between the ages of six and fourteen (Kou, 2001).

Fifty years of Japanese occupation of Taiwan ended in 1945.

This year is also known as Taiwan's Restoration Year. Following the civil war in China between the Kuo Min Tang (KMT) and the Chinese Communist Party (CCP), the KMT relocated their powerbase to Taiwan. This influenced Taiwanese music education, as traditional Chinese culture became the main focus of school learning (Ho & Law, 2006). Moreover, in the 1960s, due to Taiwan's economic growth, people started to pay attention to professional music education, by learning Western classical instruments and studying abroad (i.e. in the United States). This is the starting point at which the government recognised the importance of music education, especially for talented young musicians (Chen, 2004). In the meantime, Taiwan developed compulsory education for grades one through nine, with the last three years of junior high school, grades seven to nine, being added to the academic year in 1968 (Ho & Law, 2006). Music is included in the school curriculum as a component of arts and humanities education during the nine years of compulsory education, the MCGE. Yet there was no special music programme (SMP). As a result, the government started offering scholarships for gifted young musicians to study abroad between 1962 and 1993. In 1973, the government established a programme for talented and gifted pupils. There are three categories of talented and gifted programmes in Taiwan: 1) giftedness/talent in intelligence; 2) giftedness/talent in scholarship; and 3) giftedness/talent in arts (The Ministry of Education, 2014).

After 1997, three more categories were added as part of the Special Education Act, which are creativity, leadership, and other areas, such as being gifted in computer science. The first public school for SMP from grades three to six was established in 1973, and the first public school for SMP from grades seven to nine was established in 1980.

In 1949, the governor of Taiwan promulgated the 'Order of Martial Law' to announce the imposition of martial law in Taiwan. As a result, from 1949 to 1987, a series of relevant regulations were promulgated, such as the regulations to prevent unlawful assembly and association, and measures to regulate newspapers, magazines, and book publication. In 1987, when Taiwan lifted its curfew and martial law was ended, Taiwan's democratic transition commenced, and the first Taiwanese National Symphony Orchestra was established. Many Taiwanese musicians returned to Taiwan from Europe and the United States, and the Taiwan Normal College was intensively upgraded to become a university providing music education at undergraduate level.

At the same time, Taiwan started to connect with the international community. Moreover, owing to the government's ending of the scholarships scheme for gifted young musicians studying abroad in 1993, the government established more SMP schools, in which gifted musicians could be educated in Taiwan instead of studying abroad (Chen, 2004). When the KMT relocated

their powerbase to Taiwan and they applied the same music educational system they had established in China when they were in government, they established more music colleges and music departments in the universities (Hsu, 1998).

### **1.2.b. Curriculum structure of Taiwanese music education**

Taiwanese music education systems (i.e. SMP and MCGE) have been influenced deeply by Western music education and various historical stages of colonisation by the Spanish, Dutch, and Japanese, as well as by Chinese immigration and the rule of the KMT (see Section 1.2.a, p. 15). As a result, the curriculum structure of MCGE is an attempt to balance different music genres, such as Western classical music, Chinese traditional music, and other forms of world music (Ho & Law, 2006). As for the SMP system, they may also be influenced by Taiwanese music educators who were educated in Europe and the United States and returned to Taiwan after 1987. The SMP system is an independent system that requires a separate entrance audition with the aim of developing musicians to get them into professional higher education music institutions. The SMP uses a university music department model for training young musicians (Chen, 2004). Normally, the SMP system starts in grade three in elementary school (see also Table 1, p. 16). The SMP curriculum structure includes one instrument as principal study, musicianship,

and aural study. Two full-time teachers are in charge of one class in the SMP. One takes responsibility for academic works and the other advises music-related studies. In addition, they have several music experts that teach private instrumental tuition (Chen, 2004).

It should be noted that pupils can transfer from the MCGE system to the SMP system through exams or auditions. However, schools typically recruit more students at the beginning of each educational level (i.e. grade three of elementary school, grade seven of junior high school, and grade ten of high school). The difference is that courses in the SMP system are designed to help students gain access to so-called professional levels of music performance study, which includes meeting the entry requirements of music colleges, although students from both the SMP and MCGE systems can attend the undergraduate level of music performance study if they meet the entry requirements.

After completing high school, students may enter higher education programmes (i.e. undergraduate study) by taking the College Entrance Examination (CEE). When students apply for a place at music colleges in Taiwan, they have to decide their major, which is difficult to change once they have started the course. This is because the college committee uses the students' examination results to decide what kind of instrumentalists they want in that academic year. During undergraduate study, college musicians may have one

instrument as their major (also known as their principal study). If their major is not piano, they take piano performance as their minor (also known as second study). Piano major students can choose one instrument as their minor. As previously mentioned, the major and minor undergraduate studies may already have been decided by the student's CEE results. As to the curriculum in music colleges in Taiwan, it is primarily based on European or Western music (Ho & Law, 2002).

The courses shown below are from the Taiwanese music college featured in this study, which is NPU. This college is designed to foster professional musicians and is one of the oldest music-teacher-training colleges in Taiwan. Unlike countries such as the UK, where performance education and music-teacher training take place in entirely separate institutions, some Taiwanese music colleges train both performers and teachers, particularly those schools that were known as Taiwan normal colleges (see also Section 1.2.a, p. 15). The Bachelor of Music program (BMus) at this college seeks to cultivate competent and successful music professionals, as well as fostering expertise in solo music performance, collaborative musical arts, and music teaching. Tables 2 to 5 list the courses that students have to take during their four years of study on an undergraduate programme. It is clear that most of the courses are based on European or Western features in music literature and pedagogy. In addition, it

should be noted that, since 2006 (laws and regulations database of the Republic of China, 2017), the undergraduate program has focused on other music-related courses (i.e. music therapy, and the music industry and marketing) in addition to teacher-training courses (i.e. foundation in psychology of education and sociology of education) from 2006 (laws and regulations database of the Republic of China, 2017). Before 2006, the BMus programme was incorporated into teacher education as compulsory training. However, since 2006, music students have been able to either follow the new course design that focuses on performance education or undertake teacher training as additional courses, for which they need to apply and pass an audition. The students selected from auditions then add an extra 42 credits of teacher-training courses to the overall credits for their undergraduate degree (normally each module is worth two credits). After graduating, they will be awarded a BMus degree and a teacher's certificate, assuming they pass the teacher's certificate examination on completion of the teacher-training courses. In special circumstances, students may be able to drop the teacher-training courses and be awarded a BMus degree only. Taiwanese teacher education is separated into three systems: for early years (three to six years old), for elementary school (six to twelve years old), and for junior high school and high school (twelve to eighteen years old). The NPU can offer teacher-training courses for early years teachers and

elementary school levels.<sup>1</sup>

Table 2: Year one course at NPU

Year 1					
First semester			Second semester		
Module	Compulsory (C); Optional (O)	Credit	Module	Type	Credit
Major	C	1	Major	C	1
Minor	C	0.5	Minor	C	0.5
Musicianship	C	2	Musicianship	C	2
Elementary Harmony	C	2	Elementary Harmony	C	2
Orchestral Ensemble	C; choose one	2	Orchestral Ensemble	C; choose one	2
Choral Ensemble		2	Choral Ensemble		2
Italian Diction	O	2	English Diction	O	2
Italian Vocal Literature	O	2	French Vocal Literature	O	2
Studies in Hakka Music and Culture	O	2	History of Taiwanese Music	O	2
Introduction to Chinese Music	O	2	History of Chinese Music	O	2
Baroque recorder basic foundation	O	2	Introduction to Music Education	O	2
			Art of Music Performance	O	2

<sup>1</sup> 'List of Teacher educations in Universities,' *Government database*. <https://data.gov.tw/dataset/27195> [Accessed August 20, 2017].

Table 3: Year two course at NPU

<b>Year 2</b>					
First semester			Second semester		
Module	Type	Credit	Module	Type	Hours/ Credit
Major	C	1	Major	C	1
Minor (second study)	C	0.5	Minor	C	0.5
Musicianship	C	2	Musicianship	C	2
Elementary Harmony	C	2	Elementary Harmony	C	2
Orchestral Ensemble	C; choose	2	Orchestral Ensemble	C; choose	2
Choral Ensemble	one of them	2	Choral Ensemble	one of them	2
History of Western Music (1)	C	2	History of Western Music (1)	C	2
Counterpoint (1)	C	2	Counterpoint (2)	C	2
Computer-Assisted Music Instruction	0	2	History of Taiwanese Music	0	2
Advanced Harmony	0	2	History of Chinese Music	0	2
Accompanying (1)	0	2	Accompanying (2)	0	2
Orff - Gordon Music Method	0	2	Introduction to Music Education	0	2
String Literature	0	2	Art of Music Performance	0	2
German Diction	0	2	Keyboard Harmony	0	2
German Vocal Literature	0	2	Kodaly and Dalcroze Music Methods	0	2

Percussion Literature	0	2	French Diction	0	2
Woodwind Literature	0	2	English Vocal Literature	0	2
			Chamber Music Literature— Winds and Percussions	0	2
			Brass Literature	0	2
			Chamber Music Literature Strings	0	2
			Composing and Performing Popular Music for Beginners	0	2

*Table 4: Year three course at NPU*

<b>Year 3</b>					
First semester			Second semester		
Course	Type	Credit	Course	Type	Hours/ Credit
Major	C	1	Major	C	1
Musical Form and Analysis	C	2	Musical Form and Analysis	C	2
Conducting (1)	C	2	Conducting (1)	C	2
Orchestral Ensemble	C; choose one of them	2	Orchestral Ensemble	C; choose one of them	2
Choral Ensemble		2	Choral Ensemble		2
History of Western Music (2)	C	2	History of Western Music (2)	C	2
Opera Workshop	0	2	Opera Workshop	0	2

Woodwind Pedagogy	0	2	Repertoire Study and Ensemble – Winds	0	2
String Pedagogy	0	2	Repertoire Study and Ensemble – Strings	0	2
Chamber Music	0	2	Chamber Music	0	2
Instrumentation	0	2	Piano Literature	0	2
Piano Music Appreciation and Analysis	0	2	Orchestration	0	2
Design Media Production	0	2	Digital Sound Effects	0	2
Introduction to Music Therapy	0	2	Music Related to Visual Arts	0	2
Accompanying Improvisation	0	2			

*Table 5: Year four course at NPU*

<b>Year 4</b>					
First semester			Second semester		
Course	Type	Credit	Course	Type	Hours/ Credit
Recital	C	1	Recital	C	1
Orchestral Ensemble	C; choose one	2	Orchestral Ensemble	C; choose one	2
Choral Ensemble		2	Choral Ensemble		2
Contemporary Music History	0	2	Contemporary Music History	0	2
Conducting (II)	0	2	Music Evaluation and Measurement	0	2

Piano Pedagogy	0	2	Music Industry and Marketing	0	2
Music Aesthetics	0	2			
Music Administration	0	2			

*The minimum number of compulsory credits which must be passed in order to progress to the next year of the undergraduate programme is 38. The minimum number of optional modules in the undergraduate program is 60 credits.*

Music is a highly competitive professional field throughout the musician's career, from the audition process for gaining admission to an elite college, university or conservatoire of choice to competing for a limited number of professional positions after graduating (Wristen, 2013). Music students have a tendency to be anxious, as the learning environment in music colleges is also highly competitive (Alta *et al.*, 2004). In addition, some Taiwanese researchers have identified the issue of MPA among TCMs along with the willingness to learn MPA-coping strategies (Yen, 2006). As a result, consideration may need to be given to the question of why there are various courses related to music performance (i.e. pedagogy) and applied skills (i.e. music industry and marketing) in colleges, but no modules dealing with the psychology of performance or performance anxiety. It is therefore important to explore how exactly TCMs self-manage MPA in this college, and how students acquired strategies to cope with MPA during their studies in order to explore the possibilities of learning coping strategies using other resources.

### 1.3. Future careers

Although there are many career routes that TCMs can take after graduating, generally they can be divided into two routes based on NPU's website.<sup>2</sup>

- Pursuing postgraduate study either in Taiwan or abroad.
- Starting music careers. For example, as music therapists, music administrators, or music teachers in elementary school, junior high or high school, and as performers in self-employment (e.g. music studios).

According to a survey in 2012 of the career development of alumni who graduated between 2007 and 2011 from National Chiayi University (NCU),<sup>3</sup> 56% graduates undertook music teaching jobs (i.e. teachers for elementary school, junior, and junior high school) or relevant work (e.g. performer or working in private music studios as instrumental tuition tutors), 28% of graduates were pursuing a postgraduate degree, and 16% of graduates were working in other jobs. Moreover, 97% of postgraduates undertook teaching jobs or relevant work, and only one postgraduate was pursuing doctoral studies. Although this survey has some limitations on data collection (i.e. it did not mention the response rate, there was a lack of detail

---

<sup>2</sup> National Pingtung University. (2017). *Career Map*. Available from: <http://www.music.nptu.edu.tw/files/11-1104-13.php?Lang=zh-tw> [Accessed 19<sup>th</sup> August 2017].

<sup>3</sup> NCU's stated aims for the curriculum and its career development are similar to NPU's, that of fostering expertise in music performance, collaborative musical arts and music teaching.

distinguishing music-relevant jobs, and no definition of ‘other jobs’), it seems that students more or less engage in a teaching-relevant job after they leave college. Lebler, Burt-Perkins & Carey (2009) mentioned that college students might initially anticipate being performers. However, some graduates may not become performers onstage, and may decide to undertake a job related to music teaching (Lebler, Burt-Perkins, & Carey, 2009). Regardless of why college musicians undertake a teaching job, it seems that teaching music is an important skill that students could require when they start a career. Because some music college students move into teaching careers or engage in teaching-relevant jobs, a study looking at the self-management of MPA in college students (e.g. Yen, 2006; Liu, 2016) should then also look at the sustainability of this self-management, as well as potential application in students’ future teaching careers. My research will therefore explore this as third research question.

#### **1.4. Aim of the thesis**

The aim of this research is to investigate the ways in which MPA can be self-managed by college musicians in Taiwan and what they believe might apply in their future teaching careers. Much literature has investigated MPA-coping strategies and their functions (Buswell, 2006; Roland, 1994; Steptoe, 1989; Taylor, 2004). However, literature that focuses on MPA self-management in this cultural region

is limited. Although some Taiwanese researchers have found that TCMs were using their own unique coping strategies or relying on past coping MPA experiences to manage their own MPA, there is still a lack of detail about the self-management strategies used and their potential application in students' future teaching. As a result, the data collection and analysis in my research will focus on the following questions:

- 1) How do TCMs define and perceive MPA?
- 2) How do TCMs self-manage MPA?
- 3) What strategies for managing MPA do the TCMs believe that they will use with their students when they carry out teaching as part of their future portfolio careers?

### **1.5. Structure of the thesis**

The thesis comprises ten chapters, which includes the introduction, three chapters of literature review, a chapter on methodology, four chapters of data analysis presentation and the conclusions. The introduction includes the rationale for conducting this research and a brief introduction to the research background, addressing Taiwanese music education and its curriculum structure. Chapter 2 introduces current definitions of musical performance anxiety (MPA) through literature reviews. It includes types of MPA, the symptoms of MPA, its effects, contributing factors, comparisons of

the level of MPA, current practice of MPA in higher education, the role of music educators, and strategies in sport psychology for coping with anxiety. This involves exploring the similarities and differences between sport performance and the performing arts, and discusses the strategies used in managing performance anxiety. This chapter aims to gain basic knowledge of MPA in order to consider its importance and how to cope with MPA, as well as playing an important role in the research in explaining MPA in relation to research question 1. Moreover, it aims to view the management of MPA by applying strategies from other domains (i.e. sport) and give some examples of how people from domains similar to that of music performance self-manage their performance anxiety, or how they have been helped in education settings. It may also help readers to look at participants' management of MPA strategies from the researcher's perspective when reading the data analysis chapters, as this thesis examines some coping anxiety strategies from sport (i.e. self-talk).

Chapter 3 is a literature review that introduces MPA-coping strategies by focusing on cognitive strategies, behavioural strategies, and cognitive behavioural therapy (CBT), and shows how these strategies have been used to approach MPA. This chapter draws on existing literature to examine MPA-coping strategies suitable to be included in a 'performance diary.' The performance diary was given to

participants as an assistive and optional tool for interventions to introduce or reinforce strategies, and to provide a way for participants to structure their self-management if they desired. Chapter 4 focuses on what self-management is, its theory, the relationship between stress management, and how self-help and CBT work. It aims to provide some ideas for readers of what self-managed MPA might look like. Chapter 5 presents the methodology, which introduces qualitative research, and the reasons for taking a qualitative approach to my research questions. This chapter also includes an overview of the research design, a brief description of the pilot study, the main study, data analysis, and addresses ethical issues.

There are four data analysis presentation chapters: Chapter 6, strategies used in preparation for different types of performance during a timeline leading up to a performance; Chapter 7, strategies in context: people and places; Chapter 8, understanding the strategies: metacognition in musical learning and managing MPA; and Chapter 9, MPA self-management and the teaching–learning cycle. In Chapter 6, the data is analysed in accordance with Roland’s (1994) argument that the strategies used could be discussed in relation to different time periods before performance. Moreover, it will discuss the strategies’ use in relation to different types of performances. The aim of this chapter is to examine the strategies used by focusing on when the strategy was used and in relation to which types of performance.

Chapter 7 explores the role of peers, teachers, and others in assisting participants' MPA management and the impact this had on self-management. It will discuss four categories: solitary; working with peers; teacher assistance; and practice in solo-aided conditions along with different MPA-coping strategies in four performance situations. These include the pre-research situation, concert preparation, exam preparation, and recital preparation. It then proposes that there is a correlation between student-led strategies and learning to learn. Chapter 8 examines the role of metacognition in musical learning and management of MPA. It examines the development of metacognitive skills both in learning instruments and managing MPA among all year levels. This chapter is presented based on the notion of conceptual change in learning an instrument and MPA management. Chapter 9 discusses MPA self-management in the teaching-learning cycle, which provides interesting insight into potential applications of this research. It will discuss, through four situations, the different ways of teaching MPA strategies that students believe they would apply in their future teaching careers. Chapter 10 concludes with an account of the limitations of the research, a discussion as to how the findings fill the current research gap in the existing literature, provides suggestions for future research, and recommendations for college musicians, teachers, and institutions, as well as researchers exploring the management of MPA.

## **Chapter 2. Musical performance anxiety (MPA)**

### **2.1 What is musical performance anxiety (MPA)?**

MPA is often known as 'stage fright' and is a common problem for musicians. Studies concerning the prevalence of MPA have included reports from Europe, the Americas, Asia, and Oceania, indicating that MPA might be neither racially nor culturally specific (Cox & Kenardy, 1993; Fehm & Schmidt, 2006; Fishbein *et al.*, 1988; Huang, 2006; Huang, 2014; Kenny, Davis & Oates, 2004; Kokotsaki & Davidson, 2003; Patston, 2014; Yen, 2006). Most of these studies refer to Western classical music (Bartel & Thompson, 1994; Fishbein *et al.*, 1988; James, 1997; Yondem, 2007). However, MPA can also occur in the learning of different music genres. Green (2008) investigated how informal popular music-learning practices are incorporated into formal music education. She found that pupils learning popular music in groups experienced MPA in their lessons as they realise at some point that their skills and knowledge levels are below those needed for the accurate rendition of a song (Green, 2008). She also found that pupils seemed to go through a cycle of success, deterioration, then improvement in the progression of learning popular music by working in a band setting. Papageorgi, Creech and Welch investigated MPA perception in 170 undergraduates and 74 portfolio-career musicians trained in Western classical, jazz, popular, and Scottish traditional music (Papageorgi, Creech & Welch, 2013). They found

that musicians from these four participating musical genres shared similar MPA perceptions and concerns, including both positive and negative connotations. Western classical musicians were generally found to report higher levels of MPA compared to musicians from the other genres, especially in solo performance contexts, indicating that the performance context is likely to influence musicians' perceptions of MPA and efficiency in coping with the demands of performance. But future research is needed to consider the interaction of musical genre specialisation with other key variables, such as type of performance, which are likely to determine the extent to which musicians will experience performance anxiety (Papageorgi, Creech & Welch, 2013).

Gabrielsson (1999) mentioned that MPA appears not only on stage but also in offstage playing, although it is usually reported less frequently. For example, college musicians may experience MPA when taking one-to-one tuition. MPA is more significantly related to the development of self-imposed standards and developing perfectionism (Patston, 2014). From a clinical perspective, MPA at severe levels may meet diagnostic criteria for social anxiety disorder and may conform to a distinct subtype of social phobia similar to public speaking anxiety (Sadler & Miller, 2010). In essence, it arises from the effects of an 'exaggerated fear of performing in public' (Kokotsaki & Davidson, 2003; Wilson, 2002). For example, people may be filled with feelings of panic in public performance situations.

Interestingly, MPA not only occurs in music performance majors, but may also be experienced by music education students. Conway *et al.* (2010) explored the perceptions of the tensions experienced by music education students. They investigated thirty-four instrumental music education undergraduate students using a qualitative approach and employing a case-study design. They found two common concerns among music education students. Firstly, students reported they felt it was hard to balance time between practising (performance related), homework (i.e. readings for methods class), household tasks, and relaxing or socialising. As a result, students feared individual performance development was sacrificed in favour of a music education degree, owing to difficulties in time management. Secondly, students often experienced frustration that their efforts and accomplishments were not as visible on campus as those of performance majors (Conway *et al.*, 2010). Although my research does not focus on the ‘music education student,’ existing literature has offered different perspectives on the causes of MPA related to my research, such as time management.

Bernhard (2005) reviewed research literature regarding burnout and general mental health in music education. She indicated that when considering stress issues in relation to general college life and teacher burnout, music education majors might have unique mental health needs. She suggested that there is a need to teach

intrapersonal (i.e. time management skills, study strategies, physical organisation, diet, and exercise) and interpersonal (i.e. effective appropriate relationships with peers and family) mental health skills as a component of music education programmes. She also suggested that, owing to the current curricula of music education, programmes may lack room for additional courses addressing these issues.

Nevertheless, it may be possible to have a short course to learn these skills, such as a seminar or workshop. Moreover, she believed that students who observed professors maintaining appropriate interpersonal and intrapersonal mental health might value and practise related skills (Bernhard, 2005). This emphasises the importance of the teacher's role in all aspects of musical learning.

Patston (2014) discussed the nature of MPA and its prevalence in various populations through a review of relevant literatures. He mentioned that even though much of the literature indicates the importance of MPA, it is still rarely discussed in the field of music education (Patston, 2014). He then argued that music educators have a critical role in the developmental trajectory of the condition and provided music educators with advice on how teaching practice can ameliorate developing or extant MPA in their students, such as embedding knowledge of the management of MPA in one-to-one pedagogy (Patston, 2014).

In recent studies, the development of managing MPA

intervention programmes in music colleges has been mentioned frequently (see Section 2.2, p. 64). It is possible that institutions have noticed the prevalence of MPA and its importance. However, these intervention programmes may be independent courses for college musicians, in which case managing MPA strategies may not be embedded in one-to-one tuition. This may establish a gap between MPA intervention programmes and one-to-one tuition. This is because, in the training and education of classical musicians in higher education, one-to-one tuition has long been accepted as the most effective teaching/learning environment and continues to be highlighted as central to success (Gaunt, 2011).

Instrumental and vocal learning in conservatoires is influenced deeply by the interaction and relationship between one-to-one tuition tutors and students. Gaunt (2011) investigated the one-to-one relationship in instrumental/vocal tuition in higher education by comparing student and teacher perceptions at a conservatoire in the UK. One of the findings is that there is a power dynamic in the relationship, through which students tend to be strongly influenced by their teachers in terms of their opinions about the appropriate social dimensions of the relationship. For example, students follow teachers' suggestions and trust them without doubts and questions. Teachers trust that students are carrying out what they advise them to do, as the advice comes from teachers' experiences and

understanding. This power dynamic in one-to-one tuition may influence the ways in which students learn MPA-coping strategies from the independent MPA intervention courses. For example, students may acquire various strategies from independent MPA intervention courses. Yet they may still only adopt the strategies provided by their one-to-one tuition teacher, such as increasing the amount of practice time or eating healthy foods. Gaunt (2011) suggested that although musicians may have access to and input from a number of professionals other than their one-to-one teacher (i.e. academic teaching staff, chamber coaches, and health professionals), there is perhaps rarely the same kind of teamwork between them, nor is there the detailed building of a personalised training and development programme. The one-to-one teacher in higher education music, for example, often still works in relative isolation, with little connection to a student's other learning experiences (Gaunt, 2011). As a result, it is important that institutions consider the gap between developing an independent MPA intervention programme and the power of one-to-one tuition in a conservatoire learning environment.

This is particularly relevant when considered in light of many young musicians' development of teaching careers. González (2012) mentioned that, even without teacher training, college musicians had already developed a certain pedagogical identity, their own way of teaching, and preferred teaching styles. This is because college

musicians' experiences as learners (i.e. reflections on learning experiences as performer-learner and their teachers' teaching style) influence their own way of teaching and their preferences in teaching style. The process of learning how to teach through reflection on learning experiences can be considered as a metacognitive skill. Metacognition is often associated with the development of musical learning in music education literature (Hallam, 2001a; Hallam, 2001b; Hallam & Bautista, 2012). In musical learning, the metacognitive skills concern all aspects of practice, from musical techniques to psychological strategies. The metacognitive strategies may show considerable differences between different levels of musical ability, such as beginner and expert, and individual differences among musicians and novices at the same level of competence (Hallam & Bautista, 2012).

Hallam and Bautista (2012) state that the key element in the development of expertise is metacognitive skills. There are three stages in learning skills: 1) the cognitive-verbal-motor-stage; 2) the associative stage; and 3) the autonomous stage. The first stage means that learners learn a task through self-instruction which is under cognitive and conscious control. When learners begin to put sequences of response together more fluently, identifying and correcting errors, it means they may be in the second stage. In the autonomous stage, the skill becomes automated, which means that it

is carried out without conscious effort. The skill continues to develop each time it is used, becoming more fluent and quicker.

In learning to play an instrument, many skills are acquired simultaneously, new skills are constantly being added to the task, and skills learnt earlier are continuously practised so they achieve greater automaticity (Hallam & Bautista, 2012). According to Hallam and Bautista (2012), 'the levels of automaticity that are developed in relation to skills frees up working memory for other tasks. Problems are viewed and represented at a deeper level, and more time is spent analysing problems before attempting solutions' (p. 660). For example, in music practice, when musicians begin to learn new repertoire, they may run through the repertoire first. Then they can identify the most challenging passages which need to more work, constantly monitor their own practice, and review their learning progress through self-evaluation. Through such metacognitive processes of learning, students come to understand how they learn, and this may also be a mechanism that they use to identify ways to teach. Apart from skills learning, researchers found that there is a conceptual change of instrumental learning as students develop expertise (Hallam & Bautista, 2012). These conceptual changes concern learning as a concept, strategies, and their conception of evaluation. The three levels of instrumental education are summarised in the table below.

*Table 6: Conceptual changes in instrumental learning*

	Learning concept	Learning strategies	Conception of evaluation
Early years/Novice	Repetitive practice	Playing notes correctly	External judgements by teachers
Intermediate level	Organised and systematic	Interpretative position by focusing on increasing number of dimensions in sequence	Educational practice, allocating marks and correcting mistakes
Advanced level	Reflection and self-regulation	Constructivist	Different interpretations of the same repertoire can be equally valid

Although these conceptual changes do not have direct links to MPA, this shows that metacognition plays an important role in changing students' learning strategies, learning concepts, and conception of evaluation as they develop expertise. As a result, it is important to consider that students' strategies used in managing MPA and their conceptions of MPA may also change through the development of expertise.

### **2.1.a. The types of anxiety**

Since the 1960s, anxiety has been understood in terms of two different types: state anxiety and trait anxiety. The definition of state anxiety is characterised by subjective, consciously perceived feelings of fear and tension, accompanied by or associated with the activation or arousal of the autonomic nervous system, and a perception of impending harm appraised as virtually inescapable. In other words, it is a tendency in a particular situation. An example of state anxiety is when a musician experiences anxiety immediately before a performance. As to trait anxiety, it is a stable, individual difference in proneness to anxiety; that is, there are differences in the disposition to perceive a wide range of stimuli or situations as dangerous or threatening. It can be seen as the tendency to respond to threats with state anxiety reactions. An example of trait anxiety is the case where musicians feel anxious in general, not limited to specific moments immediately prior to a performance (Kenny, 2011; Kokotsaki & Davidson, 2003; Papageorgi, Hallam & Welch, 2007; Sadler & Miller, 2010). According to Martens *et al.* (1990), two aspects of performance anxiety and partially independent components of competitive sport anxiety have been identified; these are cognitive anxiety and somatic anxiety. Cognitive anxiety is to feel concerned about the consequence of failure. Its symptoms are negative expectations, negative bias in their retrospective self-evaluation of performance, extreme concern

over the result of performance, and heightened responsiveness to change in the face of the reactions of judges or the audience. The definition of somatic anxiety is negative perception of the meaning of physiological arousal prior to performance and conditioned fear responses associated with the performance venue. It may occur in the form of physical symptoms during heightened MPA, such as muscle tension (Kenny, 2011).

### **2.1.b. Symptoms of MPA**

The symptoms of MPA may be generally described as mobilising the body to attack enemies. According to Lang *et al.* (1988) as cited by Papageorgi, Creech and Welch (2013), anxiety symptoms can be categorised as being present in three ways: physiological (bodily reactions to heightened arousal); cognitive (thoughts related to mental images of danger and threat); and behavioural (inclination to keep or run away from everything perceived as dangerous). Gabrielsson (1999) mentioned that automatised behaviour is often inhibited or disrupted when the player begins thinking about his or her performance, such as lifted shoulders (see also Table 7, below).

*Table 7: Symptoms of MPA*

Category	Symptoms	Example
Physiological symptoms	An increase in heart rate, dry mouth and shortness of breath.	String players with cold hands and a lack of finger control. (Gabrielsson, 1999).

Cognitive symptoms	Fear of making mistakes and excessive worries over one's performance and the consequences of failure.	Loss of concentration, memory failure, and misreading of the score (Steptoe, 2001).
Behavioural symptoms	Bow hands (e.g. left hand holding the right hand), lifted shoulders, weak and shaky arms, errors in performance, frequent visits to the toilet, and isolating behaviour (Gabrielsson, 1999; Roland, 1994).	Failure of technique and loss of posture (Steptoe, 2001).

In addition, Steptoe (2001) mentions that the primary component of MPA is affect or feelings, such as anxiety, tension, apprehension, dread, or panic (Steptoe, 2001). Although it seems that the symptoms of MPA may influence performance quality, the effects of MPA have been reported as both positive and negative by researchers. Some researchers have found that MPA may be of benefit to musical performance, such as Hamann and Sobaje's research in 1983. As a result, the following section will explore both the positive and negative effects of MPA.

### **2.1.c. The positive and negative effects**

Wesner, Noyes and Davis (1990) investigated the experience of performance anxiety in students and faculty staff through a

questionnaire. They found that auditions and solo performances were situations rated as being the most anxiety-provoking. The same result can be found in research by Papageorgi, Creech and Welch (2013), which found that solo performances tended to evoke higher levels of performance anxiety compared to group performances. MPA perception may need to be considered in combination with other factors, such as musical genre and performance text (i.e. solo and ensemble), and the MPA-coping strategies which need to be person- and performance-specific.

Wesner, Noyes and Davis (1990) indicated that the most common symptoms of MPA (in order) were poor concentration, rapid heart rate, trembling, dry mouth, sweating, and shortness of breath (Wesner, Noyes & Davis, 1990). In their study, nine percent of participants (of a total of 302 participants) admitted that they often avoided performance opportunities because of anxiety and thirteen percent reported that they had interrupted a performance on at least one occasion owing to anxiety. Over a third felt that anxiety had at least some adverse effect on their careers and fifteen percent had sought help for an anxiety issue (Wesner, Noyes & Davis, 1990).

Normally, the negative aspects of MPA receive more attention than the positive effects. Hamann and Sobaje (1983) found that MPA had positive effects owing to 'drive theory' (Hull, 1943). They observed that literature in psychiatric and psychological research

reveals that anxiety theories in learning behaviour have been formulated based on performance factors.

There are three theories that can provide insight into research on MPA's positive effects: drive theory, Spielberger's extension of drive theory, and trait-state anxiety theory. These theories indicate that individual responses to anxiety may differ in different situations and between people with varying levels of training, ability, and anxiety (Hamann, 1982).

Drive theory was first established by Clark Hull in 1943. The theory predicts a linear relationship between drive (arousal) and performance. This theory helps explain why some individuals find it difficult to perform well under pressure, whereas others find it helpful and perform better under pressure. The differences may depend on the difficulty of the task for the subject, skills level differences between beginners and experienced performers, and the degree of task mastery (Liu, 2016; Gabrielsson, 1999). According to Hull's drive theory, as cited by Kent (2006), if a subject's arousal or state anxiety increases and the task difficulty is appropriate for the subject, it can enhance performance quality. But if the subject experiences over-arousal and the task is complex, it may result in poor performance, known as the theory of the inverted-U.

The inverted-U hypothesis states that performance improves with increasing levels of arousal up to an optimal level. If the arousal

level goes beyond that, it may lead to a detrimental effect on performance. The optimal level of performance varies between individuals doing the same task and/or an individual doing different tasks (Kent, 2006). As to Spielberger's extension of drive theory, it contains predictive statements concerning the effects of anxiety and intelligence on performance in learning tasks that vary in difficulty (Hamann, 1982). Hamann (1982) examined the effect of anxiety in musical performance and assessed the musical quality of subjects' performances under enhanced and reduced anxiety-performance conditions among ninety music students by using a state-trait anxiety inventory and state-trait personality inventory. He found that superior intelligence in musicians may facilitate high anxiety on learning tasks. While high anxiety may initially cause performance detriments in very difficult tasks, it will eventually facilitate the performance of bright individuals as they progress through the task and the correct responses become dominant (Hamann, 1982).

Drive theory and Spielberger's extension of drive theory may both positively and negatively affect the individual's ability to perform, depending on their task mastery<sup>4</sup> or their training. The difference is that drive theory does not explicitly differentiate between trait and state anxiety (Hamann, 1982). Hamann (1982) found that there was a relationship between the number of years of

---

<sup>4</sup> Task mastery refers to the level of a musician's skill in carrying out a performance task, an important factor in MPA (Lehmann, Sloboda & Woody, 2007).

study and performance quality within high or low anxiety conditions. The participants with the greatest number of years of formal study were rated superior under anxious performance conditions as compared to participants with fewer years of formal study (Hamann, 1982). Moreover, in his study, participants with greater task mastery performed better because increased anxiety states facilitated performance, which could link to drive theory, in that the mastery of a task (habit strength) and anxiety are related.

Trait-state anxiety theory specifies the conditions under which subjects differing in trait anxiety would be expected to show differences in state anxiety under performance conditions dependent on drive and task mastery (Hamann & Sobaje, 1983). According to the theories above, anxiety may have positive effects on enhancing performance quality. But the quality of performance still depends on the degree of task mastery and individuals' levels of trait anxiety. Hamann and Sobaje examined sixty college musicians under both formal school exam (judging) situations and via tape recordings, using state and trait anxiety level measurements and a state-trait personality inventory (Hamann & Sobaje, 1983). They found that increasing anxiety tends to facilitate performance skills, especially for subjects with high task mastery. Furthermore, musicians' states anxiety increased in situations where they were being judged and performance ratings were better.

This study may not support researchers who study anxiety reduction. However, it provides the perspective that the level of ‘task mastery’ may be one of the factors that can turn MPA into a positive way to enhance performance quality for college musicians. As a result, it proposes the question of ‘how to increase the level of “task mastery”.’ This may relate to strategies for coping with MPA, such as making a practice plan and time management.

**2.1.d. What factors contribute to musical performance anxiety?**

In Gabrielsson’s (1999) study, there are seven contributing factors that may raise the level of MPA: overuse, technical perfection, expectations of others, self-imposed expectations, auditory style, the relationship between pathology in the individual’s family and MPA, and age and increased experience of performance. I have divided these into three categories: factors, causes/definitions, and effects (see Table 8, below).

*Table 8: Gabrielsson’s study*

Factors	Cause/definition	Effects
Overuse	May be caused by genetic factors, musical technique, and the intensity of practice.	Physiological damage.
Technical perfection	A frequent cause of tension and feelings of inadequacy.	Increase the level of MPA both in trait
Expectations of others		

Self-imposed		anxiety and state anxiety.
Auditory style, that is, a person who has acute sensitivity to music. For example, musicians were aware that their emotional experiences with music were very different from those with speech in ways not amenable to verbal description. They felt drawn to re-experience musical events that had affected them.	Cognitive traits and state anxiety are a significant correlate and predictor of high scores in auditory style for musicians.	1. Generates state anxiety for musicians but not for non-musicians. 2. Avoiding performances because of performance anxiety. 3. Practising more, with a higher incidence of tendonitis; received physical and occupational therapy more than musicians with mid or low auditory-style scores.
Relationship between pathology in family and MPA	Parents' resistance towards a musical career, rather than failure.	MPA may paradoxically reflect a fear of success.
Age and increased experience of performance	As a performer's reputation grows, expectations of performance also grow, thus generating constant pressure to maintain or heighten one's standard.	May affect one's self-perception.

Sârbescu and Dorgo found that personality dimensions might contribute to MPA. Clearly related to MPA are neuroticism, introversion, and trait anxiety (Sârbescu & Dorgo, 2014). However,

Sadler and Miller found that individuals' predisposition to MPA was associated with increased years of study. Furthermore, personality disposition was offset by years of formal training and MPA decreased over successive performances under varying circumstances (Sadler & Miller, 2010). Based on their theory, 'years of formal training' may be one of the factors that can reduce the level of MPA. Yet, 'years of formal training' may not relate to undergraduate year levels.

Kokotsaki and Davidson (2003) examined the chronological effects of anxiety levels on musical performances among forty-three second- and third-year undergraduate students from the Guildhall School of Music and Drama through questionnaires (Kokotsaki & Davidson, 2003). They found that third-year students, whose musical performance levels normally surpass those of second-year undergraduates, exhibited a pre-performance anxiety level greater than that of their younger peers. Ely (1991) stated that frequent performances would afford students more opportunities to find their own methods of coping with MPA.

But fewer 'years of formal training' may not be the only factor to contribute to the level of MPA. Brandfonbrener indicated that performance anxiety has different origins, meanings, and manifestations as varied as the individuals in which it occurs (Brandfonbrener, 1997). For instance, individuals' value and task difficulty may be different for the same task. This is because task

difficulty and value may relate to confidence and self-efficacy.

According to Papageorgi, Hallam and Welch (2007), when the subjective value attached to a performance is great (i.e. a high level of task difficulty), the potential for experiencing high levels of MPA is increased.

Literature on years of experience related to MPA is variable. Steptoe and Fidler (1987) investigated the relationship of stage fright with public performing experience among three groups of musicians (i.e. experienced orchestral musicians, music students, and amateur musicians). They found higher levels of stage fright among students compared with professional musicians. This difference could be ascribed either to age or to performance experience. Within the professional group itself, MPA was negatively correlated with age and level of public performing experience (Steptoe & Fidler, 1987).

However, they then argued that this finding cannot be interpreted unequivocally, as exposure to public appearance leads to a reduction in MPA. There are other factors that might have influenced their data, such as highly performance-anxious musicians who might have given up the competitive occupation of working in a top-level orchestra at an early age, leaving a preponderance of low-anxiety older musicians.

The existing literature provided useful accounts of age and performing experiences in relation to levels of MPA, but future research could look at this from different angles. For example, future

research could explore MPA strategies used among these three groups of musicians in order to examine what difference 'age' and 'performance experience' make. (E.g. Would professional musicians' groups only include those who had managed to find their own coping MPA strategies or who had lower MPA in first place?)

Similar findings can be found in Wolfe's research. Wolfe studied the relationships between several measures of MPA (i.e. adaptive anxiety scale, maladaptive anxiety scale, and MPA scale) and personal factors (i.e. age, gender, professional experience, years of private study, and so on) among 193 professional and amateur musicians (Wolfe, 1989). She found that musicians with some professional performing experience had significantly higher scores in confidence and significantly lower scores in nervousness. Yet, although older musicians appeared to be slightly less anxious, gender, performing mode, and years of private study were unrelated to anxiety. This is because some degree of stress and tension is necessary for effective musical performance (Wolfe, 1989).

Other researchers have found that perfectionism is one of the contributing causes. The efforts of many teachers, in striving for achievement for their students, can lead to those students striving for perfectionism as they search for correct pitch and perfect technique. Feelings of MPA and perfectionism may be generated in students over the course of many years of having lessons with the same teacher,

who they hold in high regard. Perfectionism has been identified as a major source of psychological distress, giving rise to maladaptive behaviours and physical complaints (Patston, 2014; Wristen, 2013). 'Sensitivity and criticism' may trigger MPA as well: sensitivity and criticism may affect motivation and performance in music students who have tendencies towards being highly competitive, maintaining high self-standards, and show tendencies towards low self-esteem and high anxiety, often harbouring feelings of envy towards other musicians (Atlas, Taggart & Goodell, 2004).

In addition, 'insufficient preparation' is another of MPA's contributing factors, which results from a sense of insecurity in performers. They may feel this as a result of their personality or psychobiological state. They may also believe they are unable to perform because of a lack of ability (Roland, 1994). Ely (1991) studied how teachers help young musicians handle MPA, suggesting that being certain that the music has been well prepared is the most important factor in eliminating MPA. He stated that practice makes relaxed performers, as practice can eliminate doubts that musicians have about their abilities to perform (Ely, 1991). However, practice may help in terms of improved musical performances, but it may or may not reduce MPA. The ways to control the factors contributing to MPA may relate to the MPA-coping strategies used. For example, fewer years of performing experiences may be one of the factors

contributing to MPA (Steptoe & Fidler, 1987). Increasing performing experiences through contrived performance situations or imagination (i.e. visual rehearsal) may be appropriate MPA-coping strategies to control this factor. However, the literature discussed in this section shows that MPA-contributing factors are various, multiple, and individual. Therefore, it is crucial to understand how MPA is perceived by different individuals and how they learn several MPA-coping strategies.

#### 2.1.e. Comparison level of MPA

Many researchers have shown that the comparison level of MPA can be categorised in several ways. I have classified them according to the literature, as shown in Table 9, below.

*Table 9: Variables used in MPA research on comparison level of MPA*

Category	Comparison
Gender	Women reported that they have stage fright more than men, and that most problems occur in string players, followed by woodwind, brass, and percussion (Gabrielsson, 1999).
Performance setting	<i>Audience:</i> students show the highest MPA when playing in front of peers or critics, and females reported more perceived MPA than males (LeBlanc <i>et al.</i> , 1997). Individuals experienced significantly increased anxiety in judging situations compared with non-judging situations, but the quality of performance was better in

	<p>judging situations than non-judging situations (Spencer, 1969).</p> <p><i>Performance type:</i> solo performance creates higher MPA than ensemble performance. This is because solo performance anxiety is close to social phobia, such as fear of negative evaluations and judgemental attitudes (Taborsky, 2007; Papageorgi, Creech &amp; Welch, 2013). Playing in a small orchestra leads to higher MPA than playing in a large orchestra. Increasing the number of co-performers decreases the nervousness of musicians (Gabrielsson, 1999).</p>
<p>Personal variables</p>	<p>Students whose musical performance ability surpassed others exhibited a higher level of MPA (Taborsky, 2007).</p> <p><i>Trait and state anxiety:</i> Individuals with high trait anxiety will experience a greater increase in state anxiety than individuals with low trait anxiety. However, individuals with high trait anxiety and low performance skills will be more anxious and the quality of performance will decrease to a greater extent than those who have high trait anxiety and high performance skills (Gabrielsson, 1999; Sadler &amp; Miller, 2010).</p> <p><i>Somatic and cognitive anxiety:</i></p> <p>High levels of somatic arousal can lead to low cognitive anxiety, and high levels of cognitive anxiety occur with low somatic arousal (Osborne &amp; Kenny, 2008).</p> <p>Low cognitive anxiety and low somatic anxiety result in a better quality of performance if self-confidence is high.</p> <p>High cognitive anxiety, low somatic anxiety and high self-confidence result in the best quality of</p>

	<p>performance.</p> <p>High cognitive anxiety, high somatic anxiety, and low self-confidence result in a worse quality of performance.</p> <p>(Kenny, 2011).</p>
Instrumental types	<p>String players reported significantly higher levels of both adaptive and maladaptive anxiety than other instrumentalists (Wolfe, 1989).</p>
Emotionality	<p>Musicians with low MPA did not show significantly higher levels of positive emotionality (PEM), as might be expected if PEM offered protection against MPA. High negative emotionality (NEM) musicians reported about the same level of MPA as low NEM performers with equivalent years of study (Sadler &amp; Miller, 2010).</p>
Years of formal training	<p>High formal training had better adjudicated performance scores under enhanced anxiety situations than in reduced anxiety conditions as compared to subjects with medium or few years of formal training (Hamann, 1982).</p> <p>Students with more performance experience perceived more anxiety in advance of, rather than during, the performance itself (Taborsky, 2007).</p> <p>Professional musicians experienced more adaptive anxiety and less maladaptive anxiety than amateur musicians (Taborsky, 2007).</p>

It seems that gender, performance setting, personal variables, instrumental types, emotionality, and years of formal training may cause individuals to perceive MPA differently. In other words, MPA is conceptualised as a multidimensional construct persisting over time.

The following examples from literature draw on ‘timing’ and how it can be explained. LeBlanc (1994) evolved a theoretical model to represent the process of preparing and presenting a music performance from beginning to end, based on a person preparing a solo performance (see Table 10, below).

*Table 10: LeBlanc’s eleven-level hierarchy of MPA*

Level	Definition	Example
11	Performer's characteristics and learning history. This includes age, musical ability, musical training, personality, degree of performing experience, quality of performing experience, and memory of circadian rhythm.	Adolescent performers may be vulnerable to MPA. Pessimists’ musical ability and experience facilitate easing MPA.
10	Difficulty and appropriateness of music for performance.	Some music that is more difficult to play or sing than other music will abet MPA, owing to excessive difficulty.
9	Adequacy of the musical instrument for the performance task, adequacy of preparation to perform, and adequacy of physical conditioning.	Lack of practice, inadequate strings for string players, and so on.
8	Performers’ emotional and physical health.	Performing under conditions of emotional or physical duress.
7	The performer’s current affective state in preparation of performance.	The performers’ mood, such as happy or pensive, will change when it is almost time to play or sing.

6	The variable performing environment (i.e. measurement of devices and procedures, physical comfort in the environment, presence and behaviour of audience members, memorisation requirements, distraction and time of day).	Performing from memory, presence and behaviour of the audience, peers, and so on.
5	Self-perception immediately prior to the performance including perceived difficulty of music, appropriateness of music, adequacy of preparation, individual exposure, importance of performance, perception of their own experience, and audience support.	The performers' beliefs about various conditions, such as the music's difficulty and appropriateness, and adequate preparation.
4	Physical and psychological condition of performer.	Biological and cognitive processes.
3	Focusing of attention (actual performance).	The more the performer focuses on the performance itself, the less he/she will focus on MPA.
2	Self-perceptions of the fifth level, and immediate feedback (during performance).	Performers receive immediate positive/negative feedback through their own hearing.
1	Subsequent feedback or evaluation (after performance).	Audience's comments, reviews, rating, and evaluations.

Although LeBlanc developed this hierarchy by performance preparation through time, he emphasised that individuals' backgrounds (i.e. age, musical ability, personality), and the number

and quality of performing experiences and so on are variables that may need to be taken into account when assessing individuals' levels of MPA. This theory may allow the incorporation of all the major variables that influence the development and treatment of MPA and offer immediate accessibility for use by music teachers and performers (LeBlanc, 1994).

Other researchers have found that MPA often reaches a peak just before performance (Gabrielsson, 1999; Papageorgi, Hallam & Welch, 2007). However, Salmon, Schrod, and Wright (1989) examined manifestations of MPA among forty undergraduate music majors performing in front of judges. They used questionnaires that assessed feelings, thoughts, and physical sensations related to the experience of MPA at four intervals: one day before performance, one hour before performance, during the performance itself, and on an average day-to-day basis. They found that the participants' anxiety peaked during performance, was less elevated one hour before performance, less again one day before performance and was least on an average day-to-day basis. They also suggested that performing experiences and age may influence the perception of MPA, as they found that participants starting at a younger age reported greater anxiety one hour before performance than during performance. It seems that the relationship between MPA-coping strategies and MPA are complex and depend on individual context.

As Steptoe (1989) mentions, coping is defined as a musician's behavioural and cognitive efforts to avoid and reduce the effects of potentially stressful situations. These efforts may change in response to different variables, such as context, individual predisposition, condition, age, and performing experiences (Biasutti & Concina, 2014; Salmon, Schrodts & Wright, 1989; Wolfe, 1989). As a result, when adopting MPA-coping strategies, musicians, music educators, and researchers should take these variable factors into account. Taborsky reviewed literature regarding MPA and its potential effects on musicians (Taborsky, 2007). He suggested that public school music educators who understand issues related to MPA could possess tools to assist college music majors. Although he did not mention clearly what these tools are and how to assist college music majors, some colleges have already implemented programmes related to MPA issues.

## **2.2 Current practices of MPA management in higher education**

MPA is an important issue for music schools in Taiwan. Some Taiwanese researchers have examined the effects of MPA among TCMs (Huang, 1999; Huang, 2005; Yen, 2006). Huang suggested that many TCMs are willing to gain basic knowledge of MPA and the best ways of coping with it, as they report MPA negatively influences their performance quality (Huang, 1999). Furthermore, she indicated that

MPA issues exist not only among TCMs, but also among professional musicians (Huang, 2005). However, studies on MPA management in Taiwan and publications in Taiwanese about MPA are limited, even though researchers have noticed and realised its importance (Liu, 2016). The MPA studies in Taiwan are mostly focused on the symptoms of MPA, its effects, and the level of MPA in different performance situations. Few Taiwanese studies seek to examine MPA-coping strategies and current practices of MPA management in Taiwanese music colleges.

In 1999, the Central Conservatory of Music, Beijing, China, developed a programme to cope with MPA. In the United States in 1998, the Juilliard School, New York, developed a new programme devoted to coping with performance anxiety, including the Alexander Technique. Nowadays, some institutions combine courses relating to coping with MPA with new technology facilities, such as the performance simulator at the Royal College of Music, London, UK. Williamon, Aufegger and Eiholzer investigated the efficacy of simulated performance environments in which conditions of a 'real' performance could be recreated using new technology in the form of a 'performance simulator' among eleven college violinists (Williamon, Aufegger & Eiholzer, 2014). Participants completed a questionnaire about their experiences of using the simulator in two performance environments, a small recital and an audition. They found both

simulated environments offered convincing and realistic experiences of performance contexts and were rated as being particularly useful for developing performance skills. This finding suggested that performance simulators could be useful tools for teaching musical skills more efficiently, as musicians could not only highlight their performance strengths but also address their weaknesses. Moreover, musicians can access this tool repeatedly and consistently, at controlled levels of risk and with pre-defined outcomes. However, owing to MPA-contributing factors being various and individuals' performance capabilities being different, the precise method of using this tool for individuals may still need to be explored further (Williamon, Aufegger & Eiholzer, 2014).

Awareness of musicians' mental health and wellbeing issues has been increasing in the UK among professionals and college students in recent years. The BBC radio programme *Music Matters*<sup>5</sup> discussed mental health issues from different perspectives by inviting psychotherapists, scientists, and students from a conservatoire to discuss their experiences. One of the interesting discussions pointed out that there is an interaction between mental and physical health. Mental and physical health are strongly related to each other, and it is hard to identify which comes first. In other words, physical injuries can result in MPA; as well, anxiety may lead to physical injuries. The

---

<sup>5</sup> 'State of Mind: Music and Mental Health,' *Music Matters*. 2017 [Radio]. BBC Radio 3. 10 August, 2017. Available from: <http://www.bbc.co.uk/programmes/b08cgvlp>.

professionals then suggested that musicians have conversations with health professionals, such as GPs who can help both physical injuries (e.g. back pain) and mental issues (e.g. anxiety). They also suggested it would be interesting to explore how to help musicians to go onstage through applying the training model used by football teams. For example, in music performance, a teaching team only helps musicians to go onstage, whereas in sport performance, a football team is supported by a physiotherapist, a performance coach, a psychologist, and medics.

A study conducted in Germany in 2016 discussed the development of an intervention programme and examined its effects under audition conditions (Spahn, Walther & Nusseck, 2016). The researchers stated that the intervention programme offered a multimodal approach, integrating psychological strategies and training in musical ability in order to give students the opportunity to choose their own strategies to cope with MPA. The study provides details of the MPA intervention programme. The intervention programme in this research can be categorised in three parts: 1) working on performance practice; 2) exercises for coping with MPA; and 3) a theoretical framework. These three parts consisted of fourteen seminars. 'Working on performance practice,' aimed at exploring 'nonverbal expression' by video recordings; 'giving feedback' to each player by all participants in order to learn psychological

strategy; a 'concert in class', providing new ways for participants to explore both playing and coping with MPA situations; and 'subgroups' learning 'to work on musical techniques.' The second part is 'exercises for coping with MPA'. It includes cognitive techniques (i.e. cognitive restructuring), mental preparation exercises (i.e. imagination and mental rehearsal), and body-oriented exercises (i.e. relaxation exercises and breathing). The 'theoretical framework' gives information on performance principles and coping strategies for different phases of an audition. It offers an understanding of physiological and psychological concepts of performing in order to cope with the challenges. In their study, there were thirteen participants (eight students in the control group), who participated the intervention programme of fourteen weekly sessions and were required to perform in two simulated auditions, at the beginning and at the end of the semester. They filled in self-assessment questionnaires related to MPA at both auditions. Two judges rated the performances in both auditions. As well, audio recordings of the performances were sent to orchestral musicians for appraisal. The intervention programme was shown to have a positive influence on how they prepared for an audition, how the musicians felt, and how they handled MPA during an audition. The positive effect on music performance quality showed not only within the evaluations by the college musicians themselves, but was also supported by the judging

panels and the external orchestral musicians. It also found that, after performance, students were more pleased with their achievements than those not taking the intervention programme.

Spahn, Walther and Nusseck (2016) stated that these findings were consistent with the aim of the seminar to teach students to accept their own performances and not to concentrate on mistakes. Positive cognitive strategies were part of the repertoire of coping strategies offered in the seminar. To more positively accept their own efforts and to not search for mistakes during and after auditions were central issues of the intervention, because the significant role of perfectionism in disabling performance has been shown in several studies (Dews & Williams, 1989; Kenny, Davis & Oates, 2004).

Although this study supports the thesis that MPA-coping strategies are functional and can enhance performance quality as well as students' achievements, it does not explain how students choose their own strategies, what strategies they choose or what motivates their choice. This may be because this research adopted a questionnaire method, which limits the researchers' ability to examine the conditions of participants using MPA-coping strategies in detail. Furthermore, the aim of this research was to explore the result of the effectiveness of MPA interventions rather than understand the process of how the participants cope with MPA.

From my personal perspective, it would be better to

understand the individual process of participating in intervention programmes in order to improve those programmes in the future and give other music educators and musicians more examples for ways to cope with MPA. This is the reason for my research exploring how TCMs self-manage MPA. In addition, this study only focuses on the 'audition' situation, whereas students may need different strategies to cope with MPA in different performance situations; this, therefore, is also explored in my research.

Students in different year levels may need different strategies, as levels of anxiety may differ according to year level (Kokotsaki & Davidson, 2003). Kokotsaki and Davidson examined the MPA levels of twenty-one second-year and twenty-two third-year students majoring in vocal performance at the Guildhall School of Music and Drama in London during their mid-year examinations (Kokotsaki & Davidson, 2003). They found that levels of anxiety were higher among the third-year undergraduate students than the second-year students before performance. However, they found that third-year students were awarded higher marks than second-year students, which could support the positive effect and the facilitating role of anxiety in more experienced performers and may relate to years of formal training and task mastery (see also Section 2.1.c, p. 47).

Overall, there may be many factors we need to be aware of and consider when adopting MPA strategies in creating an intervention

programme, including performance types (i.e. solo or group), performance environment, (i.e. concert, audition, or recital), year levels, and timing (i.e. before, during, and after performance). Since many studies have proven that MPA interventions are helpful either for managing MPA or enhancing performance quality (Spahn, Walther & Nusseck, 2016; Williamon, Aufegger & Eiholzer, 2014), it would be interesting to explore how these psychological strategies work for college musicians individually. It would also be useful to study the coping process when preparing for a performance from the participants' own voice, instead of proving its functionality and effectiveness through various MPA measurements. I take this argument into account in the methodological approach that I have chosen and in the presentation of the analysis of my data.

### **2.3 The role of music educator**

Wristen examined depression and anxiety in 287 college musicians, undergraduates and graduates, at one university (Wristen, 2013). She found that a considerable number of students reported symptoms indicative of anxiety or depression, and the high rate of untreated anxiety and depression among music students was concerning. She then suggested that music educators can help prepare their junior high and high school students (aged 14 to 18) for the stresses of university music study by helping them develop coping

strategies, fostering awareness of anxiety and depression as common and treatable conditions, and promoting the acceptability of seeking treatment when necessary. There are five implications for music educators from Wristen’s research, as shown in Table 11, below.

*Table 11: Implications for music educators*

Category	Content
1	Music educators are highly influential in the lives of their college students. Simply acknowledging these mental disorders with the same level of concern given to physical injuries affecting musical participation might encourage students to seek treatment when needed.
2	Music educators need to be mindful of their limitations and to always respect student privacy and confidentiality.
3	It is important to foster projects and interactions where students learn to identify musical, organisational, or social problems and develop productive solutions. It can help them learn to effectively cope with actual or potential challenges and develop their interpersonal and communication skills while addressing specific music objects.
4	Providing procedural guidance for memorisation, tips for coping with the physiological and psychological stressors of performance, and numerous opportunities to participate in small-stakes performances are advisable to build up success and self-efficacy.
5	Educating students about mental health issues and where to seek treatment, teaching students to identify challenges they encounter in their practice, as well as helping them identify their own unique triggers for mental distress, are vital parts of advancing comprehensive health for musicians.

From my perspective, ‘fostering awareness of anxiety and depression as common and treatable conditions’ seems to see MPA as a disease

that may need treatments when necessary. Given the argument that MPA could be a positive way to enhance performance quality, it is important to understand what MPA is step-by-step, through providing basic knowledge about MPA (i.e. a definition and examples), and then addressing the issue of managing MPA strategies. Daubney and Daubney (2017) have published a practical guide for music teachers for addressing MPA issues and management. They suggest that the key to a successful performance is to handle MPA effectively by promoting the desire to perform. This may include mental preparation, and requires careful and skilful application and practice of the strategies. Teachers can equip students with a range of flexible skills and strategies to help them thrive in potentially stressful situations and to be able to transfer these skills between different situations. They state that teachers should learn and practice these MPA-coping strategies in order to providing strong role models for their students (Daubney & Daubney, 2017). This could be linked to Gaunt's argument that students tend to be strongly influenced by their one-to-one tuition teachers in music college settings (see Section 2.1, p. 36). Given these two arguments supporting the importance of the teacher's role in learning, it could be assumed that teachers may be one of the most important factors in delivering MPA knowledge and coping strategies at music colleges. In addition, in light of the connection between teaching strategies experienced as a learner and

those used as one begins to teach, it is interesting to explore the current practice regarding MPA strategies embedded in one-to-one tuition in music colleges, which will be explored in Chapter 7.

Other researchers have suggested that music educators are in a unique position with regard to the administering of feedback to their students. They are required to give nearly constant feedback in order to provide students with information about the quality of their musical performance (Atlas, Taggart & Goodell, 2004). Since the personality correlates of MPA include negative evaluation and frequent and intensive emotional states experienced and expressed every day, teachers should be alert to such problems with MPA. They should support students in the early stages of their education, for instance by offering programmes for performance preparation that include the management of performance-based evaluative cognitions (Osborne & Kenny, 2008; Sadler & Miller, 2010). This will be explored in my thesis in relation to Research Question 3, namely what strategies for managing MPA do the TCMs believe that they will use with their students when they carry out teaching as part of their future portfolio careers? Fehm and Schmidt (2006) suggested that it is important to incorporate interventions into the regular instrumental lessons and cultivate a supportive atmosphere during instrumental lessons with less pressure and more encouragement. Positive reinforcement is more effective than punishment. This may be

particularly true for those students who are highly sensitive to criticism. Therefore, a music educator's emotional sensitivity plays a large part in the effectiveness of their teaching. It stands to reason that if music educators are more aware of and sensitive to the personality of their students, they are more likely to be successful in providing a positive educational experience for them (Atlas, Taggart & Goodell, 2004).

#### **2.4 What can the performing arts learn from sport and other domains regarding anxiety management and cognitive enhancement?**

Athletes, musicians, and performing artists are, in some ways, significantly different. However, both musicians' and athletes' professional identities and activities are linked inextricably to their performances (Hays, 2002). For example, both in sport matches and music performances, 'audiences', which may include experts or judges, are one of the common elements that comprise the 'performance'. Moreover, performing in front of an audience provides the opportunity for sharing the enjoyment of excellence and experience of psychological pressure, which may lead to competitive anxiety in athletes and MPA in musicians.

Yoshie *et al.* (2009) examined the relationship between competitive state anxiety and the quality of music performance,

comparing the anxiety of performance relationship in pianists with that in athletes. To gain insights into the most effective coping strategies for MPA they adopted questionnaires that were originally developed to assess anxiety in athletes.

The participants were piano performance majors in university or with equivalent skill levels. They found that self-confidence is strongly associated with performance quality and related to cognitive anxiety, which can also be found in sports psychology. They then suggested that acquiring self-confidence, reducing pre-performance cognitive anxiety, and interpreting the symptoms of cognitive anxiety as being facilitative to the subsequent performance could improve music performance quality (Yoshie *et al.*, 2009). Based on this finding, it may be possible to apply anxiety-coping strategies, which relate to increasing the level of self-confidence for athletes, from sport psychology to MPA management in musicians.

Osborne, Greene and Immel (2014) stated that strategies for performance anxiety management and performance enhancement grafted from the sports field to the musicians' training process improved the essential skills for performing artists. Other researchers suggested that musicians could get help from sports psychology consultants, as many of the mental and physical issues are similar among musicians and athletes, such as performance anxiety, injury, concentration, and performing in an audience-presence context

(*International Musician*, 2013). Moreover, various treatments for competitive anxiety in athletes, including cognitive behavioural therapy (CBT), cognitive restructuring, progressive muscle relaxation, and mental skills training, have been shown to be effective in treating MPA (Yoshie *et al.*, 2009). However, it may be necessary to examine the pros and cons and be aware that applying strategies from one domain to another requires particular care (Hays, 2002). Recent studies focusing on applications from sport psychology to music psychology are limited, especially on the issue of performance anxiety. In this section, I will explore the similarities and differences between these two disciplines and discuss this in relation to anxiety and managing MPA.

#### **2.4.a. Similarities**

According to Hays (2002), there are both similarities and differences between sports and arts performance that can be categorised into different areas by mental aspects of performance enhancement, developmental processes, the management of injury and retirement, and eating disorders. The similarities of performance enhancement include parental involvement in developmental processes, mental aspects of judgement about performance, coping with anxiety through psychological training, and repetitive strain injury overuse syndrome. Like athletes, many musicians begin

instrumental learning in early childhood. Dynamics among families of performing artists may be similar to those of aspiring athletes (Hays, 2002). Both in sport and performing arts, parental investment of time, financial resources, logistics, and support of offspring are important elements to foster a performer from childhood to adulthood. The parent-child relationship is particularly vulnerable when young musicians become increasingly susceptible to performance anxiety and the fear of negative judgement.

‘Overinvestment’ via over-identification, or taking on the task for the child, can affect the child’s relationship with his or her craft and can have profound effects on the family system. A similar situation occurs in sport, which describes parental over-engagement among elite gymnasts as ‘achievement by proxy.’ Parents’ own sense of self becomes defined by their children’s achievement (Hays, 2002). In performing arts, ‘parental over-engagement’ has been described by the term ‘stage parents,’ whereby parents can affect their children’s learning and become aggressive with their children’s teacher or one-to-one tuition tutor (Hamilton, 1997; Hays, 2002). In Western classical instrumental learning, the role of parents has an enormous influence on the children’s musical development and parent-teacher-pupil relationships and interactions can be both positive and negative (Creech, 2010).

According to Grolnick (1997), as cited by Creech (2010), there

are three types of parental involvement: behavioural support, cognitive/intellectual support, and personal support. The definition of behavioural support is to monitor and participate in practice, attend lessons, and adopt the role of home teacher. Cognitive/intellectual support is to expose the child to cognitively stimulating activities and resources and engage in intellectually domain-specific activities in the home that have been found to comprise an important area of parental support (Grolnick, 1994). With regard to personal support, it is related to parental understanding of the needs of pupils.

Creech (2010) examined the ways in which parents may most constructively support their children's musical development and what styles of parent-teacher and parent-pupil interaction would influence the extent to which parents engage in different types of supportive behaviours in instrumental learning. She suggests that parents should be versatile and adept at moving between the close and distant positions on the responsiveness axis and between directive and acquiescent positions on the control axis. For example, in instrumental learning contexts, parents can provide practical assistance, personal support, seeking and following the teacher's advice, and allowing the space for an autonomous relationship between child and teacher to develop. Furthermore, parents can provide a structured home environment practice and be interested audiences (Creech, 2010).

Hench (2011) investigated literature relating to youth performance psychology, including the topics of motivation in youth sport and music study, general anxiety and performance anxiety in children, and mental skills training for children in sport and in the classroom. She stated that, because of the strength of parental influence, it is important for coaches and teachers to keep parents abreast of any mental skills activities in which their children participate. If parents are unaware of the mental skills that coaches or teachers are implementing with students, they may unknowingly interfere with these skills (Hench, 2011).

Apart from mental skills training with parents' participation, the behavioural support of parental involvement can be linked to managing MPA. In Chapter 3.2.a, one of the selected managing MPA behavioural strategies discussed is 'contrived performance situations,' which involves creating the atmosphere of a performance, often at the performance venue and with a small audience. This can be related to parents' engagement in instrument practice and how they might provide a structured home environment for practice. If parents create a home performance environment for their children, it may make their children more able to manage MPA issues, as they frequently perform in front of people, even just to practise. For example, parents can provide a stage space in the living room and become the audience to listen to their children's practice without harsh judgements.

Sometimes parents could invite neighbours to attend their children's music salon at home or take their children to perform at special family occasions. Fehm and Schmidt (2006) found that people would like more occasions to perform in front of friends or family members as one anti-MPA intervention. The examples mentioned above could be seen as parental behavioural support and personal support for children's musical development and to help children with managing MPA.

As children/young people grow up and enter music college, the school setting and teachers will most likely influence their music learning; as previously discussed, one-to-one tuition is the mainstay of conservatoire education (Gaunt, 2011). This change may influence people's thoughts and perception of performance, such as in the face of judgements from school panels. Hays (2002) indicated that both the performing arts and sport focus less on aesthetics than on perfection. For example, ballet students or gymnasts receive feedback from panels containing the word 'correction'. It means they are working well. The same situation can be observed in music performance, such as the summative assessment of school exam for college musicians. College musicians look forward to receiving a high score or a specific score over the baseline, which means they have performed well. Yet, students' conception of evaluation may be different in different educational levels of instrumental learning in professional institutions

(Hallam & Bautista, 2012). Students may conceive of evaluation as allocating marks and correcting mistakes at the intermediate level of instrumental learning, as well as understanding different interpretations of the same repertoire at the advanced level of instrumental learning (Hallam & Bautista, 2012).

Focusing on perfection more than aesthetics is not absolute in all types of sport. Figure skating or synchronised swimming may also involve beauty, motion, and expressive form. Receiving negative feedback or a poor score after performance can occur in both sport and music performance. It should be acknowledged that negative feedback has many forms. If failure is attributed to factors that are outside of the students' control and leaves students feeling powerless, it can be extremely damaging. However, if students attribute the failure to external causes and see it as controllable, it is often very helpful and important in sustaining motivation as well as maintaining self-esteem (Hallam, 2012).

In coping with MPA, Buswell (2006) mentioned that it is important to have the ability to deal with negative feedback by using the strategy of 'accepting mistakes' (see further details in Chapter 3.1.b, p. 124). This strategy includes managing the impact of mistakes after performance. It seems that studies which look at accepting mistakes in music performance are more common than such studies in sport. In other words, the perspective of adopting cognitive

methods in helping musicians is often reparative rather than preventative (Hays, 2002; Salmon & Meyer, 1992).

Strategies used to cope with suboptimal sporting performance under stressful conditions, known as 'choking under pressure', can be found in research into competitive sport anxiety (Wilson, 2012). According to Baumeister and Showers (1986), 'choking' is defined as the occurrence of inferior performance despite striving and incentives for superior performance. While choking, individuals may be able to make rational decisions and select the correct 'plan of action' under pressure, but cannot execute it because of intervening psychological factors, such as cognitive, attentional, emotional, and situational factors (Wilson, 2012). As a result, strategies for ways to prevent choking are incorporated into psychological skills training and the understanding of the mechanism underlying it, such as theories of self-focus and distraction.

Although optimal levels of arousal and tension management are central mental skills, athletes may vary in their attention to or concern about arousal (Hays, 2012). This argument is similar to musical performance, in that an optimal level of anxiety may have a positive effect on enhancing performance quality when it comes with a high level of task mastery (Hamann & Sobaje, 1983). Although the study shows that the positive effect of MPA can enhance performance ability when anxiety is at optimal levels, there are few discussions of

arousal management and limited considerations of performance anxiety as a routine element of performance in music compared with sport. Perhaps if musicians have good ability both in arousal management and MPA management, it can enhance overall performance ability rather than only having MPA management ability. However, it may be better to understand the balance and relationship between arousal management and anxiety management in sport as well as the task difference and performance condition between sport and music performance. It may also be noted that the relationship between competitive anxiety and sports performance has been one of the most debated fields, as both optimal performance and choking under pressure may arise from anxiety (Wilson, 2012).

Owing to the performance arena being common ground between athletes and performing artists, the primary psychological concerns between these two disciplines share similarities. Yet, many typical components of psychological skills training, such as goal setting and concentration training, are notable in their absence within many performing arts programmes (Hays, 2002). In the existing literature of musical performance, positive self-talk is commonly used as a way of preparing for performance to affirm students' sense of self-worth and preparedness, but none of the research discusses other types of self-talk (see also Chapter 3.1.b, p. 112). In sport, self-talk can be categorised into instructional self-talk and motivational self-talk,

which have different positive functions for different tasks and have not appeared in MPA-coping strategies. The definition of instructional self-talk and motivational self-talk can be found in Section 2.4.c.

Researchers have found that instructional self-talk is more effective for fine motor tasks than gross tasks in sport (Hatzigeorgiadis *et al.*, 2013). Anxiety symptoms (i.e. trembling and irregular breathing) can seriously interfere with fine motor control of both athletes and musicians, leading to impaired performance (Yoshie *et al.*, 2009). It may be possible that the strategies that are helpful in reducing such symptoms in the fine motor tasks of sport may also be of benefit for coping with MPA, such as instructional self-talk.

Repetitive strain injury overuse syndrome is also a common problem among performing artists, athletes, and musicians. The physicality of dance and music in performing arts most clearly parallels sport with regard to the issue of injury. 'Overuse' is also a factor contributing to MPA that may be caused by genetics, musical technique, and the intensity of practice (Gabrielsson, 1999). Dancers have to have intense physical training, and their disordered patterns of eating and amenorrhea results in a high rate of injury, especially stress fractures. Hays (2002) stated that 'overuse syndrome' tends to be associated with abrupt changes in technical style or marked increase in playing intensity in both sport and performing arts. More than that, it can be assumed that 'injury' not only increases from

'overuse' when changing technical skills or with a marked increase in playing intensity, but can also result from mental pressure or stress.

The emotional and behavioural impact of injury in sport is powerful. In addition, the hours dedicated to practice and concentration on a single-minded goal all have costs along with rewards. The risks of 'identity foreclosure' as recognised in the world of sport have their parallels among performing arts (Hays, 2002). According to Marcia (1966), as cited by Petitpas and France (2010), 'identity foreclosure is defined as individuals who have not engaged in exploratory behaviour, but have made firm career and ideological commitments typically in directions that would gain parental and societal approval' (p. 284).

#### **2.4.b. Differences**

According to Hays (2002), the contrasts between sports and performing arts are the primary goal of competition, the role of the audience, and the role of consultation. The primary goal and focus within sport competition is to 'win' whereas artists and musicians are seeking a good reputation or a sense of meaning, for example winning a part in a play, joining a professional orchestra, or obtaining a teaching position at a music college. Within the performing arts, 'winning' is supposed to be a means rather than an end (Hays, 2002). Although music competitions contain an aspect in which one player

'wins' and another 'loses,' the rationale for competitions include increasing motivation and providing opportunities for outside evaluation that may lead to improved musicianship (Roberts, 2016). However, the level of competition is as intense in the performing arts as it is in sports (Hamilton, Kella & Hamilton, 1995). Competition in sport is the primary goal: competitive sport anxiety has become one of the largest and most diverse research areas in sport psychology (Wilson, 2012). In sport settings, anxiety is usually related to the ego-threatening nature of the competitive environment and refers to the unpleasant psychological state in reaction to the perceived threat concerning the performance of a task under pressure (Cheng, Hardy & Markland, 2009; Wilson, 2012).

Although different forms of competition and its context appear in sport and music performance, they may face the same issue regarding competitive anxiety and may be able to share the same coping strategies for performance anxiety, especially in competitive situations. Yoshie *et al.* (2009) compared the anxiety-performance relationship in pianists with that of athletes to gain insights into effective coping strategies for MPA by using the revised competitive state anxiety inventory 2 subscales (CSAI-2R), originally developed to measure competitive state anxiety in athletes. They found the CSAI-2R demonstrated adequate psychometric properties when applied to MPA. In addition, both self-confidence intensity and cognitive anxiety

positively predicted overall performance. As a result, they suggest that the effectiveness of mental skills training for athletes can be applied to and be beneficial for musicians. Acquiring self-confidence (i.e. positive thinking, self-talk, and imagination skills from tennis players), reducing pre-performance cognitive anxiety (i.e. positive thought control from reducing the athlete's cognitive anxiety), and interpreting the symptoms of cognitive anxiety (i.e. stress inoculation and cognitive restructuring) will improve performance quality.

As to the presence of audiences, a sense of connection between performers and audience members in sports and music differ markedly. One of the central purposes of musical performance is to share music with an audience (Hays, 2002). This connection can be seen in the way in which the quality of a musical performance is determined through the interaction of performers and audience members (Hays, 2002). However, while the spectators are not essential to sporting activity, they may be an important element of sporting performance (Hays, 2002).

Although the sense of connection between performers and audiences in sports and music is different, the use of strategies between sporting activities and music performance may be the same.

Researchers in applied sport psychology mention that many of the mental stresses with which they help performers cope are similar to those faced by athletes, such as performance anxiety and performing

under audience scrutiny. Mental skills that are used in sport in order to increase self-confidence and deal with the issue of self-esteem can be adopted in managing MPA as well. Martin (2008) investigated motivation and engagement among 463 young classical musicians at a high school with a specialist focus on music and at a university in a major capital city in Australia, alongside sportspeople at a high school with a specialist focus on competitive sport in a major capital city in Australia. In his study, he adopted the 'Motivation and Engagement Wheel,' which comprises adaptive cognitions (e.g. valuing, mastery orientation, and self-efficacy), maladaptive cognitions (e.g. uncertain control, anxiety, and failure avoidance), adaptive behaviours (e.g. planning, task management, and persistence), and maladaptive behaviours (e.g. self-handicapping and disengagement). He found that, in terms of underlying motivation and engagement constructs and the composition of and relationships among these constructs, musicians and sportspeople are not markedly different (Martin, 2008). As a result, it may be assumed that strategies used for coping with maladaptive cognition and behaviours could be shared or applied in these two domains in order to enhance motivation and engagement. Motivation and engagement may relate to anxiety in terms of maladaptive cognition and behaviour. Anxiety may relate to self-worth motivation, which recognises that performance involves many risks, e.g. self-esteem in the event of poor performance (Dunkel, 1989). It then brings into

consideration such constructs as disengagement, self-handicapping, and failure avoidance (Martin, 2008).

However, the strategies from sport may need to be adapted for musicians and adjusted to specific events, such as auditions and concerts. Dr Sharon Chirban serves as a performance coach with the Boston Ballet and works with members of the Boston Symphony. In an interview with the *International Musician* journal she said, 'quite often, within three months to a year musicians learn strategies to help overcome their performance issues and cope on their own. Treatment is often focused around specific event, such as audition. It is almost like training where musicians go out and perform, and then come back and we tweak the tool' (*International Musician*, 2013).

Hays (2002) found that performing artists may be familiar with the idea of using consultants and they may tend to make comparisons with the types of help or assistance with which they are acquainted. Coaching, consultation, and therapy may be viewed differently within the performing arts than in athletics, which has been discussed more frequently by professionals in recent years (see Section 2.2, p. 64). As a result, musicians may need as much education concerning performance enhancement training. This is different from that of ballet dancers, for example, where performance enhancement means lack of ability to them. It will be useful for musicians to obtain information concerning performance enhancement rather than pathology-focused approaches,

the efficacy of mental skills training, the utility of briefer treatments, and a present or present/future focus. Furthermore, strategies applied from sport to the performing arts need to be undertaken with particular care, as Hays found that the musician participants in his research said that the research seemed more relevant to sport rather than music. He suggested that a consultant needs to identify the ways in which strategies can be incorporated in the particular field and how they can be adapted. Furthermore, the consultant may need to have empathy and be willing to learn or understand the specific domain that the performing artists describe. This is because it could give those who engage a consultant more confidence that they have made a good decision and feel that the consultant has an understanding of their issue (Hays, 2002).

The next section will discuss selected anxiety-control interventions from sports that may not have been used in music research, and which are concerned with enhancing self-confidence, self-efficacy, motivation, and engagement in order to apply them to MPA management (Martin, 2008; Yoshie *et al.*, 2009). There are two reasons why I elected to discuss these strategies: 1) my research is concerned with 'self-managed' MPA and the strategies used that need the assistance of sport professionals may not be suitable; and 2) the selected strategies are similar to some MPA-coping strategies or could

be linked to MPA-coping strategies that other music researchers have explored.

#### **2.4.c. Selected anxiety-control interventions in sport**

##### *Self-talk (Instructional self-talk and motivational self-talk)*

Self-talk strategies are based on the use of cues that aim at facilitating learning and enhancing performance through the activation of appropriate responses. This strategy also applies to MPA (Abel & Larkin, 1990; Roland, 1994). In sport psychology, self-talk has been implemented in a variety of motor and sport tasks ranging from fine to gross with participants from university students and beginners to experienced athletes (Hatzigeorgiadis *et al.*, 2013). Motor skills can be also applied in mental rehearsal.

Hatzigeorgiadis *et al.* (2013) examined the effectiveness of two types of self-talk in sport through meta-analysis. They found that self-talk can facilitate learning and enhance performance in sport. Furthermore, self-talk is not only effective in sport-task performance, but in the complex environment of competition as well (Hatzigeorgiadis *et al.*, 2013). The definition of instructional self-talk and motivational self-talk can be found in Table 12, below, which is summarised from Chroni, Perkios and Theodorakis (2007) and based on Zinsser, Bunker and Williams's (2001) theory of two primary functions of self-talk.

*Table 12: Instructional self-talk and motivational self-talk*

	Instructional self-talk	Motivational self-talk
Definition	Talking to yourself through a task with step-by-step reminders at each phase while performing.	Talking to yourself through a task with motivational internal dialogue while performing.
Effect	To enhance performance by triggering desired actions through proper attentional focus, teaching information, and tactical choices.	Building confidence and motivation to increase effort and to control arousal and anxiety.
Example	Musicians tell themselves to 'focus on the music while the accompanist plays the introduction, then take deep breaths before playing the first note.'	Musicians tell themselves that 'I can make it' for a two-hour long concert.

In music performance research, the fine motor control evidenced in music performance is discussed in terms of internal timekeeper models, motor programmes, and kinematic models. In other words, fine motor skill in music could be related to tempo control and instrumental learning, as the fine motor skills are associated with the coordination of small muscle movements that occur in body parts such as the fingers, usually in coordination with the eyes, such as in playing the piano or string instruments. To play a violin competently requires complex skills, including fine motor skills coupled with

metric precision (Gabrielsson, 1999). Therefore, if we could apply Hatzigeorgiadis *et al.*'s (2013) findings in MPA, it could be assumed that instructional self-talk may facilitate learning and enhance performance, especially in new tasks, so as to reduce the level of anxiety. However, it still needs to be examined in future research.

### *Success imaginary*

'The Achievement Bank Book' (ABB) is a method to help people both to stimulate their memory of positive experiences and achievements, and to provide a 'bank book' of these achievements for later rehearsal (Cockerill & Steinberg, 1997). The ABB is a technique to help athletes recall positive information about previous experiences instead of persistence in negative self-talk. This technique was developed by Jack Lamport-Mitchell and is based on CBT and RET (Rational Emotive Therapy). There are three phases to achieve it: building a trusting relationship with the client, asking clients to provide their athletic history, and a discussion about working towards future success by using ABB at home and brainstorming any achievements in their life from past until present. This technique can be carried out on a piece of paper and transposes the information in chronological order into a notebook, recording information about their athletic performances. The final step is to ask clients to write their own name and date on the cover of the ABB so as to remind

them of their successes when they experience anxiety or lack of confidence (Cockerill & Steinberg, 1997). The ABB technique can be linked to Patston's (2014) research, which is about adopting performance diaries for musicians by using psychological interventions.

#### *Visuo-motor behaviour rehearsal*

Systematic desensitisation employs covert rehearsal of feared situations paired with progressive relaxation to counter phobic responses (Wolpe *et al.*, 1973). The rationale behind this approach is that relaxation and anxiety are mutually exclusive. The effectiveness of this intervention in sport depends on the potency of the imagined stimulus to generate a response analogous to that elicited by the actual event (Gray, Haring & Banks, 1984). Visuo-motor behaviour rehearsal (VMBR) is similar to systematic desensitisation, which adopts relaxation training and the covert rehearsal of a planned event to enhance functioning. It was developed by Suinn (1972). It could be seen as the extension of the counter-conditioning principle to non-clinical settings in sport. Counter-conditioning is also called 'stimulus substitution,' which is a form of respondent conditioning that involves the conditioning of unwanted behaviour or response to a stimulus into a desired behaviour or response by the association of positive actions with the stimulus. Mentally rehearsing a behaviour

with VMBR produces realistic and vivid imagery, and a development of rehearsal conditions which closely approximates performance conditions is necessary to facilitate the training (Suinn, 1976). Components of VMBR include relaxation training, visualisation or mental imagery, and performance of the skill in a simulated, stressful environment. These components provide the foundation for most psychological skill training programmes used in sport psychology applications. Researchers in sport compared the effects of relaxation training, imagery training, VMBR training, and a placebo control on karate performance. The VMBR condition demonstrated significantly improved karate performance and decreased pre-competition state anxiety (Weinberg, Seabourne & Jackson, 1981). Alrahamneh and Elbokai (2011) examined the effectiveness of VMBR in reducing anxiety and improving self-conception for athletes with special needs. They found that VMBR improved sport performance and caused a significant reduction in anxiety as well as increasing self-concept. The VMBR training not only decreased anxiety, it prevented an increase.

Gray, Haring and Banks (1984) investigated the relaxation-imagery paradigm and its effects of preparatory arousal manipulation between two rehearsal strategy factors (physically active vs. sedentary; and coping vs. mastery). 'Physically active' means making appropriate movements. 'Sedentary' means remaining seated during imagery. 'Coping' and 'mastery' in this study mean 'recovering

from errors' and 'performing perfectly.' They found that physiological arousal increased during mental rehearsal and the arousal induction and control were associated with imagery vividness and increased efficacy expectations compared to relaxation. In other words, when the participant experienced higher than average arousal levels, it may have been more closely associated with perceived desirable levels of arousal for optimal performance, thus enhancing the participant's belief that he would perform well. It is conceivable that activation instructions, which attempt to intentionally increase arousal during rehearsal, affirmed the already existing arousal, thereby assisting the subject to experience the arousal as a positive force to be channelled towards improved performance.

The most realistic representation was produced by mental rehearsal accompanied by arousal instructions, which were more closely aligned to the actual competitive situation. In addition, vividness of imagery during mental rehearsal may facilitate transfer of learning to the actual competitive situation, as it seems to be an indication of an athlete's absorption in the rehearsal process. In coping with MPA, researchers found that the use of imagery could help musicians to decrease the shock and novelty of actually being on stage, which could be seen as half behavioural therapy and half cognitive intervention of managing MPA (Roland, 1994; Kenny, 2011). As a result, if imagery skill is helpful for both athletes and musicians

to prepare for a performance, as it could transfer learning to the actual event, decrease the level of anxiety, and increase efficacy expectation, we may suppose that the imagery skill (i.e. vividness of imagery) used in sport could be learned and applied in music performance contexts, especially in dealing with competitive anxiety.

## **2.5 Summary**

This chapter has introduced MPA, including its types, symptoms, effects, contributing factors and a comparison of MPA levels. In discussing the management of MPA from an educational perspective, the ways that issues are addressed in current practice through intervention programmes in different countries can be seen, along with exploration of the role of music educators. The research cited in this literature review has clearly indicated the importance of managing MPA for college musicians and has raised suggestions as to the many factors that may cause individuals to perceive MPA differently, such as years of formal training. In addition, timing, performance setting, and performance environment may cause different levels of MPA. As a result, MPA management strategies may need to take these factors into account. In other words, strategies need to be flexible and adaptable to different performance contexts.

Some institutions have developed MPA intervention programmes which are concerned with delivering various

MPA-coping strategies and methods under different performance conditions for college musicians. Yet, we may need to be aware of a gap between developing an independent MPA intervention programme and the power of one-to-one tuition in the conservatoire learning environment to help students self-manage MPA.

Since musicians and athletes share many elements of a performing environment (Hays, 2002; Martin, 2008; Yoshie *et al.*, 2009), examining the similarities and differences between these two domains and the application of managing anxiety strategies in sport and music enables the us to see the connections between the two domains. Whereas in some senses they are different, the use of psychological strategies in coping with anxiety between sporting activities and music performance is the same. In other words, it may be possible to apply psychological strategies from sports to music performance.

However, we may need to be aware that applying strategies from one domain to another needs to be carried out with particular care (Hays, 2002). In exploring MPA, an interesting gap in research can be seen, in that there is an increasing awareness of MPA issues and learning its management has been adapted from sports to music performance in recent years. Yet literature discussing the application of psychological strategies used in sports to music performance are still limited. The following chapter will introduce psychological

strategies for managing performance anxiety and its relation to music performance.

**Chapter 3. What are cognitive therapy, behavioural therapy, and cognitive behavioural therapy (CBT) and how are these therapies used in approaches to MPA?**

'Coping' refers to mental and behavioural activity aimed at dealing directly with the person–situation imbalance that has given rise to a stressful appraisal, sometimes referred to as 'problem-focused coping,' or at managing its impact on the person, sometimes referred to as 'emotion-focused coping' (Mann & Contrada, 2015: p. 266). Steptoe (1989) stated that coping might relate to escape from the situation or the alteration of the person's emotional response to that situation. In other words, coping can be seen as an individuals' responses to a stressful situation that some people may attempt to avert (i.e. avoidance) and others may not. The individuals' responses may vary depending on environment, predisposition, and on situational factors (Steptoe, 1989). Bullis and Hofmann (2015) mentioned that people with generalised anxiety disorder worry about a number of things, in which cases their 'worries' are typically exaggerated, excessive, and maladaptive. As a result, anxiety-coping strategies have been developed to target the process and function of worrying and its consequences, such as cognitive restructuring techniques and relaxation skills (Bullis & Hofmann, 2015).

Many studies have examined psychological anxiety-coping strategies and their effects on musical performance (Braden, Osborne &

Wilson, 2015; Brugués, 2011; Kendrick *et al.*, 1982; McGinnis & Milling, 2005; Nagel, Himle & Papstorf, 1989). Some researchers have explored the strategies can be categorised as long-term and short-term based on musicians' performance timetables (Roland, 1994; Fehm & Schmidt, 2006). In the long-term, musicians tend to rely on musical strategies when preparing for a performance. In the short-term, they use more psychological strategies, both cognitive and behavioural strategies (see Table 13, below). For example, a musician focuses on her musical skills and familiarity with music and style one month before performance. Furthermore, she might also maintain her physical health through physical activities. As the performance comes closer, she may try tapering off practice and using mental rehearsal by reading through the score and words of her performance. Moreover, she may use positive self-talk as a way of preparing for performance to affirm her sense of self-worth and preparedness, such as 'I can do it very well since I have done it before.' Roland stated that cognitive strategies and behavioural strategies are unlikely to be independent, and necessarily contain some overlap (Roland, 1994).

*Table 13: Roland's study (1994)*

Long-term	Short-term
Cognitive: Building confidence, mental rehearsal of music.	Cognitive: Performance goals, loss of self, task-orientated thinking, excited and alert attitude, positive self-talk, visual rehearsal, mental rehearsal, calm and relaxed.
Behavioural: Various physical activities.	Behavioural: Time alone before performance, following pre-performance routine, relaxation and breathing, physical activities.
Musical: Practice, familiarity with music and style, preparatory performances, simulating performances.	Musical: Tapering off practice, warming up on instrument.
Lifestyle: maintaining physical health.	Lifestyle: resting on day of performance, adapting eating and drinking pattern, arriving early for performance, extra sleep.

Similar research regarding separating MPA-coping strategies by timescales can be found in Fehm and Schmidt (2006). They examined MPA in gifted musicians aged between fifteen and nineteen studying in a German specialised music school. Their study focused on the students' expression of MPA, coping strategies, and the helpfulness of strategies in solo performance setting. They explained that the 'short-term' coping strategies were to be used immediately before performance and the 'long-term' strategies were defined as activities

used to 'cope with performance anxiety in the long run.' They found that participants in the study reported 'rehearsing the difficult part of the composition' most and considered this to be moderately helpful. Interestingly, more than half of the participants in the study used a wide variety of personal strategies, such as cleaning the instrument and talking to it.

As to the long-term strategies adopted in the study, practising techniques seemed to be more frequently reported. Interestingly, 'talking to others' (i.e. teachers and peers), which participants did not consider as a routine part of coping with MPA, was mentioned by many participants in the study (Fehm & Schmidt, 2006). They found that more than half of the participants in the study were willing to learn MPA-coping strategies during their regular instrumental lessons and wished for more occasions to perform in front of others, which correlates with other research. The following section reviews a range of psychological strategies referred to in research.

### **3.1 What is cognitive therapy?**

Cognitive therapy is concerned with changing faulty thinking patterns that give rise to maladaptive behaviours (Newman, 2015). Cognitive therapy emphasises interventions where the chief goals are to modify individuals' problematic ways of thinking about themselves, and this process may lead to behavioural changes (Kenny, 2011;

Newman, 2015). One of the best known cognitive strategies is 'cognitive restructuring,' which has been mentioned in many studies (Osborne & Kenny, 2008; Spahn, Walther & Nusseck, 2016). Cognitive restructuring is also described by terms such as 'rational responding' and 'schema modification,' which is to reassess the feared situation in order to make the situation more manageable (Newman, 2015). The techniques that comprise cognitive restructuring are central to the practice of cognitive therapy, and they are a key component of the skills that people learn in order to help themselves think in more constructive ways. Some cognitive strategies refer to challenging 'self-hate,' or the consequence of negative evaluation, and replacing this with a more adaptive and realistic view, such as cognitive restructuring and positive self-talk. These strategies are helpful in reducing the level of MPA for adolescent musicians (Osborne & Kenny, 2008). The principal focuses of cognitive therapy are modifying maladaptive thinking style combined with a strong educational element, which is used between sessions and homework, and practice to reinforce and maintain the skills learnt in therapy in the outside world, such as behavioural self-management and problem solving (Kenny, 2011).

According to Newman and Beck (2010), as cited by Kenny (2011), people who are 'misery makers'<sup>6</sup> or have cognitive biases

---

<sup>6</sup> People who make themselves feel miserable and report feelings of helplessness, hopelessness, and anxiety owing to dysfunctional cognitive processes, such as

could be described using six categories. Firstly, 'arbitrary inference' describes people who impulsively draw conclusions when there is insufficient evidence to support their conclusions, even in the face of evidence to the contrary. For example, a music student notices that the judge looked at him with a frown on his face during his audition; hence he concludes that the judge is unsatisfied with his performance and he will fail the audition. 'Selective abstraction' means people focus on a detail taken out of context, ignoring other more salient features of the situation, and conceptualise the entire experience on the basis of this circumscribed element. For instance, a mistake appears in a one-hour recital, hence the entire performance and any other merits may be worthless, as one mistake wipes out the entire performance. 'Overgeneralisation' is a common logical error, which comes with the adverbs in the sentence 'always' or 'never.' For example, I 'always' forget the music on the stage or I 'never' receive positive feedback after performance. 'Magnification and minimisation,' a biased thinking style, is the tendency to assign greater significance to negative events and is a close relative of selective abstraction. For example, a student receives an offer from a top music college but has been rejected by the other colleges to which he had applied. He becomes unhappy and preoccupied with rejection, without taking time to celebrate his successful application.

---

cognitive biases, cognitive distortions, cognitive errors, or logical errors (Kenny, 2011).

'Dichotomous' or 'all-or-nothing thinking' is a thinking style that refers to the propensity to analyse in terms of binary oppositions, such as 'black-or-white,' 'good-or-bad,' and 'all-or-nothing.' Although a dichotomous style of thinking could prevent negotiation and compromise, and can be useful for quick decision making, it may be associated with negative psychological outcomes, such as perfectionism (Oshio, 2012).

There are two types of perfectionism, which are positive and negative (Terry-Short *et al.*, 1995). Positive perfectionism consists of high personal standards without the self-criticism that is associated with negative perfectionism. Although the two aspects of perfectionism are different, there is evidence that much overlap exists between them. For example, an individual may have moderate levels of positive perfectionism and high levels of negative perfectionism at the same time (Egan *et al.*, 2007). Egan *et al.* (2007) stated that there had been no study to date that directly investigated dichotomous thinking and positive and negative perfectionism in a clinical sample.

The last cognitive bias is 'diminished ability to engage in perspective taking.' We may need the ability to assess a problem from a number of different angles, during which we may need to think about our own thinking processes. This can be achieved through asking ourselves questions. For example, 'I feel nervous about performing on stage. Can I manage my nerves? How do I manage this?'

As described in relation to musical learning in the previous chapter, this ability to think about our own thinking process is called metacognition. 'Failures in perspective taking and metacognition have been found to be present in both the mood and anxiety disorders, where people are often captive to their unconscious reactions that do not allow them to achieve any distance or perspective on the problems confronting them' (Kenny, 2011: p. 184–185).

### **3.1.a. The function of cognitive intervention in MPA**

Cognitive strategies for MPA are concerned with how attention is distributed and how this affects the task before and during performance. In music, there are three main foci: the self, the audience, and the music (Kenny, 2011). For example, musicians are concerned with making mistakes (e.g. playing a wrong note), audience's facial expression (e.g. looking dissatisfied), and focusing on music melody or playing. Kenny stated that if we can shift the attentional focus away from the self (e.g. concern making mistakes) and the audience (e.g. concern because an audience looks dissatisfied), we will be able to focus directly on the musical task and reduce MPA resulting from negative thoughts, such as catastrophising. Kendrick *et al.* (1982) examined cognitive and behavioural therapy for MPA among fifty-three pianists and found that attentional training of cognitive therapy was more effective than behavioural rehearsal in reducing the

level of MPA prior to and during performance. Osborne and Franklin (2002) and Steptoe and Fidler (1987) have found that musicians who engaged in catastrophic thinking had higher levels of MPA than those who did not, which emphasises the importance of cognitive therapy.

Kenny (2011) stated that three cognitive strategies have been investigated for coping with MPA: stress inoculation, positive self-talk, and the use of imagery. Stress inoculation, developed by Meichenbaum in 1985, aims to increase mastery over fear through three steps: psychoeducation, training in coping skills to reduce the expression of anxiety, and the application and practice of new coping skills with a target of consolidating and reinforcing learning (Meichenbaum, 1985).

Positive self-talk is a related strategy in which the performer focuses on his/her internal dialogue and substitutes negative statements with more realistic positive self-statements (see further discussion in Section 3.1.b, p. 110). The use of imagery can be seen as half behavioural therapy and half cognitive intervention. Musicians may be asked to visualise and rehearse in their imagination an anxiety-inducing situation (Kenny, 2011). Performers found visual rehearsal helpful for decreasing the shock and novelty of being on stage (Roland, 1994). Further discussion on the use of imagery can be found in the next section.

### **3.1.b. Selected cognitive strategies of MPA**

There are many studies that have examined MPA-coping strategies through variable comparisons (Fehm & Schmidt, 2006; Fishbein *et al.*, 1988; Montello, Coons & Kantor, 1990; Nagel, Himle & Papstorf, 1989; Steptoe, 1989). Biasutti and Concina (2014) mentioned that Steptoe was the first to propose a link between coping strategies and MPA. Steptoe's 1989 study examined the coping methods of sixty-five professional orchestral musicians with MPA. He found that deep breathing was the most common MPA-coping strategy for professional orchestral musicians, following by distraction, muscle relaxation, alcohol intake, and drugs. Studies addressing the issue of MPA-coping strategies among college musicians are numerous, such as Nagel, Himle and Papstorf's study, also conducted in 1989. They examined twenty undergraduate music performance majors for the effects of muscle relaxation, cognitive therapy, and temperature biofeedback training for MPA, and found these strategies were all helpful for MPA reduction. However, the findings of this study may not relate to self-managed MPA as the researchers delivered the MPA-coping strategies first and then examined their effects. Roland (1994) indicated that although many MPA-coping strategies have been studied for their effectiveness, little research has been undertaken in the way of 'naturalistic studies' to examine the strategies. As a result, he investigated how professional

musicians manage MPA through semi-structured interviews with thirty musicians including twenty-three classical music performers aged from sixteen to sixty-eight years, with a mean age of forty-four years. Furthermore, he analysed the strategies used according to timescales (see also Table 13, p. 103). He found that the four most commonly used cognitive strategies 'before performance' are accepting mistakes, followed by visual rehearsal, positive self-talk, and goal setting. The behavioural strategies used included gaining extra sleep, breathing, relaxation, and physical activities.

As discussed in Chapter 1, similar research can be found in Taiwanese literature. Yen (2006) found that on the day of performance most participants tended to adopt concentration followed by deep breaths or adjusted breathing, distraction, mental strategies (i.e. self-talk), dietary (e.g. eating sweet food), muscle relaxation, and 'other' (i.e. praying, do nothing and did not manage it). As to before performance, distracting activities were the most common (i.e. physical exercises, travelling, chatting with people, reading, and shopping). Liu (2016) found that the most common coping strategies were deep breathing, positive thinking, secure memory (memory stations), and muscle relaxation. Although Liu did not mention what strategies could be used to 'secure memory' and 'positive thinking' in her research, they may be linked to the strategy of mental and visual rehearsals to 'memorise music and commit it to

repertoire' and some cognitive strategies for changing negative thinking into positive thinking, such as cognitive behavioural therapy, also known as cognitive restructuring (Newman, 2015). Moreover, some musical strategies may cause psychological effects, which may be adopted in enhancing musical techniques and managing MPA, such as simulating the performance/contrived performance situation, following a pre-performance routine, and a practice plan/tapering off practice (Roland, 1994). These cognitive strategies used in 'naturalistic studies' are discussed in more detail in the following section before considering behavioural strategies.

### *Self-talk*

'Even the most proficient and experienced performers felt a moment of self-doubt before going on stage' (Roland, 1994: p. 28). Positive self-talk is a cognitive strategy aimed at enhancing performance and reducing anxiety (Thomas, 2014). The aim of positive self-talk is to help performers realistically appraise their perception of a performance and adopt more positive and helpful self-statements, as well as reduce the sense of threat the performers feel (Wilson & Roland, 2002). The function of positive self-talk is increased confidence, associated with lower heart rates and fewer performance errors (Abel & Larkin, 1990). In addition, some researchers have found that self-talk, self-efficacy and performance

quality may be linked to each other, as positive self-talk may be an effective cognitive strategy for skill acquisition, performance enhancement, and the management of anxiety (Hamilton, Scott & MacDougall, 2007). Clark, Lisboa and Williamon (2014) investigated thoughts and perception during musical performance among twenty-nine undergraduate and postgraduate classical music performance students. They found that there is a link between self-talk and performance quality, in that the content of self-talk may relate to participants' feelings about the performance. For example, when the participants felt that a performance was going well, self-talk would typically remain focused on the upcoming music and on communicating, with little negative evaluation. In contrast, when performances were not going as well as hoped, self-talk was reported to involve negative evaluation and focus on how things could be going better (Clark, Lisboa & Williamon, 2014). They explained that this is because 'verbal persuasion' is one source that contributes to the development of self-efficacy beliefs and can be self-directed in the form of self-talk, which can then impact significantly upon efficacious beliefs (Bandura, 1997; Clark, Lisboa & Williamon, 2014; Hardy, 2006). As a result, Clark, Lisboa and Williamon (2014) suggested that learning how to control self-talk would be of benefit for musicians to enhance their performance quality.

### *Mental rehearsal*

Mental rehearsal (MR) is a form of practice in which subjects produce a vivid mental image of actually performing a technique (Lippman, 2012). The MR itself is an imitation of perceptual and sensorial experiences that allows one to cognitively represent stimuli in the absence of its external presence (Murphy, 1994). For example, people do not imagine that they are watching themselves perform, but they actually carry out the activity in their imagination without physical movement. Some research evidence suggests that, for a skilled person, mental practice can be as effective as actual practice. In relation to music performance, Buswell (2006) stated that MR is the mental or imaginary rehearsal of a physical skill without 'physical movement,' using visual, aural, and kinaesthetic senses to create or recreate an experience similar to a physical event. The process involves imagining the performance and rehearsing the activity in the mind in an attempt to prepare the mind and body for competition (Browne *et al.*, 2010). There are two mechanisms intimately linked to motor control, action simulation, and internal models (Keller, 2012). Keller (2012) explains the mechanism underlying mental rehearsal, stating that:

Action simulation occurs when sensorimotor brain processes that resemble those associated with executing an action are engaged in the absence of overt movement. Internal models constitute another mechanism that relies on experience-based learning. The idea behind

these models is that sensorimotor transformations between bodily states and events in the immediate environment are represented in the brain. Action simulation during music performance entails running internal models that trigger auditory and motor images of one's own upcoming actions. (p. 208-209)

Buswell (2006) mentioned that MR is like another type of dream; this is because the central nervous system does not differentiate between real and imagined events. For example, a person bursts into tears in a dream in which his pet has died. When he wakes from this nightmare, his tears are real and the scene seems very vivid, like the actual situation. This is because the nightmare has been impressed upon his visual and muscle memories; the mental images have primed the body for physical action (Buswell, 2006). As a result, musicians may adopt MR to rehearse the actual performance situation by using imagination, instead of rehearsing in the actual performance place.

Mental rehearsal in music performance can take several forms, which may include mental practice away from the instrument, the silent reading of musical scores, and thinking of the ideal sound during performance (Keller, 2012). Roland (1994) indicated that MR can happen at any time and can be unplanned, especially as the process of MR is very simple and creates a connection between the mind and the body that can result in smoother and more precise physical movement

in the actual performance. The benefits of MR are improved physical functioning, and changed emotional state, such as calming nerves and feeling relaxed, as well as getting more energy and confidence before a performance. MR can be used as a substitute for practice when a player is afflicted with an injury or is unable to play physically, such as committing music to memory, tapering off practice, and making practice more efficient (Buswell, 2006).

Researchers have found that MR can help musicians acquire specific advantages for the motor-learning and memorisation of repertoire. Keller (2012) examined the role of MR in music performance. He found that mental rehearsal, which contains cognitive and motor mechanisms that support the generation of anticipatory images, could help to assist in planning and executing one's own actions with potentially beneficial effects on the control of parameters such as timing, intensity, articulation, and intonation. Moreover, in ensemble performance, 'anticipatory imagery' may facilitate interpersonal coordination by enhancing 'during performance' predictions about others' action timing (Keller, 2012). Rubin-Rabson (1941) examined two forms of mental rehearsal on memorising piano music among nine skilful pianists. She compared three different methods of learning by combining mental practice; the methods were:

- 1) Keyboard trials – mental practice<sup>7</sup> – keyboard trials until material memorised smoothly.
- 2) Keyboard trials until material memorised smoothly – mental practice.
- 3) Keyboard trials until material memorised smoothly – another keyboard trial added.

She found that method 1 could achieve retention much better than others and could reduce the required extra keyboard trials. Method 2 not only required more keyboard trials but produced less retention than either of the other methods (Rubin-Rabson, 1941). In other words, musicians could benefit from adopting mental rehearsal mid-way through practice for a performance that needs to be played from memory. It seems that MR is a multifunctional strategy, which could help with both coping with MPA through improving physical functioning and changed emotional state, and enhance performance ability, such as assisting learning and memorising repertoire. Moreover, it may have different effects in different performance types (i.e. ensemble and solo).

---

<sup>7</sup> The form of mental rehearsal/mental practice in this study was to perform the material mentally with eyes closed, to maintain the image of the notes as firmly as possible, and to refer to the music only when there was confusion or uncertainty in mental performance (Rubin-Rabson, 1941).

## *Visualisation*

Visualisation is a mental rehearsal technique that involves the participant creating a picture of one aspect of performance in his or her mind. This makes it different from mental rehearsal, which involves rehearsal of the whole performance and physical movement (Browne *et al.*, 2010). Buswell (2006) indicated that the mechanism underlying visualisation is to prepare and programme the brain to send messages to muscles so that a physical movement can be executed as proficiently and smoothly as possible. The goal of visualisation is to prepare the mind for the task at hand and needs to be practised in advance and regularly in order to help performers overcome fear, achieve performance goals, and build self-confidence and self-esteem (Panella, 2014). For example, a cellist who is going to play Haydn's cello concerto in C major at Royal Albert Hall can use visualisation to feel the whole orchestra behind him, the audience surrounding the stage, the conductor standing on the left-hand side, and probably would feel the decoration of this hall as very red, luxurious and Victorian in style. Simultaneously, the cellist may also visualise himself playing the first C major chord of the first movement of Haydn's cello concerto as the start of the concert is announced.

Clinical psychologists use visualisation in the treatment of phobias, such as public speaking anxiety (Ayres & Hopf, 1992). Visualisation and its functions in both coping with anxiety and

enhancing overall performance in sport have been demonstrated in existing research (Nazam & Husain, 2014). Nazam and Husain (2014) mentioned that visualisation is beneficial for athletes seeking to improve performance, as it provides familiarity with the task at hand and positive feedback of their imagined performance.

In music performance, visualisation for musicians may be the same as if they were actually playing music on stage (Buswell, 2006). However, visualisation is intended as preparation for real activity and cannot substitute for the actual event (Panella, 2014). Other research has explored the potential of imagery as a component in the process of artistic performance in an elite group of twenty-six orchestral brass players from five major symphony orchestras in the United States (Trusheim, 1987). He found that positive imagery and visualisation could help his participants in dealing with nervousness and stress before and during performance. The example of positive imagery in his study is that participants imagined playing a difficult passage smoothly before actually playing in order to remove the worry, which may result in real mistakes. Positive imagery is related to mental imagery, which is without physical movement.

Taking this positive approach into account, Trusheim found that visualisation could help brass players cope with MPA in two ways: 1) using visualisation techniques in various situations before the actual

event; and 2) varying the details of visualisations so that performers could be flexible during the actual event.

The first way considers that the visualising technique can be adopted in different performance environments (e.g. audition, recital, and orchestral playing). The second considers that musicians can visualise a performance in various ways in order to reduce shock in the actual performance, for instance in cases where musicians may not know the performance environment in advance. This finding can be linked to Roland's argument that visualisation could decrease the shock and novelty of actually being on stage (Roland, 1994). In sum, visualisation is one of the techniques of mental rehearsal that can be used in conjunction with physical movement (Browne *et al.*, 2010). It can be adopted together with mental rehearsal and provides similar functions to mental rehearsal (i.e. to assist with learning, coping with MPA, and enhancing performance ability).

### *Performance goal setting*

Goal setting is a major element of all mental preparation programmes for practice and performance, which can take place before, during, and after any practice or performance (Thomas, 2014). Setting performance goals can also help with managing MPA, as it takes the focus away from the audience as being threatening (Roland, 1994; Thomas, 2014). Roland (1994) explained that most performers

believe that audience members attending a concert are expecting to hear a good performance, not to find fault with the performer. Besides, entertaining the audiences is not the performers' primary goal, as performers are seeking their own musical expression through the performance while being true to the composer's intent (Roland, 1994). Such thought is very positive and a good way to encourage performers to enjoy the performance and challenge themselves to achieve a high quality of performance rather than worrying about it, which would result in MPA.

Thomas (2014) stated that goal setting is a major element of all mental preparation programmes for practice and performance, and it is crucial to adopt it before, during, and after any practice or performance. Moreover, goal setting should consider situations (i.e. audition or practice) and timescales, such as short-term and long-term. Thomas also stated that there are three types of goals: 1) outcome goals, which focus on the end result; 2) performance goals, which focus on one's own performance, independent of the other performers; and 3) process goals, which are flexible, within the performer's control, and associated with less anxiety and better performances. The first one may contain external factors and concerns the outcome of performance, such as winning or losing in a music competition. The second one is in the control of performers, such as learning musical technique. An example, is a string player who

practises two-octave scales and aims to play clearly and with good intonation. The last one usually concerns how the musicians perform certain skills, whether physical, technical, or mental, which are important during the practice period. For example, 'I will practice the complete sonata with a focus on the imagery I want to use' (Thomas, 2014).

Zimmerman (2011) mentioned that two types of goal orientation have been distinguished in relation to the purpose for learners' achievements: 1) performance goal orientation, which is to gain positive judgements of one's current level of personal competence and avoid negative judgements; and 2) mastery goal orientation (also known as learning/task goal orientation), which is to gain positive self-judgements by actually increasing one's competence. It is an ongoing debate in relation to goals and the optimal balancing of mastery and performance approaches to learning and achievement in educational psychology. In the music domain, performance-orientated musicians would tend to be concerned with comparative ability, being the best, and outperforming others. Mastery-orientated musicians would tend to focus on developing competence, improving, making progress, and attaining mastery (Martin, 2012). It may be important to understand one's 'personal best'<sup>8</sup> in order to resolve tensions between these two goals and assist

---

<sup>8</sup> 'Personal best refers to personalized goals or standards of excellence that match or exceed one's previous best in an academic context' (Martin & Liem, 2010: p.64).

musicians to more optimally balance mastery and performance concerns as they prepare, persevere, and perform (Martin & Liem, 2010). Other researchers have indicated that, although setting a goal may bring positive effects such as enhancing motivation and self-confidence, the goals may also be dysfunctional; for example, when an individual is already stressed or under pressure, the assignment of difficult goals may lead to impaired performance by increasing stress (Jones & Cale, 1997).

It is interesting that goal setting is one of the MPA-coping strategies that takes the focus away from anxiety and concentrates on music performance itself, but it may also result in anxiety if it is adopted inappropriately and the goal is beyond the performer's ability. Jones, Swain and Cale (1990) explained that goal difficulty<sup>9</sup> and expectations of success were related to both cognitive anxiety and self-confidence in the expected direction; that is, the greater the goal difficulty and the lower the expectations of success, the higher the level of cognitive anxiety and the lower the level of self-confidence. Therefore, it seems that it may be better to understand one's 'personal best' or one's ability before setting goals in order to avoid unnecessary goal difficulty.

---

<sup>9</sup> "Goal difficulty" refers to a measure of the probability of a performer not achieving a goal, which is usually expressed as a percentage. Research indicates that, as goal difficulty increases, so does performance, up to a critical point. Thereafter, performance decreases (Kent, 2006).

### *Accepting mistakes/errors*

Musicians tend to strive for flawless performance and perfection, avoiding mistakes at all costs (Kruse-Weber & Parncutt, 2014). Accepting honest mistakes in practice and performance can lead to increased comfort and physical freedom in the eventual control of a performance (Westney, 2003). In addition, accepting a mistake as a past event and maintaining the focus on the present is a positive cognitive strategy to manage MPA (Roland, 1994). Some researchers use 'error' instead of 'mistake' in their studies (Kruse-Weber & Parncutt, 2014; Flossmann & Widmer, 2011; Hallam & Bautista, 2012). Buswell (2006) indicated the effects of making mistakes depend on three segments: a) lapse of perception, such as how the serious was the mistake for the whole performance; b) the language of the lapse, such as what word is used to describe the mistakes; and c) the ability to deal with mistakes, such as how performers cope with the mistakes when they happen, before/during/after performance. For example, a college musician plays a wrong note and thinks this wrong note is a blunder (the language of lapse) in her recital. She feels dreadful, as this wrong note may ruin her concert today (lapse perception). However, if she can think that this wrong note is about her behaviour, not her identity, and take mistakes as an experience, this activity may be regarded as accepting mistakes after performance.

Buswell suggested that musicians should have a rescue strategy prepared before performance, and that strategies for dealing with mistakes can be discussed in chronological order, that is, before, during, and after performance (Buswell, 2006). Before performance, it is crucial for musicians to minimise mistakes. They can do this by identifying and practising the most difficult passages they are studying and preparing a personal rescue strategy, such as writing down their feelings when they make mistakes, what they do when they make mistakes, what kind of words can encourage them to move on when the mistakes happen, and so on (Buswell, 2006). During performance, Buswell suggested that focusing on the current playing while the mistake occurs is the best way to reduce the level of MPA and bring attention back to the present. Thinking back to what has just happened (mistakes) is calamitous for musicians.

After the performance it is important to learn from the mistakes and see the mistakes as a type of feedback, not as a failure: to put the mistakes into perspective. In this way, musicians can have positive mental health and wellbeing. Similar research regarding setting out a rescue plan and learning from mistakes can be found in Kruse-Weber and Parncutt's study. Kruse-Weber and Parncutt (2014) examined risk and error management for musicians through an interdisciplinary conceptual framework. They indicated that balancing risks and managing errors may be crucial for musicians, as

risks can generally be perceived as either failures or opportunities.

Yet the potential underlying risks of performance situations are often ignored and underestimated. As a result, they set out a conceptual framework for musical risk management that gives orientation to musicians by identifying, clarifying, and communicating error issues (see Table 14, below).

*Table 14: Risk management*

External aspects:	Task-oriented strategies: (based on different aspects of performance)	Internal threat:
<ul style="list-style-type: none"> <li>• Social risks- Mostly communication problems between musicians, students, and teachers; they involve missing or wrong information, or misinterpretation.</li> <li>• Material problems- Refers to problems with the instrument, the room, or the musical score.</li> </ul>	<ul style="list-style-type: none"> <li>• Perceptual level- Distinguishing between the perspective of visual perception and cognition (mainly score reading). Weak points are, for example, beginnings and ends of phrases.</li> <li>• Kinematic level- Considering timing and position of movements and anticipation of movements (too late or too early) including the kinematics of arm and fingers such as anticipation, perseveration, substitutions, omissions, and intrusions.</li> </ul>	<ul style="list-style-type: none"> <li>• Individual risks- Mostly caused by lack of proficiency, technical deficiencies, a destructive, negative attitude to errors, and poor time management during practice or quick study.</li> <li>• Psychological and physiological risks- Psychological risks: unrealistically high expectations, negative outlook, and exaggerated beliefs in automation. Physiological risks: cold or sweaty hands, trembling extremities or shortness of breath.</li> </ul>

	<ul style="list-style-type: none"> <li>• Ergonomic level- E.g. technical or ergonomic factors such as the force required producing a tone with a given loudness or fingering errors.</li> <li>• Acoustic level- May depend on the venue. E.g. musicians should practise performing in different room acoustics and they should be able to regulate the acoustic balance.</li> </ul>	
--	---	--

According to Kruse-Weber and Parncutt (2014), musicians must deal with errors and develop strategies that balance the vitality of risk-taking against error prevention in both practice and performance. The risk management happens before the error occurs and error management takes place during and after the error occurs; both managements are important for musicians to learn (Kruse-Weber & Parncutt, 2014). They stated that error management is needed to differentiate between different stages of practice (see Table 15, below). Error management can be learned as a metacognitive skill in music education. Musicians could benefit by developing cognitive monitoring skills through reflecting upon their thoughts during practice, opinions

about error, attitudes towards skill acquisition, and by regarding errors as informative for the learning process.

*Table 15: Error management*

Stage of practice	Managing errors
Exploration/deliberate play	Errors in this preliminary stage of deliberate practice are tolerated and not yet corrected.
Declarative learning	Acquisition of facts: knowledge about what, where, and when. In this stage, errors play an important role in learning.
Procedural learning	Error avoidance; skills and knowledge are acquired by repeated performance and practice.
Creative practice	Can be characterised by exploring new ideas, balances, tempos, sounds, and so on.

The literature above provides concepts of mistakes/errors and how to manage them. The common factors are that managing mistakes is related to cognitive appraisal, which depends on performers' attitudes towards performance errors and stages of practice in which errors can be managed through time and musical practice. As a result, when adopting this cognitive strategy, it may also be incorporated into musical practice and instrumental learning.

### **3.2 What is behavioural therapy?**

Behavioural therapy is based on classical conditioning and the principle of learning theory. It focuses primarily on changing the dysfunctional behaviours that arise when people feel anxious (Kenny,

2011). The most common behavioural strategies for MPA are systematic desensitisation, muscle relaxation, awareness and breathing, and behavioural rehearsal. Appel (1976) examined the reduction of solo performance anxiety responses in thirty graduate music students, both piano majors and non-piano majors, in a recital situation. She found that a systematic desensitisation training procedure was more effective in reducing solo performance anxiety in adult pianists than music analysis training (i.e. analysing the score of his or her performance composition) or no training, and there was no difference between the piano majors and non-piano majors in solo performance anxiety. The systematic desensitisation training in the study included progressive muscle relaxation. Sweeney and Horan (1982) investigated the separate and combined effects of multiple measures of MPA among eight piano majors in a university. They found that both cue-controlled relaxation and cognitive restructuring were effective in reducing state anxiety, whether combined or separated. The cue-controlled relaxation also reduced self-reported trait anxiety and improved musical performance ability. It seems that many researchers have identified the positive effects of adopting behavioural strategies in coping with MPA. As a result, the following section details the different types of behavioural strategies in relation to coping with MPA found through 'naturalistic studies' (see Section 3.1.b, p. 103).

### **3.2.a. Selected behavioural strategies in response to MPA**

#### *Breathing*

When under stress, people may breathe faster than in normal circumstances. A quick breath creates an imbalance between oxygen (O<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>). This may lead to stomach pains, tingling hands, muscle tremors, and fatigue (Buswell, 2006).

According to Gabrielsson (1999), wind players experience a dry mouth and string players experience cold hands resulting in a lack of finger control (Gabrielsson, 1999). Such physiological symptoms may result from an imbalance between O<sub>2</sub> and CO<sub>2</sub> through breathing rapidly while under a stressful situation. As a result, learning how to breathe deeply under stress is of benefit for musicians to reduce the level and moderate the symptoms of MPA in order to overcome stage fright (Steptoe, 1989; Roland, 1994). Wells *et al.* (2012) investigated the efficacy of biofeedback training and heart rate variability as an intervention for MPA among forty-six musicians. They found that a single session of slowing breathing is helpful to reduce MPA for musicians.

How to breathe correctly is a good question. Buswell (2006) stated that correct breathing should be used all the time, not just when you feel you are under stress. Correct breathing should be learned and practised in advance. This includes how to breathe into the stomach or diaphragm, and to make the out-breath longer than

the in-breath because the out-breath can encourage the nervous system to relax (Buswell, 2006). In my experience, many music educators and one-to-one tuition teachers do not entirely understand what correct breathing is. Although they try to remind their students to take a deep breath before playing the first note or if they are feeling nervous backstage, they do not teach them how to breathe correctly. Based on Buswell's statement, correct breathing should be used all the time, not just when under stress, and should be learned and practised in advance. Therefore, if a researcher investigated the MPA-coping strategy of breathing skills, students could report that they have used this skill and that their teacher taught them how to breathe. However, reasonable doubt should be expressed – 'Are those students using the correct breathing skills?' and 'Do teachers teach their students the correct breathing skills and do they really understand correct breathing skills?'

### *Muscle relaxation*

When the body, the mind and the emotions are not stimulated and are still, it can be regarded as being in a relaxation situation (Buswell, 2006). For example, when you feel relaxed in a specific place and at a specific moment, your heart rate will slow down, slowing breathing and oxygen consumption. The muscles relax and there is a feeling of calm in the body. Buswell (2006) stated that fear and

anxiety can drift away or be replaced by feelings of peace and low anxiety owing to changes in the body generating changes in the mind. As a result, it can be considered as a way in which behavioural strategy is combined with cognitive effect to reduce the level of MPA for musicians. Relaxation skill is the same as breathing skill, in that both should be learned and practised (Buswell, 2006).

Practising techniques seemed to be a strategy more frequently used than others such as relaxation and engaging in counselling or therapy as a long-term coping strategy (Fehm & Schmidt, 2006). There are various relaxation skills, such as the Alexander Technique (AT), progressive muscular relaxation, cue-controlled relaxation, and guided relaxation. The following sections introduce details of these relaxation skills.

### *The Alexander Technique (AT)*

The AT, named after Frederick Matthias Alexander, teaches people how to stop using unnecessary levels of muscular and mental tension during their everyday activities. AT has been applied in the clinical area of pain management and has subsequently been popularised in the performing arts, especially ballet (Yoshie *et al.*, 2011). Yoshie *et al.* (2011) mentioned that the AT has been endorsed by many famous musicians and has been applied in many leading international music conservatoires. For example, the Royal College of

Music (RCM) states that the AT training has a strong tradition at the RCM.<sup>10</sup> Weekly group sessions as a compulsory module, led by resident experts, are popular with many students. It is also possible to arrange lessons with visiting specialists who offer guidance on particular aspects. In Taiwan, some universities offer AT in either their undergraduate or postgraduate programmes. For example, National Taiwan University of the Arts offer AT as optional module in undergraduate programme,<sup>11</sup> whereas Tainan National University of the Arts integrates the AT as an optional module into its postgraduate programme.<sup>12</sup> Some schools (i.e. National Pingtung University and National Taipei University of Education) mention that they offer a brief lecture on the AT or integrate the AT into some courses, such as group sessions of ‘vocal pedagogy,’ and the optional module ‘the art of music performance.’

The positive effects of AT can be found in many studies.

Lawrence (2015) examined the effectiveness of AT sessions on musicians' performance, anxiety, respiratory function, and posture by adopting systematic reviews that searched up to February 2014. The selection of studies in her research is based on participants who were

---

<sup>10</sup> Royal College of Music. (2017) *Health & Wellbeing*. Available from: <http://www.rcm.ac.uk/life/studentssupport/healthwellbeing> [Accessed 15<sup>th</sup> August 2017].

<sup>11</sup> National Taiwan University of the Arts. (2017) *Curriculum-Credit Course-Course of Bachelor*. Available from: <http://portal2.ntua.edu.tw/~d02/stuaff/course/100112.pdf> [Accessed 15 August 2017].

<sup>12</sup> Tainan National University of the Arts. (2017) *Curriculum Mapping*. Available from: [https://ap.tnnua.edu.tw/CourseInfo/Course\\_Map.aspx?DSno=312](https://ap.tnnua.edu.tw/CourseInfo/Course_Map.aspx?DSno=312) [Accessed 15<sup>th</sup> August 2017].

musicians, including children, adults, amateurs, students, and professionals, as well as singers and instrumental musicians. Interventions were AT sessions, including one-to-one or group lessons, a control group, which either received another or no control intervention, outcomes related to music playing, musicians' health or posture, and forms of publications, which includes peer-reviewed articles, Masters' and doctoral theses, and conference presentations. She found that AT sessions can improve performance anxiety in musicians (Lawrence, 2015). The AT may have beneficial effects on improving performance quality, as many researchers have suggested. Jones (1972) found that adopting AT may bring better breath control for singers, and Dennis (1987) found that AT may help wind players improve in maximal voluntary ventilation (e.g. adjust breathing resulting from anxiety).

#### *Progressive muscular relaxation (PMR)*

American physician Edmund Jacobson developed progressive muscular relaxation in the early 1920s. PMR is a technique for learning to monitor and control the state of muscular tension. For example, a therapist asks their patient to lie down in a warm and undisturbed place. Then the therapist asks patients to use breathing skill and tighten each muscle group without excess strain on the in-breath for a second, release on an exhalation. Finally, therapists

will ask patients to repeat the word 'relax' to themselves on every exhalation (Buswell, 2006).

### *Cue-controlled relaxation*

As to cue-controlled relaxation, it is based on the theory of 'classical conditioning' and is much simpler than the skills above. This is because it can be done alone without a therapist, as patients can write down the cue and practise it whenever they see the cue.

Cue-controlled relaxation addresses the external anxiety-producing stimuli (Sweeney & Horan, 1982). Sweeney and Horan (1982) examined the effect of cue-controlled relaxation and cognitive restructuring in coping with MPA among eighty college musicians. They found that adopting a strategy of cue-controlled relaxation is effective in managing state anxiety, in reducing self-reported trait anxiety, and improving musical performing competence.

### *Guided relaxation*

Guided relaxation is similar to cued relaxation, which can be also done without a therapist. However, guided relaxation needs tape- or audio-guide assistance. For example, people can record their own voice and listen to the recording when they need to use it (Buswell, 2006). There are many guided relaxation videos on YouTube or medical websites. However, the styles of the videos are quite varied. I

suggest if musicians would like to watch or listen to those guided relaxation videos, they might want to be aware of the quality and content of the video. This is because cultural variations and personal preferences may bring different definitions of the feeling of relaxation skills (Malhotra *et al.*, 2013).

To sum up, compared with the AT, progressive relaxation (PR) and guided relaxation, cue-controlled relaxation is the most suitable strategy for musicians to overcome MPA through self-help, as the AT and the PR need therapists' assistance. Yet, it should be noted that guided relaxation may need multimedia tools to assist musicians' learning. Nevertheless, the tapes or audio guides are easy to access from the Internet and the effectiveness of self-guided relaxation modules has been identified by other researchers in the clinical field (Malhotra *et al.*, 2013). Therefore, it is possible to consider guided relaxation as one strategy in self-managed MPA. Future research may need to address the issue of testing the applicability of self-guided relaxation as a net-based psychological intervention (Malhotra *et al.*, 2013).

#### *Following a pre-performance routine*

A 'pre-performance routine' is defined as a sequence of tasks, relevant thoughts, and actions that an athlete engages in systematically prior to his or her performance of a specific sporting

skill (Moran, 1996). In sports studies, following a pre-performance routine is an ideal intervention for athletes who are prone to distractions and choking during performance, as it helps them maintain appropriate attentional control under pressure (Mesagno & Mullane-Grant, 2010). In music performance, researchers have suggested that pre-performance routines are highly individualised and based on personal previous performance experiences (Connolly & Williamon, 2004). It seems that a successful performance requires planning and will be infinitely more successful than one with a lack of planning.

Buswell (2006) observed that planning is part of the process of warming up for the performance to come. It may start as performers begin the day, or even days or weeks before. As a result, he suggested a stage-by-stage approach to performance following a chronological order: mental preparation, the week and the day before performance, and at the venue. Mental preparation has the capacity to transform a routine performance into an exciting one and should begin a week or so before going on stage (Buswell, 2006). For example, as I mentioned in the mental rehearsal section above, musicians can create an actual performance scene by using MR and try to focus only on the positives of the situation, such as hearing the loud applause after a perfect performance. In this way, musicians can build up confidence in order to moderate the level of MPA.

The week before performance, musicians can focus on where, when, who, what, and how in order to balance their life with intensive practice. For instance, a college musician may ask himself the following: where is my graduate recital venue and when is it taking place, who should I invite, what things should I prepare for, and how should I practise and plan in the week before the recital? This strategy is very helpful for college musicians who are preparing for their final examination (graduate recital), in order to organise their practice schedule and keep the routine as regular as possible.

The day before the performance, performers should be thinking positively, taking time to prepare themselves by eating their favourite foods or using their favourite bathing or grooming products, ensuring that everything is ready for the big day, and adopting MR and visual rehearsal to go through all of their pieces. At the venue, musicians can arrive early in order to have sufficient time to get to know the venue (Buswell, 2006). Roland (1994) also mentioned that performers could become familiar with the performance venue if they arrive early and warm up with their instruments, which is physical preparation as well as having the psychological effect of reassuring the performers that the sound is satisfactory, so as to have some time alone before the audience arrives.

Connolly and Williamon (2004) observed that pre-performance routines may include physical activities, nutrition,

and rest, as well as warming up using mental, emotional, technical, and musical strategies. They indicated that there are two key factors that seemed to apply in facilitating the optimal state for performance: 1) a long-term commitment to high-quality physical, technical, and artistic preparation; and 2) the development of an individualised, flexible pre-performance routine. The first factor concerns optimal performance preparation and encourages musicians to incorporate mental and emotional strategies through reviewing previous performance preparation and finding the most successful methods. The second factor emphasises the concept that consistency in preparation leads to consistency performance. Musicians can segment pre-performance routines into four sections, such as the morning and the afternoon on the day of performance, the arrival at performance venue, and ten minutes before performance (Connolly & Williamon, 2004).

#### *Various physical activities*

Physical preparation before performing is a very individual choice (Roland, 1994). It is interesting to consider how physical activities work for musicians. According to Taylor and Wasley, 'across the broad spectrum of educational and professional music performance contexts, general physical fitness is an area that receives surprisingly little formal emphasis' (Taylor & Wasley, 2004: p. 162).

Perhaps musicians are mainly focused on musical skills, mental training, and avoiding extra physical damage by being involved in a high-risk exercise. For example, a cellist may protect his or her fingers by avoiding playing basketball or going rock-climbing. However, moderately intense exercise has revitalising or energising capabilities, in addition to reducing anxiety (Taylor & Wasley, 2004). Besides, physical inactivity may have an impact on the emotional state, such as low mood and a negative state of mind.

There are two types of physical activities: chronic exercise and acute exercise. Each brings different beneficial effects for the health of musicians and can be used at different times, such as long-term physical activities for chronic exercise and acute exercise one day prior to performance (Taylor & Wasley, 2004). Many studies have indicated that chronic exercise might increase positive mood and reduce depression (Biddle, Fox & Boutcher, 2000; Mutrie, 2000). Some researchers have also indicated that regular physical activities help to control MPA (Rocha *et al.*, 2014).

Rocha *et al.* investigated the relationship between regular physical activities and the level of MPA among eight-seven graduate music school students who had at least two years of music experience, were engaged in a local or national orchestra, and were studying for a music higher-education degree. Their study adopted a questionnaire about physical activity habits and MPA inventory. They found that

regular physical activity (i.e. an active lifestyle before performance) helps musicians to control their MPA better. Yet this study did not mention what types of physical activities were included in the questionnaire and what length of time was used to define 'regular' activities.

Taylor (2000) explained that chronic exercise that includes yoga, tai chi, and other aerobic activities is recommended for reducing an anxious disposition and can help to manage stress. Khalsa *et al.* (2013) examined the effects of yoga intervention on MPA among the residential music students of a prestigious six-week summer programme at Boston University. They found that yoga could be an effective intervention to deal with both the cognitive and somatic symptoms of MPA, such as trembling, increased heart rate, and fear of failure. It is also possible that yoga could help reduce the fears that adolescent musicians may have about negative performance evaluations by others, such as teachers and parents.

The feedback on the yoga programme reported by participants in the study is that they would recommend it to other musicians and planned to continue with yoga. But they found that yoga did not have as much of an impact on the technical and creative aspects of musical performance as it did on MPA reduction (Khalsa *et al.*, 2013). This study did not explain why yoga has such positive effects from the participants' point of view, as it only compared a control group and

yoga group concerning MPA levels.

Other researchers have explained that chronic exercise can reduce MPA as it can distract anxious focus and increase self-confidence and self-esteem. Regular mental focus on something that prevents rumination about ongoing negative thoughts can certainly be useful (Taylor & Wasley, 2004). For example, when people are participating in chronic exercise, the activity can force people's mind to focus only on the physical symptoms of the activity without thinking about other things.

As to acute exercise, such as running, it can reduce self-reported state anxiety and physiological indices of stress (Taylor, 2000). The benefits of acute exercise are distraction and mastery, release of endorphins, and rhythmic contraction and relaxation of muscles to reduce tension (Taylor & Wasley, 2004). I have categorised the characteristics of chronic exercise and acute exercise in Table 16, below.

*Table 16: Exercise type*

Types	Time	Benefits	Cautions
Chronic exercise	Regular exercise participation, e.g. six–eight weeks of regular exercise.	Distraction, reduction in muscle tension, heart rate, and blood pressure. Feelings of calm, reduction in trait anxiety,	Goal orientation (focus on personal achievement not comparison with others). Starting with one session per week lasting between twenty and thirty minutes. After three to four weeks, it can be increased to two

		improved lung function for brass and woodwind players.	sessions per week.
Acute exercise	Single session (at least twenty minutes) that can be embedded into pre-performance routine.	Distraction, reduction in muscle tension and blood pressure. Reduction in state anxiety.	Need to be rehearsed and any response closely monitored before being incorporated into a pre-performance routine. Should take place more than an hour prior to performance.

*Contrived performance situation*

Creating a small audience of students and musical experts for a trial performance can help to prepare for the actual performance, reduce MPA in the real performance situation, and enhance performance quality (Nixon, 2013; Bissonnette, Dubé & Provencher, 2015). Students have expressed their wish for more occasions to perform in front of friends or family members as one anti-MPA intervention (Fehm & Schmidt, 2006). However, Abel and Larkin (1990) argue that although a contrived performance situation is useful in that it allows assessments to occur during an actual performance, it may be somewhat less threatening than the consequences that may occur in real life (Abel & Larkin, 1990). For example, receiving a grade that may influence an individual's graduate

diploma after a recital may raise different feelings about the performance so as to contribute to different levels of MPA. Even though the actual performance situation cannot be the same as the contrived situation, creating more performing opportunities through adopting contrived performance situations can still desensitise the musician somewhat to the performance experience and help with MPA (Nixon, 2013).

Researchers also explored musicians' perceptions and experiences of using simulated performance environments with technology support (i.e. virtual panels and audiences). They found that musicians tend to use simulation training to enhance specific performance skills, rather than reducing MPA overall, which is a new finding of positive effects through the use of simulation training (Aufegger *et al.*, 2017). In other words, the simulation training not only helps musicians reduce the level of MPA, but also assists their music practice.

#### *Practice plan/Tapering off practice*

According to Roland (1994), tapering off practice is a crucial strategy for musicians preparing a performance; that is, only doing sufficient practice on one or two days before performance. When the performance is imminent, performers generally only carry out sufficient practice, such as running and reading through the score of

their performance backstage (Roland, 1994). For example, if a cellist is going to prepare an entire concerto, he may determine the most difficult passages first, and then work through small sections, repeating them until he feels confident he can play the correct notes in each one. Then, he might move on to run through the whole movement. Probably one or two hours prior to performance, he may run through those difficult passages again, instead of playing the entire concerto.

Roland stated that tapering off practice was seen as essential in MPA management (Roland, 1994). Although he did not explore what the psychological effects were, it can be assumed that over-practice/overuse on the day of performance may result in physical injuries and MPA (see also Chapter 2.1.d, p. 52). As a result, tapering off practice may help musicians to avoid physiological damages resulting from overuse.

There seems to be a tendency to focus on two types of goals for the practice of a specific piece of music: technical performance quality and expressive performance quality (Jørgensen, 2004). The definition of 'goals of technical performance quality' is related to musical expression, ideas, and communication. Hallam (1997) observed that some students let their musical ideas guide their technical work, some allow it to develop naturally, while others use a combination of preconceived plan and intuitive process towards their performance.

As to 'goals for expressive performance quality,' this is a goal to develop a performance plan after overcoming all technical challenges. For instance, if a cellist is going to perform David Popper's *Concert Polonaise* Op. 14, he could try to practice the section that includes lots of octave passagework, and then run through the entire piece of music again. Once he feels his playing is fluent and not stuck in any specific segment, he will start to focus on musical expression.

All in all, effective strategies for practice depend on individual differences and specific preferences for learning habits (Jørgensen, 2004). There is no evidence to support any one practice strategy as being the best or better than the others. Therefore, it is important to attain self-evaluation skills and self-directed exploration, as strategies for effective practice are anything but routine and may include everything, such as musical techniques and psychological strategies for managing frustration (Chaffin & Lemieux, 2004).

### **3.3 What is cognitive behavioural therapy (CBT)?**

Cognitive behavioural therapy (CBT) is often used as umbrella term and as shorthand to identify a group of interventions, rather than a single strategy (Nezu & Nezu, 2015). In other words, CBT is a combination of behavioural and cognitive strategies, which is focused and directive, usually of short duration and action-orientated (Kenny, 2011). It was developed from, and is in large measure encompassed

by, behaviour therapy. Traditional behavioural researchers underscore the mediational role that cognitive processes can play regarding behaviour (Nezu & Nezu, 2015). In other words, CBT is an action-orientated form of therapy that assumes that maladaptive, or faulty, thinking patterns cause maladaptive behaviour and negative emotions. CBT strategies focus on changing an individual's thoughts, such as using cognitive patterns in order to change his or her behaviour and emotional state. It can help people change how they think and what they do. These changes can help them feel better. Unlike other talking treatments, it focuses on 'here-and-now' problems and difficulties. Instead of focusing on the causes of distress or symptoms from the past, it looks for ways to improve the current state of mind. Although the evidence in support of the improvement in MPA by way of CBT is positive, one should note that treated musicians may not achieve a reduction in level of anxiety similar to that experienced by those who do not suffer from MPA, even after CBT (Kenny, 2011).

### **3.3.a. The unique/effective components of CBT**

According to Kenny (2011), cognitive, behavioural, and cognitive behavioural interventions are based on the same principles, but use the available therapeutic techniques in different amounts. There are two broad streams of thought, CBT and psychodynamic

therapy,<sup>13</sup> which continue to compete for overall dominance. Stallard states that CBT is a very effective way of helping people overcome problems and is based on the idea that how we feel and what we do are affected by what we think. It will help people to identify unhelpful thoughts that can lead to worried, anxious, or unpleasant feelings (Stallard, 2005).

Rishi (2015) discussed and clarified the features of CBT and features of psychodynamic therapy (see Table 17, below). She mentioned that the advantage of CBT is that it fosters a more independent effort on the part of the client. As such, it involves less reliance on the therapist than does psychodynamic therapy. Many people cannot afford or do not want to ongoing therapy (six months or longer) and prefer to try to use the more directive skills learned in a time-limited CBT course of treatment on their own. CBT is particularly good for recent onset and relatively circumscribed issues or specific goals.

*Table 17: Features of CBT and psychodynamic therapy*

Features of CBT	Features of psychodynamic therapy
<ul style="list-style-type: none"> <li>• It is relatively brief and time-limited (twelve weeks to six months).</li> <li>• It is highly instructional in</li> </ul>	<ul style="list-style-type: none"> <li>• While it can be brief, it is often longer term (six months or longer).</li> <li>• It is less structured, typically</li> </ul>

<sup>13</sup> Psychodynamic therapy is a therapeutic approach that embraces the work of all analytic therapies. It tries to understand 'why' a person feels or behave the way they do, such as uncovering deeper and often unconscious motivations for feelings and behaviour (Rishi, 2015).

<p>nature and homework is a central element.</p> <ul style="list-style-type: none"> <li>• It is highly structured and directed, with the therapist setting the agenda for each session (based on mutually agreed goals).</li> <li>• It focuses on the here-and-now only and not a person's history.</li> <li>• The relationship with the therapist is not a focus of the treatment.</li> </ul>	<p>without homework assignments.</p> <ul style="list-style-type: none"> <li>• The client, not the therapist, sets the agenda for the session by talking about whatever is on their mind.</li> <li>• It focuses on the here-and-now as well as on personal history.</li> <li>• The relationship with the therapist is included as a focus of therapy.</li> </ul>
--	---

Kenny (2011) has summarised the unique features of CBT from a practical perspective, which can be compared with the spectrum of psychodynamic therapy and identified with six techniques. Firstly, the use of homework and out-of-session activities assists in the maintenance of new learning after termination of therapy and offers opportunities to practise the skills learned in therapy. Secondly, the direction of session activity is set by use of an agenda, pre-planned techniques at specific times during the session, deciding what will be discussed prior to the session, and actively directing the patient towards specific topics.

Thirdly, skills to be used by patients to cope with symptoms are taught. It focuses on developing new cognitions and behaviours that will assist the person in dealing more effectively with their

symptoms and behaving more adaptively. Fourthly, CBT emphasises patients' future experiences by focusing on the patients' current and future behaviours. Fifthly, it provides patients with information about their treatment, disorders, or symptoms. This involves offering explicit explanations to patients about the treatment modality and the specific techniques that will be used to help them manage their symptoms (i.e. recommending books for patients to read and providing handouts about treatments). Lastly, cognitive-focus therapies evaluate and challenge the patients to modify false or distorted cognitions associated with their symptomatic behaviour.

### **3.3.b. Is CBT effective for MPA?**

The spectrum of CBT is the most researched of all psychological interventions and, to date, is considered the most effective treatment for a range of psychological disorders (Kenny, 2011). Goren (2014) investigated the effectiveness of nonpharmacologic psychotherapies for MPA by through a meta-analysis. She found that the combined psychotherapies (i.e. CBT) are most effective compared with complementary and alternative therapies (i.e. hypnotherapy), behavioural therapies, and cognitive therapies. Kendrick *et al.* (1982) compared the efficacy of behavioural rehearsal and CBT for MPA. They found that CBT showed a greater improvement than behavioural rehearsal on MPA. A similar finding

can be found in Appel (1974), where a desensitisation procedure was more effective in reducing MPA than music analysis training or non-training. Nagel, Himle and Papstorf (1989), who combined systematic desensitisation, rational-emotive therapy, and exposure, as well as Niemann, Pratt and Maughan (1993), who used a combination of muscle relaxation, breathing awareness, coping imagery, and biofeedback, found a decrease in self-reported trait anxiety and state anxiety of MPA in graduate music students.

Hunnicutt and Winter (2011) investigated the adoption of CBT strategies to cope with MPA for vocal students through three case studies. They stated that only licensed medical or mental health professionals could diagnose performance anxiety, not teachers. However, the therapeutic strategies for coping with MPA can be adapted for instrumental lessons and used by teachers during those lessons, including cognitive restructuring, coping cards, and graded task assignments. In one of their case studies, they found that low self-esteem contributed to a high level of MPA. As a result, they suggested teachers could have a conversation with students and help them by pointing out their strengths (i.e. reasonably rethinking) in order to increase their self-efficacy, self-confidence, and alter their self-concept in a positive way (Hunnicutt & Winter, 2011). This could be seen as adopting a cognitive restructuring technique.

Coping cards may be helpful in reminding students

experiencing stress that they have the capacity to succeed, and a single cue word works better in stressful moments (Hunnicuttt & Winter, 2011). For example, students can write down a few well-thought-out coping cards (i.e. 'breathe' or 'strength').

As to the graded task assignment, teachers can map out a highly structured practice plan together with students, determining how much practice is needed each week, when it will take place, the content of the practice sessions, and the rewards after each practice as motivation. Hunnicutt and Winter (2011) mentioned that 'graded task assignment' can make students concentrate on practice sessions and avoid distractions. Other case studies included were desensitisation, specifically focusing on a public performance context, and cognitive restructuring for students with perfectionist tendencies (Hunnicuttt & Winter, 2011).

### **3.3.c. How does CBT work?**

CBT can be characterised by a number of distinctive features. There are six important steps in gaining clarification regarding which elements of a complex psychological therapy contribute to therapeutic outcomes (Kenny, 2011). I have summarised the steps in Table 18, below.

*Table 18: The six important steps to CBT*

1	An assessment phase in which the person recounts the story of their symptom onset to the therapist.
2	Confirmation of diagnosis and severity may be assessed using questionnaires and rating scales.
3	Some educational input is provided about the person's condition.
4	Informed consent should be obtained prior to the commencement of therapy.
5	Patients are invited to work collaboratively to identify a target.
6	Patients are also advised of their responsibilities in therapy, such as diary keeping, completing homework, and behavioural practice.

Stallard 2005 found that the effects of CBT can be achieved with fewer than the standardised twelve to sixteen sessions. However, this typically depends on the aim and focus of intervention, which can broadly be categorised in three levels, summarised in Table 19, below. Stallard also indicates the seven core components of CBT for anxiety disorder: psychoeducation, emotional identification, relaxation training, cognitive restructuring, positive self-talk and self-reinforcement, and systematic desensitisation via exposure (Stallard, 2005).

*Table 19: Three levels of CBT's aim and focus*

Level	Detail
1	Developing a clear CBT formulation that explains the onset and/or maintenance of the patients' difficulties. In this level, it requires up to four sessions and focuses on assessing the psychoeducation.

2	Helping the patients identify their unpleasant emotions and systematically confronting and coping with stressful situations, i.e. positive self-talk, positive diary, and relaxation techniques. It requires between four and six sessions.
3	Helping the patients identify and challenge common dysfunctional cognition and processes that affect a number of aspects of their life.

Although CBT can be achieved in fewer session, the average of number of sessions is four two-hour sessions per week, for around six weeks, and the cost of CBT varies between specialists (Brugués, 2011). It seems that the cost in time and money may be the disadvantages of CBT. Therefore, researchers have developed self-help based on CBT, using the theory of self-management, which the next chapter will explore.

### 3.4 Summary

Cognitive therapy, behavioural therapy, and CBT all have their functions and effective strategies for managing MPA. Cognitive therapy can help people learn to make use of these strategies on their own, so that they attain greater self-efficacy in monitoring, modifying, and evaluating the functionality of their own thinking styles (Newman, 2015). Behavioural therapy can assist people in changing their dysfunctional behaviours through multiple relaxation skills. CBT can help people changing their thoughts in order to change their behaviours and emotional states, which is also the most researched of

all the psychological interventions, and is considered the most effective treatment for performance anxiety.

In the field of musical research, these therapies have been discussed in relation to the specific strategies used in the context of musical practice and stage performance, particularly when focusing on anxiety issues. Researchers have found that some strategies are multifunctional, both enhancing performance capability and managing anxiety, such as mental rehearsal and visualisation. As a result, it may be of benefit to learn various MPA-coping strategies as a way of self-managing MPA and as a way of enhancing performance ability and assisting learning. In addition, owing to the contributing factors of MPA being varied and individual, the MPA strategies adopted may need to be individualised and various combinations of strategies may need to be used, depending on individual circumstances.

Based on these two arguments, it is important for individuals to develop the ability to self-manage, which can help them find the most suitable MPA-coping strategies and manage their anxiety. Furthermore, some anxiety-coping strategies have been developed and tailored for self-help. Chapter 4 explores the concept of self-management and self-help strategies for managing anxiety.

## **Chapter 4. Self-management**

### **4.1 Theory of self-management**

In clinical studies, self-management has been defined as an individual's ability to manage, with treatment, the physical and psychological consequences and lifestyle changes inherent in living with a chronic condition (Mulligan & Newman, 2007).

'Self-management' can also be a term used in reference to professionals' development of interventions to help people self-manage their condition more effectively. Many self-management interventions incorporate concepts underpinned by psychological theories, such as cognitive therapy, behavioural therapy and CBT (Mulligan & Newman, 2007). Mulligan and Newman (2007) stated that the underpinning psychological theories provide a theoretical framework to draw attention to the importance of people's beliefs about themselves, their illness, and how they affect self-management. Self-efficacy, self-regulation, and stress-coping models are key concepts of these theories. The definition of self-efficacy relates to the self-confidence that individuals have in their ability to perform a given behaviour. Individuals with resilient self-efficacy have the ability to rebound quickly from difficulties; even when they make serious mistakes on stage, they can still continue to perform as if nothing has happened (Bandura, 1997).

Mulligan and Newman indicate two routes, modelling social persuasion and skill mastery, which can help people to enhance their self-efficacy (Mulligan & Newman, 2007). Modelling social persuasion emphasises teaching self-management skills and learning from others in a group setting, as observing an individual's behaviour can act as social persuasion that encourages other people to take part. Skill mastery involves goal setting and learning problem-solving skills. This is because setting specific goals increases the possibility of success and each success helps to build self-efficacy as well as maintain behaviours as people come to believe they have the ability to achieve their targets. However, it should be noted that difficult goals, which extend beyond personal competence, may lead to anxiety (see also Chapter 3.1.b, p. 120).

When applying these routes in the self-management of MPA, two factors need to be taken into account. Firstly, some interventions/coping strategies may be helpful to learn in a group setting. Secondly, it may be better to set goals or have a plan during the performance preparation period. However, it is important to acknowledge that learning interventions/strategies in a group setting contain both pros and cons. Group learning programmes have the advantage of providing the opportunity for peer support and reducing administrative costs. However, individuals may be less willing to attend group programmes for personal reasons, such as timetable conflicts,

social anxiety, and the differences in individuals' needs. Clark and Hampson (2001) note that an individual programme can be tailored to each person's needs and can be designed to be more easily incorporated into standard care. However, it may still be important to be aware of the issue of how successfully the strategies used are maintained when there is a lack of peer support and encouragement.

In relation to music learning, based on the argument that self-efficacy is one of the key concepts within psychological theories of self-management, peer learning may be one of the methods that helps students self-manage their MPA, as it can increase self-efficacy through the learning process. Moreover, this method can be embedded in MPA-coping strategies (i.e. the contrived performance situation). Hanken (2016) explored peer learning as part of students' principal instrument study in the Norwegian Academy of Music through observing classes and interviewing teachers and students. She stated that peer learning is invaluable in music higher education and benefits both students and teachers within a one-to-one tuition context. This may be owing to the theory of community of practice, whereby learning results from participation in social practices rather than from direct teaching and transfer of knowledge (Lave & Wenger, 1991; Hanken, 2016).

In the study, Hanken examined three cases in which teachers organised group lessons (peers learning in a group) for students each

week or every few weeks in the academy. The major findings in her study can be divided into sections: 'peers as resources in class lessons,' 'providing useful feedback to peers,' and 'students as teachers.' The example of 'peers as resources in class lessons' includes students giving comments on each other's performances and students performing pieces that they are still in the process of learning. This can be linked to Bandura's argument about how a person's sense of self-efficacy can be enhanced while observing others and 'coping modelling,' through which students in the class can observe fellow students working through difficulties, gradually overcoming them through determined effort (Hanken, 2016).

'Providing useful feedback to peers' includes listeners expressing what they find meaningful in the performance, a performer asking questions about issues on which he wants feedback or opinions, listeners posing open and neutral questions to the performer regarding artistic ideas, and listeners offering opinions to the performer but only if the performer asks for such feedback (Hanken, 2016). She then found that students reported they gained more self-esteem and felt a greater sense of security through this learning process, as they experienced the group as a safe and trusted learning environment. The example of 'students as teachers' is that students take turns to perform their piece while other students give feedback, ask questions and discuss different technical or musical solutions. The teacher rarely engages in discussion

but rather encourages students to go deeper into an issue. This learning process can help students become independent learners and musicians, which challenges the power dynamic of one-to-one tuition in the traditional conservatoire learning environment (Gaunt, 2011; Hanken, 2016).

In the self-management of MPA, group learning has both the advantages and disadvantages previously discussed. However, in music performance, peer learning in a group setting brings many positive effects, especially through the role of peers. The role of peers seems to play a crucial part in instrumental and vocal learning within the traditional one-to-one tuition learning context. This argument could provide a rationale for some coping MPA strategies, such as accepting mistakes and organising a contrived performance situation, since the method of 'peer learning' through instrumental group lessons has psychological functions in reducing MPA. For example, the purpose of adopting a contrived performance situation is to increase the level of MPA through simulating the actual performance situation in order to help students cope with their fear of the audience, negative feedback from the audience, and making mistakes. Through group learning, students may have more opportunities to experience playing in front of others (i.e. audiences) and receiving feedback, either positive or negative, from others. In addition, observing peers' learning may help students reduce their anxiety from peer pressure, such as comparing

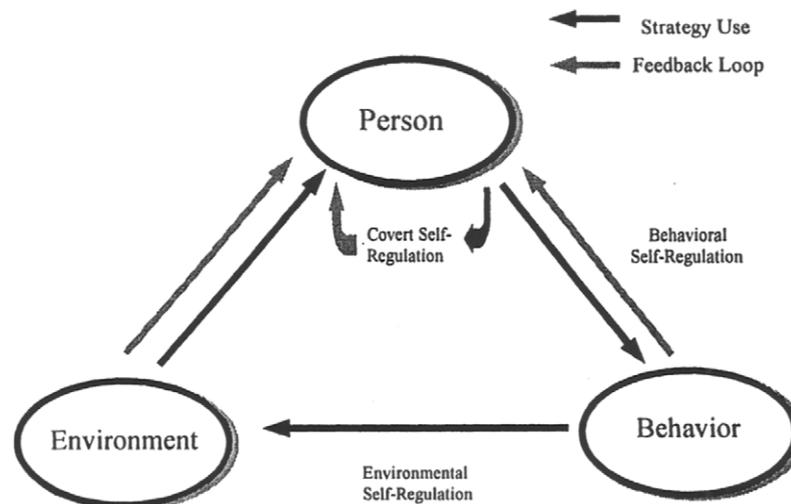
one's musical achievement to others'. Learning through observing others may help musicians understand that it is not about who is the best musician, but about what they can all learn from the performance and the feedback process that follows. This links to Bandura's theory that self-efficacy can be enhanced while observing others, as if the instructive function of the observation is underlined, while the comparative, evaluative function is minimised.

The other key concept underlying psychological theories of self-management is self-regulation, which frequently appears in musical performance studies of music practice (Nielsen, 2001; Varela, Abrami & Upitis, 2016). In clinical studies, the definition of self-regulation relates to altering individuals' views about their condition and its treatment, which are seen as the drivers of coping and health-related behaviour (Mulligan & Newman, 2007). In a music educational context, self-regulation is often associated with Zimmerman's model, which provides a framework through which to comprehend the various possible trajectories of individual musical development (Varela, Abrami & Upitis, 2016). Zimmerman (2000) stated that 'self-regulated learning is described as cyclical because the feedback from the prior performance is used to make adjustments during the current effort. There are three cyclical phases of self-regulated learning; before efforts to learn (forethought), during learning efforts (performance control), and after learning efforts

(self-reflection). Forethought phase is task analysis (i.e. goal setting and strategic planning) and self-motivation beliefs (i.e. goal orientation and outcome expectancy). Performance control phase features self-control (i.e. task strategies, time management, help-seeking, self-instructions, and environmental structuring) as well as self-observation (i.e. metacognitive monitoring and self-recording). The self-reflection phase includes self-judgements (i.e. self-evaluation and casual attribution) and self-reaction, which is related to self-satisfaction' (Zimmerman, 2011).

The adjustments for current effort are necessary. This is because 'personal, behavioural (i.e. self-observing and strategically adjusting one's method of learning) and environmental factors (i.e. observing and adjusting environmental conditions or outcomes) are constantly changing during the course of learning and performance, and must be observed or monitored using the triadic self-orientated feedback loop' (Zimmerman, 2000: p. 14). Figure 1, below, illustrates the triadic forms of self-regulation regarding these three factors (Zimmerman, 2000: p. 15).

Figure 1: Triadic forms of self-regulation



This figure refers to the degree to which individuals are metacognitively, motivationally, and behaviourally active in their own learning (Varela, Abrami & Upitis, 2016). The centrepieces of self-regulation are strategy selection, monitoring, and revision (Nielsen, 2001). Nielsen (2001) stated that owing to the nature of instrumental teaching in one-to-one tuition and students often being engaged in solitary practice, the effectiveness of self-regulatory methods might be altered and differ depending on interpersonal, contextual, and intrapersonal condition.

Increasing or enhancing motivation could help students' self-regulated learning (Zimmerman, 2011). According to Zimmerman (2011), there are many sources of motivation to support self-regulated learning, such as goal orientation theories (i.e. concerning the purpose or reasons for the learner's achievement) as well as self-efficacy and

outcome belief (i.e. expectancies about personal capabilities and outcome). Each source of motivation can be linked conceptually to other sources of motivation and to specific metacognitive processes (Zimmerman, 2011).

Hallam (2001a) examined the development of metacognition and performance planning strategies among twenty-two professional musicians and fifty-five string players, from beginners to musicians at the point of entry to college. She found that professional musicians showed extensive metacognition in relation to their preparations for performance, encompassing technical matters, interpretation, and issues relating to learning itself (i.e. concentration, planning, monitoring, and evaluation). There were similarities in the strategies adopted, but there was considerable variation among professional musicians because of the difference in individual needs (Hallam, 2001a). This research also found that some professional musicians experienced MPA but had developed coping strategies. Novice musicians generally had not developed successful coping MPA strategies. They often attempted to cope with MPA by playing in front of people, mock examinations, and strategies used during performance (i.e. treating an exam as if it were a lesson). It seems that there is a correlation between self-regulation of musical practice and MPA self-management.

In sum, it seems that self-regulatory skills (i.e. activities relating to learning itself) in relation to preparation of music performance can

be attained through a learner's own learning process. When applied in MPA self-management, we can assume that students may find effective MPA-coping strategies through the learning process of developing the learner's own expertise.

As to the 'stress-coping model,' which is one of the key concepts underlying psychological theories of self-management, it focuses on strategies people use to cope with stress. Active strategies are more helpful than passive strategies. The strategy based on this concept is CBT, discussed in Chapter 3.3 (Mulligan & Newman, 2007). According to Auerbach (1986), stress management intervention arose in the 1960s with the growth of community mental health and crisis intervention movements; disenchantment with medical model approaches to mental health, and dissatisfaction with traditional psychiatry; the development of behavioural and CBT; the growing acceptance of psychological problems within the community; and the growth of self-help approaches to psychological wellbeing. The following section will explain the differences and similarities between stress and anxiety, as well as introduce the interventions of stress management.

## **4.2 Stress management**

According to Hogan (2013), the definition of stress is a state that can be precipitated by a range of factors, including symptoms of

anxiety in its sufferers such as poor sleep. Stress can have positive effects on an individual, but chronic stress can negatively affect health, which can certainly predispose someone to anxiety. Whether or not these conditions develop tends to depend on an individual's response to stress. Anxiety may also be the manifestation of other conditions (Hogan, 2013). The difference between stress and anxiety is determined by the effect of chronic stress on individuals (Hogan, 2013). In other words, anxiety is the effect of stress that continues after an existing stress-causing factor is gone.

Stress can also be seen as the body's reaction to a circumstance or situation that requires a physical, mental, or emotional response or adjustment, and can be caused by any changes, including positive ones. Anxiety is a feeling of fear and is often related to situations perceived as uncontrollable, which can also be viewed as a future-orientated mood. In other words, stress is a reaction to something happening now, and anxiety is a reaction to something that is going to happen in the future. Although stress and anxiety are slightly different, both stress and anxiety bring negative emotions that can be managed.

Stress-management interventions are designed to help people cope with stressors, negative emotions, physiological stimulation, and health consequences that arise from these stressors by changing their cognitive and emotional responses to the trigger events (Kenny, 2007). Stress management interventions vary widely in content and

duration, and may include progressive muscle relaxation, meditation, guided imagery, cognitive restructuring, problem-solving skills, and anger management, as well as educative components related to general health, diet, exercise, and wellbeing.

According to the Australian Psychological Society (2010) there are a number of psychological interventions (i.e. narrative therapy and family therapy) that can be applied and adopted in coping with various mental disorders, such as anxiety, borderline personality disorder, and eating disorders. Kenny (2007) stated that caution about stress-management, which can be distinguished from many other psychological interventions, must be invoked (Kenny, 2007). First of all, stress management is applied to adequately functioning individuals who may face difficult circumstances in their occupational or social settings. Secondly, it is more educational than psychotherapeutic, as programmes are generally derived from the principles of learning theory (i.e. CBT), which aim to change some aspect of behaviour that has been learned and therefore can be changed. Finally, the deliverers of intervention programmes act as educators rather than establishing a therapeutic relationship with participants. Therapists help participants to set their own goals and assist them with self-monitoring.

Other psychological interventions, for example narrative therapy, differ in that therapists identify clients' values or strengths

through understanding the 'stories' that they use to describe their lives, which is effective for coping with an eating disorder, for example (Scott, Hanstock & Patterson-Kane, 2013).

The direction in stress management has changed in recent years, as stress itself has been understood in a new way, so as to affect the way that stress management programmes are developed and delivered (Kenny, 2007). Self-help therapy therefore has often been mentioned, used as an adjunct to traditional therapy or as a standalone treatment, and can be categorised as two types: guided self-help that includes brief contact with a therapist; and pure self-help, without contact with a therapist. Most self-help programmes are based on CBT principles and typically combine psychoeducation<sup>14</sup> with skill training, including homework tasks. In self-help programmes, individuals read books or use computer programmes to help them overcome psychosocial problems (Australian Psychological Society, 2010).

Furthermore, there has been a growing interest in the use of the Internet as a means of delivering psychological interventions (Kenny, 2007). Learning strategies to cope with stress through the Internet may be of benefit to people who would like to save money, want easy access, and feel uncomfortable being face-to-face with

---

<sup>14</sup> Psychoeducation is not a type of therapy, but rather a specific form of education that involves explanation of information to clients regarding what is widely known about the characteristics of their diagnosis and information about how it can be actively monitored and effectively managed (Australian Psychological Society, 2010).

counsellors (Kenny, 2007). Apart from educators or counsellors delivering psychological intervention through the Internet, it may also be that people seek coping strategies from the Internet on their own initiative. For example, if people think that stress is not a serious issue that needs to be immediately cured by professionals, they may use the Internet or other resources (i.e. pure self-help) to find suitable strategies. The difference between the former and latter is that the former is an agreement in advance between both deliverers and learners, and the latter involves learners seeking help on their own, through their own efforts.

### **4.3 Self-help with CBT**

Many researchers have developed CBT self-help online resources, which is so-called computerised cognitive behavioural therapy (CCBT). This starts with a CBT session and is then followed by an online programme. Traditional face-to-face CBT has some barriers and shortages, such as a lack of skilled therapists within the local vicinity and financial hurdles, as previous discussed in Section 4.2. Proudfoot *et al.* (2003) found that treatment through a CBT programme by use of multimedia techniques to enhance patients' engagement could be maintained until a six-month follow up. Sethi, Campbell and Ellis (2010) suggested that adolescents with mild to moderate depression and anxiety can benefit from CCBT provided

in conjunction with traditional face-to-face CBT. The online programme that was adopted by Sethi and colleagues is called 'MoodGYM.' The MoodGYM, which is a free online CBT training programme, was established by the Australian National University, and uses flash diagrams and online exercises to teach the principle of CBT. It demonstrates the relationship between thoughts and emotions, works through dealing with stress, and teaches relaxation and meditation techniques. They examined the efficacy of MoodGYM on an adolescent population and found that both CBT and CCBT are effective at reducing levels of anxiety, and the combination of CBT and CCBT is effective in reducing anxiety and negative thoughts (Sethi, Campbell & Ellis, 2010). They then suggested that CCBT adjuncts may have advantages over standalone face-to-face CBT or online therapies in teaching basic cognitive therapy methods for the reduction of negative thought processes.

However, O'Kearney *et al.* (2009) pointed out negative effects, as adolescent boys showed an unwillingness or inability to use the online CBT programme, indicated by the fact that the researchers were faced with low levels of module completion. Accordingly, it may be worthwhile to consider other methods that can assist CBT learning other than the Internet or online programmes. A study in sports psychology has found that self-help manuals, audiotapes, and educational resources for coping with anxiety are available to coaches

and athletes at all levels of performance. Self-help booklets and accompanying tapes include mental rehearsal, goal setting, and concentration training, and exercises are provided to assist with learning (Nesti & Sewell, 1997). The study also examines the use of anxiety control strategies and performance in skating by using mental training, relaxation, and incorporated skills within a personalised pre-performance routine, in the context of practising these skills each day. The findings suggest the validity of using self-help booklets and audiotapes with young athletes. Moreover, throughout an individual's sporting life, coaches rather than therapists would be better placed to teach anxiety-control strategies. This finding can be linked to Kenny's argument on the feature of stress management programmes.

Apart from self-help manuals that can help athletes to manage their performance anxiety, using self-help booklets by incorporating the concept of self-monitoring can be beneficial for stress management (Sadler & Miller, 2010). This is because of the decrease in negative effects over time and reflects one component of CBT in which systematically observing one's thoughts and behaviours can lead to therapeutic change (Sadler & Miller, 2010). The benefit of self-recording is that recording a positive behaviour will encourage people to repeat the same behaviour, as the act of recording the positive, desirable behaviour functions as a positive consequence and reinforcement (McNamara, 2001). When applying self-monitoring in

MPA management, it can be seen as a way for performers to organise, examine, and manage the condition of MPA both mentally and physically.

In the music-learning process, a self-monitoring skill is one of the crucial elements in the acquisition of expertise (Hallam & Bautista, 2012). Patston (2014) suggested that it is important to incorporate psychology into the music curriculum and encourage students to use a ‘performance diary’ in order to think about their performing experiences from a psychological perspective, and in turn reduce the level of MPA (Patston, 2014). McNamara (2001) mentioned that cues or reminders to self-monitor should be structured into a programme and the self-monitoring booklet should be completed at the end of lessons (McNamara, 2001). Self-monitoring booklets should be attractive to students who articulate an intention to change their behaviour. This is a good way for both educators and students to receive positive reinforcement for programme compliance and/or behaviour change. Based on McNamara’s research in 2001, there are six tips for producing a good self-monitoring diary (see Table 20, below).

*Table 20: Tips for producing a successful self-monitoring diary*

1	The diary should be attractive in appearance and fit easily into a pocket.
2	Emphasis of ownership of the diary, responsibility for behaviour change, and commitment through notation on the page is important.

3	Set general goals by breaking them down into specific targets.
4	Set the goals by chronological order, such as short-term and long-term.
5	There should be a reaffirmation of the commitment in order to improve behaviour at the beginning of each day.
6	Evaluation of achievements, daily or weekly, as goal achievements often bring people positive reinforcement.

However, it should be noted that self-monitoring tools (i.e. booklets and a performance diary) help people to learn and enhance the function of self-management. Researchers have stated that self-monitoring tools as an adjunct may have advantages over a standalone psychological programme. Additional tools should be structured and incorporated into a comprehensive programme (McNamara, 2001; Nesti & Sewell, 1997; Patston, 2014).

#### **4.4 Summary**

Self-management interventions incorporate concepts developed within psychological theories (e.g. CBT) where self-efficacy, self-regulation, and stress-coping models are the underlying factors. Self-efficacy and self-regulation are key factors in applying self-management theory to music performance. Through reviewing the literature on this topic, it can be seen that peer learning in group lessons can enhance students' self-efficacy through observing peers going through the learning process. In addition, it can increase the level of self-esteem through learning in a trusting and supportive

environment (Hanken, 2016). Although some psychologists have suggested that individuals may be less willing to attend group programmes as a psychological intervention for personal reasons or differences in individual needs, they may result in positive effects in the management of MPA for college musicians. This is because one-to-one tuition and the necessity of solitary practice in conservatoire education can result in limited awareness of how other students manage MPA. Therefore, a student observing how fellow students cope with MPA may enhance his/her self-efficacy in managing MPA, rather than working through the issue alone. However, there is no research to support this argument, as it has not been discussed in existing literature. In addition, it may be possible to encourage one-to-one tuition tutors to organise group lessons to enhance students' self-efficacy and self-esteem (Hanken, 2016) and MPA strategies could be embedded in the lesson, such as the contrived performance situation.

Self-help therapy could be a way to support the development of MPA self-management. For instance, guided self-help can be accessed through online programmes (Sethi, Campbell & Ellis, 2010) or through using the assistant tools of structured self-help booklets along with a psychology course (Sadler *et al.*, 2010; Patston, 2014; Nesti *et al.*, 1997; McNamara, 2001). There are many ways that teachers, professionals, and even peers can help musicians

self-manage MPA. Therefore, it would be interesting to explore in my research how MPA self-management could be embedded in a Taiwanese music college, for example, how MPA-coping strategies are incorporated into some modules by teachers, how coping with MPA is embedded in one-to-one pedagogy by vocal/instrumental tutors, or how students adopt self-help strategies.

## **Chapter 5. Methodology and research design**

### **5.1. Introduction to qualitative and quantitative research**

There are many ways to divide or classify research, two of which are quantitative and qualitative research. Many studies in music education research utilise singular qualitative or quantitative methodologies (Fitzpatrick, 2014). Quantitative research methods and strategies are based on a post-positivistic<sup>15</sup> worldview that uses the empirical method to test theories through procedures for scientific objectivity, including careful observation of behaviour, the isolation and manipulation of variables, and hypothesis testing (Wheeler, 2016).

Qualitative researchers in the field of music education have rejected the positivist paradigm, as it is insufficient to illustrate the whole of the music education experience (Fitzpatrick, 2014). Fitzpatrick states that qualitative research has a different focus, which goes beyond the use of qualitative data and reflects the belief of its followers that not all that is important can be reduced to measurements. Moreover, Fitzpatrick argues that it is essential to take into account the interaction between the researcher and the participants being studied (Fitzpatrick, 2014). According to Matsunobu and Bresler (2014), qualitative research, which is by

---

<sup>15</sup>The paradigm of quantitative research has been historically closely linked to positivism. Yet, it has been largely superseded by a post-positivist approach owing to criticisms of positivism. Post-positivism seeks to maintain aspects of positivism while coming to terms with these criticisms (Robson & McCartan, 2016).

definition a social construct, is an umbrella term for a wide array of methodologies, including a case-study approach, phenomenology, and action research, among others. The methodologies within qualitative research in music education can be found in the mainstream genres, such as case studies and ethnography, and in new genres, such as narrative research, which has emerged out of arts-based research (Matsunobu & Bresler, 2014).

## **5.2. The philosophical assumptions of qualitative research:**

### **Ontology, epistemology, and methodology**

The philosophical assumptions of any research can be discussed in relation to three aspects: ontology, epistemology, and methodology. The definition of ontology is the philosophical study of the nature of being and essence of things in the social world (Mason, 2002). In other words, it can be understood as 'what the nature of reality is in the research'. As to epistemology, it studies the nature of knowledge or evidence of things in the social world, which can be understood as 'what might represent knowledge or evidence of the entities or social reality that researchers wish to investigate' (Mason, 2002). The methodology addresses how to acquire knowledge through specific methods (e.g. interview and survey). In other words, methodology describes and analyses methods, whereas method refers to techniques and procedures used in the process of data-gathering

(Cohen, Manion, & Morrison, 2000). To be more specific, ontology seeks 'what exists and what is out there to know?' Epistemology is looking at 'what and how can we know?' As to methodology, it helps us to understand 'how can we go about finding out whatever we believe can be known?' This is followed by understanding which precise procedures can be used to acquire knowledge, such as research methods (Guba & Lincoln, 1994).

A paradigm is a filter or grid through which the world is understood. It is not a theory or set of rules governing thought, so much as an orientation of mind that determines how one thinks about the world (Scheib, 2014). Paradigms may be viewed as a set of basic beliefs which are based on ontological, epistemological, and methodological assumptions (Guba & Lincoln, 1994). Quantitative and qualitative research have traditionally been considered as different research paradigms in the sense that the distinctive belief systems carry with them clear philosophical assumptions (Robson & McCartan, 2016). As shown in the literature reviewed above, quantitative research is based on a post-positivistic worldview while qualitative research is based on social constructivism (Matsunobu & Bresler, 2014; Wheeler, 2016; Robson & McCartan, 2016). Table 21, below, presents and clarifies the difference between post-positivism and constructivism by discussing ontology, epistemology, and methodology, based on Guba and Lincoln's (1994) research as well as

Robson and McCartan's (2016) study (see Table 21, below).

*Table 21: Comparison of post-positivism and constructivism*

Aspect	Post-positivism	Constructivism
<p>Ontology: What exists and what is out there to know?</p>	<p>There is an external reality that is separate from our descriptions of it. 'Reality' does exist, but it can only be known imperfectly and probabilistically, in part because of the researcher's limitations (Robson &amp; McCartan, 2016).</p>	<p>Social properties are constructed through interactions between people, rather than separate existence. The world of experience is lived and meaning is constructed by human beings as they interact and engage in interpretation (Robson &amp; McCartan, 2016).</p>
<p>Epistemology: What and how can we know?</p>	<p>Objectivist; knowledge construction is both a rational activity based on evidence and a social activity based on power, politics, and ideology. Objectivity is sought, together with precise control of the research situation (Robson &amp; McCartan, 2016).</p>	<p>Subjectivist; the task of research is to understand the multiple social constructions of meaning and knowledge. Research participants are viewed as helping to construct the 'reality' with researchers. Researchers' presence is assumed to affect the nature and results of the research. Therefore, subjectivity is an integral part of the research (Robson &amp; McCartan, 2016).</p>
<p>Methodology: How can we go</p>	<p>Deductive: General to specific.</p>	<p>Inductive: In an inductive approach</p>

<p>about finding out whatever we believe can be known?</p>	<p>Research procedures involve specifying precise hypotheses and may include qualitative methods (Robson &amp; McCartan, 2016; Guba &amp; Lincoln, 1994).</p>	<p>no theories or hypotheses is applied at the beginning of the research and the researcher is free to alter the direction for the study after the research process has commenced in response to the data. Researchers tend to use methods such as observation and interviews to acquire multiple perspectives (Robson &amp; McCartan, 2016).</p>
--	---	---

According to Braun and Clarke (2006), there are many qualitative analytic methods that are either tied to a particular theoretical and epistemological position (e.g. interpretative phenomenological analysis) or different manifestations of method from within the broad theoretical framework (e.g. grounded theory). However, there is a method that allows the researcher to independently apply in a range of theoretical and epistemological approaches; that is thematic analysis. The advantage of using thematic analysis is the flexibility of its theoretical position. The next two sections will discuss thematic analysis further and why I used a qualitative research approach for my research questions.

### **5.2.a. Thematic analysis**

Thematic analysis is a foundational method for qualitative analysis. It is a method for identifying and analysing patterns within the data (Braun & Clarke, 2006). There are two primary ways to organise data in thematic analysis, inductive and deductive approaches (Braun & Clarke, 2006). The inductive approach involves identifying themes as they arise and is data-drive. Data is coded without the researcher's analytic preconceptions and without trying to fit into a pre-existing coding frame. In a deductive approach, data is driven by the researcher's theoretical or analytic interest in the field. The coding process of deductive analysis requires data to be coded through quite specific research questions or theoretical approaches. In my research, I have adopted inductive thematic analysis.

According to Braun and Clarke (2006), there are six phases to conduct a thematic analysis: 1) becoming familiar with the data set; 2) generating initial codes; 3) searching for the themes; 4) reviewing the themes; 5) defining and naming themes; and 6) producing the report.

In the first phase, the key is 'repeatedly reading' the data and searching for meanings, as potential themes may be shaped when reading through the data. In the second phase, an inductive approach involves generating codes as they emerge within the data, as opposed to codes based on theory. Codes identify the feature of the data and can allow the researcher to be able to present the entire data set in

meaningful ways. This phase also involves collating and matching the codes with extracts from the data.

The third phase involves organising the codes into themes by considering how different codes may combine to form an overarching theme. This phase also enables the researcher to look at the relationship between different codes, codes and themes, and different levels of themes (i.e. main themes and sub-themes).

Once candidate themes have been listed, a review takes place (phase 4). Reviewing involves re-reading the collated extracts in order to examine whether the data fits coherently into the themes. Considering whether themes accurately represent the data set in relation to theoretical and analytic approach is also important in this phase.

When the researcher has a good idea of what the themes are and how they fit together to present an overall story of the data, the research is ready to move to the fifth phase, defining themes (i.e. considering what the themes are) and refining themes (i.e. considering what aspect of the data each theme captures). It requires going back to data extracts for each theme, organising them into a coherent and inherently consistent account, then writing a detailed analysis for each theme. In addition, it is important to consider how each theme fits into the overall story in relation to the research questions. Sub-themes may appear, which are themes-within-a-theme,

to giving a clear structure to a large and complex theme.

The last phase, 'producing the report,' tells the story of data by considering the validity of the analysis, providing interesting accounts within and across the themes, and providing sufficient evidence of the themes within the data (i.e. data extracts). Beyond that, the data extracts need to be embedded in an analytic narrative that contains arguments related to the research questions. Further discussion of how I adopted thematic analysis in my research can be found in Section 5.3.d.

#### **5.2.b. Why take a qualitative research approach to my research questions?**

The main focus of my research is to understand how participants cope with MPA through self-management and to examine MPA-coping strategies and their impact. I believe the participants' MPA-coping experiences are lived, and the participants are helping to construct the 'reality' (i.e. MPA self-management) with the researcher (myself), a point of view which is based on the constructivist worldview. Accordingly, the qualitative approach helped me to capture the totality of the participants' experiences, as well as allowing for a full exploration of the participants' experiences and their uniqueness. Directly contacting the participants and gathering data through interviews were crucial for acquiring knowledge for this

research. The interview allowed the respondent to talk in some depth, choosing his or her own words. It also helped me, as the researcher, develop a sense of the person's understanding of the situation. In addition, I had a similar educational background to the participants, as I was studying in the same college as the participants. As a result, I might better understand the phenomenon of being a college musician and the possibilities embedded in the experiences of self-managed MPA, as I have preconceptions about the phenomenon of this study and can attempt to explain it as well as integrate it into the research findings.

### **5.3. Research design (Overview of research design: Aim, research question, participant numbers and year level, research procedure)**

#### *Aim of research and research questions*

As stated in previous chapters, many researchers have not explored in detail how TCMs adopt MPA-coping strategies, or how far their own coping strategies could help in managing MPA. Therefore, my research intends to fill this gap; it involves the selection of different MPA-coping strategies, the development of self-management material as an assistive and optional tool for participants, and an investigation into how this material, along with other methods of self-management, is used by the students and its impacts. These were

explored in the pre-research situation (i.e. before introducing the self-management material) and in three types of performance: a formal school concert, an exam, and a graduate recital. My research questions were:

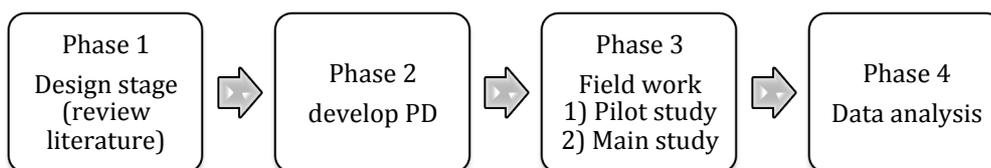
- How do TCMs define and perceive MPA?
- How do TCMs self-manage MPA?
- What strategies for managing MPA do the TCMs believe that they will use with their students when they carry out teaching as part of their future portfolio careers?

### **5.3.a. Overview of research design (phase 1)**

There were four phases to this research. The first phase was the 'design stage,' during which literature was reviewed regarding MPA issues (i.e. its definition, performance anxiety types, symptoms, effects, and current practice) and relevant literature regarding anxiety and stress management across different disciplines, such as sports, performing arts, and in mental disorders. The second phase was to develop a 'performance diary' (PD), an optional and assistive tool (i.e. self-management material) for participants in this research, containing selected MPA-coping strategies that other researchers have explored, as discussed in Chapter 3 (see Appendix 1). The PD itself could also be regarded as a strategy for MPA self-management. The third phase was field work, which was to conduct a pilot study to

test the methods leading to and informing the main study. The final phase was to analyse and present the data through the process of inductive thematic analysis. Figure 2, below, summarises these four phases.

*Figure 2: Flow chart 1: The four research phases*



*Background of participants*

The participants of this research were fifty-three students majoring in Western classical instruments, vocal studies and composition (see Table 22, below). The participants were recruited from undergraduate level, year one to year four, from the Department of Music, National Pingtung University (NPU) in Taiwan, a professional music education institution in Taiwan.

*Table 22: Participants' background*

Year level	Number of participants	Major	Number of participants	Gender	Number of participants
Year 1	19	Strings	20	Female	46
Year 2	11	Woodwinds	11	Male	7
Year 3	13	Brass	4		
Year 4	10	Percussion	2		
Total	53	Piano	14		
		Composition	1		
		Vocal study	1		

There are three factors that need to be explained in relation to this school and its students. Firstly, in this school, there are few double bass and brass players, significantly fewer than other majors. Students of composition and percussion are also less numerous than those of strings, piano, and woodwinds. Secondly, for unknown reasons, the original total number of year three students was fewer than those of other year levels. Normally, there are around twenty to thirty students in each year level, including all majors. Thirdly, there were fewer male students than the female students in this school. Owing to voluntary participation, it was important for the research that I didn't purposively select participants; there were only seven male students in my research. Although there are interesting gender issues that could be discussed along with MPA, this could detract from my research questions and may be material to explore in further research.

### **5.3.b. Performance diary (phase 2)**

Patston (2014) mentioned that music educators have a critical role in assisting their students to manage MPA, such as encouraging students to maintain 'performance diaries' to share performing experiences from a psychological perspective and to develop a psychological self-management plan for them. Kenny (2011) examined MPA through twenty in-depth interviews with orchestral

musicians. She found that MPA-coping strategies from self-help books could help some musicians overcome stage fright (Kenny 2011). Both Patston's (2014) and Kenny's (2011) research inspired me to develop a 'performance diary,' an optional and assistive tool for this research which can be seen as a self-management strategy to assist the participants in coping with MPA (see Appendix 1). The performance diary (PD) contained two parts: the first introduced the basic concepts of cognitive behavioural therapy and helped musicians understand their current performance state through a current performing state checklist (CPS). This was based on O'Connor's research (2001) that there are three conditions necessary to a successful performance: technical skill, physical fitness, and mental skills. The second part of the PD offered a brief of description of each selected MPA-coping strategy identified by other researchers as being effective, both in terms of sport psychology and music psychology (see also Chapter 3, p. 101).

### **5.3.c. Field work (Phase 3)**

#### **Description of pilot study**

The aim of my pilot study was to investigate the ways in which the PD supported college musicians' preparation for performance. The research questions were 1) what factors contribute to MPA among TCMs and 2) what impact does the performance diary have? Two

participants were from conservatoires that have an international standing and were exposed to frequent solo work. They were asked to use the performance diary over a four-week period leading up to a performance. Data was collected through the PD and semi-structured interviews after the performance.

### *Initial findings from pilot study*

The results of this pilot study were categorised into two themes. The first theme was the causes of MPA for college musicians. In this pilot study, I found that the factors that contribute to MPA were varied, as the performance context, personality, and previous performance experiences were different and personal. Interestingly, I found that the level of degree/grade could have an effect on the level of MPA, as the participants were in different year levels and perceived MPA in different ways. The second theme of this study was ‘what impact does the performance diary have?’ I found that all the participants in the pilot study reported that they had heard about the coping strategies selected and felt that they were very helpful in preparing for their performance, but had not realised that they had previously learned the strategies until they read the performance diary. Furthermore, participants who believed they did not experience MPA reported that strategies from the performance diary enhanced their overall musical performance abilities, not just in coping with

MPA. The findings of my pilot study were published and presented at a SEMPRES conference (Huang, 2014).

*Revision for main study*

I revised three points from the pilot study for the main study. Firstly, I revised the content of the performance diary, especially addressing the simple description of what MPA and CBT are and making it resemble a diary, as one of the pilot study findings suggested that the performance diary was not only for coping with MPA but could enhance overall performance ability. Secondly, I increased the number of participants, the levels of degree/grade, different types of performance, and focused on TCMs. I implemented my main study only in Taiwan and recruited between ten and fifteen students from each year level (in total around 60 participants), and interviewed them before and after different performance types. Thirdly, I decided to inform my participants that PD was an optional and assistive tool in the main study. This was because, through the pilot study, I realised that using the PD as an optional and assistive tool could give my participants more flexibility in choosing their own MPA-coping strategies, as the MPA-contributing factors were varied and dependent on the performance context, personality, previous performance experiences, and year levels. As well, owing to the fact that MPA-contributing factors were varied, participants might already have their own coping strategies, which could differ from other

participants'. Therefore, informing participants that the PD was an optional and assistive tool might have helped generate natural and detailed data on exploring how participants self-managed MPA.

### **Description of the main study**

Students who were studying at undergraduate level and majoring in music performance were potential participants. In the second semester,<sup>16</sup> year one to year three students all have a formal school concert and an exam, whereas year four students only have a graduate recital. It should be noted that to perform in a formal school concert is optional for year one to year three students, and it is possible to perform chamber music. Given that the structure of courses (i.e. the concert and exam timetables) and the performance context for undergraduate and postgraduate students differs, I did not recruit any postgraduate participants in the study.

When the second semester began, all the undergraduate students were required to attend a compulsory meeting, where I had the opportunity to inform them about the study and to recruit participants. I gave the students a consent form (see Appendix 2), which included contact details and preferable first contact date and contact method. The students who participated in the study signed a

---

<sup>16</sup> There are two semesters in an academic year in this school. The first semester is from September to January, around five months, followed by a second semester from the end of February to June. Normally, all students start a new academic year in the first semester.

consent form and returned it to me at the end of the meeting. In total, sixty students participated but seven students did not complete the study, and were therefore removed; two of them lost touch during the first interview period. One of them dropped out of the study after the first interview with no reasons given. I decided to remove four from the study as they did not have performances within the relevant semester. The consent form stated clearly that a successful participant must be involved in either a formal school concert or exam or both in the semester, should complete all the interviews, and could withdraw from the research at any time without reason. Although the final number of participants was fifty-three (completed the whole process of interviews), more than half of the undergraduate students (sixty of one hundred and seven students) from this professional institution participated in this study at the outset.

### **Research procedure and technique of the main study**

I conducted interviews using two routes, route A and route B, owing to the requirement of being involved in an 'optional concert' (see Figure 3, Flow charts 2 and 3, below). The interviews were conducted before the performance and either after each performance (school concert and exam) or after the exam performance, if the participant did not perform in the concert. The option of using the performance diary was given at the pre-interview. This gave a

four-week preparation time for the concert and a further eight weeks of preparation for the exam.

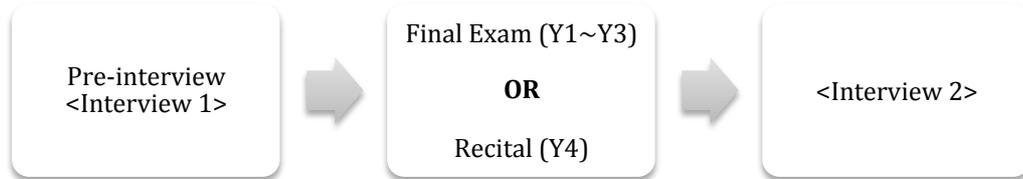
The timeline of preparation was based on the student's performance schedule. The concert took place eight weeks after the second semester started, and the exam eight weeks after the concert, at the end of the second semester. As I used the first four weeks of the second semester to recruit participants, participants had four weeks to use the PD if they chose in preparation for the concert performance. Participants in route A had to perform both in concert and in an exam. As a result, they were interviewed three times: before the first performance, between the first and second performances, and after the second performance (see Figure 3, below). Thirty-four of fifty-three participants performed in both the concert and the exam.

The participants in route B were interviewed twice, before and after the exam in the second semester. Nineteen of fifty-three participants performed in the exam only, including ten participants from year four (see Figure 4, below). According to the undergraduate programme handbook from the school, all year four students were required to give a graduate recital in the last semester of their undergraduate programme. As a result, it should be noted that year four students only performed in the final recital instead of the formal school concert and exam, as the second semester was the last semester of their undergraduate journey.

Figure 3: Flow chart 2 – Route A



Figure 4: Flow chart 3 – Route B



Owing to the research design of having three stages of interviews for most of participants, before all the performances (interview 1), after the concert (interview 2) and after the exam (interview 3), interviews 2 and 3 were conducted with the performance diary involved. Data was collected through semi-structured interviews, which enabled the researcher to ask some set questions but also allowed new questions to be raised during the interview in order to explore the themes of the questions (Edwards & Holland, 2013). The format of interview was conversational so that it permitted two-way communication between interviewer and interviewee (Edwards & Holland, 2013). Table 23, below, presents the number of interviews carried out in each phase.

*Table 23: Interview timetable*

	Interview 1 (Before performance)	Interview 2 (After concert)	Interview 3 <sup>17</sup> (After exam/recital)
Number of interviews	54 interviews (one interview per student)	34 interviews	53 interviews

The interviews in this research were conducted through Skype phone calls. This method made it easier to organise both the interviewer's and interviewees' time schedules to allow for an intensive interview with participants within a week of each of the participants' performances. I believed participants would remember more details when their performances had just finished. In addition, I gave options of a phone or face-to-face interview, stated in the consent form when I recruited participants in the first face-to-face meeting. Most of the participants reported that they preferred a phone interview to a face-to-face interview.

A week before making a call to participants, I wrote a message to them that clearly stated the date and time and gave them another option regarding rescheduling the interview by replying to the message no later than one day before the interview. The day before the interview, I wrote messages to the participants again as a reminder. If a participant did not answer the phone ringing more than three times at the agreed date and time, I moved to the next

---

<sup>17</sup> The exam dates are different according to major/principal study. Years one to three students majoring in the same instruments took the exam on the same date.

interviewee. After all the day's interviews were finished, I went back to the participants who had missed the call. I then wrote a message to them to reschedule the interview. If participants did not reply to this 'reschedule interview message' after a week, I removed them from the research and regarded this as 'lost touch.' This happened twice when I conducted the research during the first interview period. But it did not happen in the second or third interviews. Most of the situations where participants rescheduled their interview date were because they missed my calls, for instance if they forgot our agreed time or they were riding a bike and so they did not hear my phone calls. Two interviews (in interview three) took place over a week after participants had finished their recitals because these participants were travelling directly after performance and therefore were not in Taiwan. They asked to schedule the interview for when they returned to Taiwan.

The length of each interview was approximately half an hour, as suggested by the interviews' schedule (see Appendix 3), conducted in Chinese, and listed areas for questioning with a possible ordering of questions. There were two sets of interview schedules. The first interview schedule was adopted only in 'interview 1,' which was before all performances, the so-called 'pre-research situation' in this research. There were eleven questions regarding performance anxiety in general (i.e. questions 1, 2, 3, and 7), how they self-managed MPA

before using the PD (i.e. questions 4, 5, and 6), how they perceive MPA (i.e. questions 8 and 10), and how they acquire MPA-coping strategies (i.e. question 9). The last question was used to organise the meeting schedule and introduce the role of the PD. The second and third interview schedules contained three parts regarding the performance context (i.e. task, performance environment, and self-evaluation); self-management of MPA by time periods; and feedback about the PD (see Appendix 3: Interview schedule of second and third interviews from question 1 to question 5). In the third interview, the interview questions were essentially the same as in the second interview, but with the addition of two new questions regarding the strategies used and the differences between the preparation for the formal school concert and an exam (i.e. question 6) and the implication of learning MPA strategies (i.e. question 7). I did not ask route B participants question 5, as they did not have concert performances during the period of my data collection. I conducted all of the interviews at my home, where I had a very quiet environment and good audio recording. I used the Skype phone call through a smartphone with speaker. Audio recordings were made of the interviews through a tablet computer.

## **Description of concert performance context and situation in this study**

The formal school concert is an optional performance for all year one to three students. Each student could either perform one programme (i.e. one movement of concerto/sonata) or give a chamber music performance. It took place in the school's concert hall, entry free for the audience, with no judges and no marking. The school exam was compulsory for all of year one to three students. Students needed to prepare assigned programmes. The exam took place in various venues; normally students performed in front of between three and six internal examiners, depending on their instrument. The order of playing was randomised in both the formal school concert and exam. With regard to the order of playing in the final exam, there was a special rule, called the 'black draw.' Judges drew lots ten minutes prior to the exam to decide who should be the first examinee and play the whole piece. The rest of the examinees would only have to play part of their piece during the exam. For example, both students A and B would be assigned to perform the Brahms Cello Sonata No.1 in E minor. Student A, who received the 'black draw,' would therefore play the complete sonata, taking about half hour for three movements. Student B, who did not get the black draw, would need to play the first three minutes of each movement, taking about ten minutes to finish the exam. As a result, it was still necessary to prepare the complete

programme. However, this special rule could have positive and negative effects concerning students' psychological preparation for the exam. For example, students might experience an increase in the level of MPA when hearing his/her name called out in the 'black draw' result prior to performance or could feel disappointed that he/she did not win the black draw to perform the complete piece because he/she wanted to receive feedback for the complete piece rather than for the first three minutes.

The final recital was compulsory only for year four students and took place in the school recital hall. The programme was more flexible than an exam, as the school did not ask students to perform an assigned programme. The regulations stated that the length of programme should be fifty minutes, not including a ten-minute interval, and applied to all instrumentalists and singers. Students performed in front of three internal examiners organised by the students' one-to-one tuition teacher, as stated in the regulations. Students invited people to be in the audience during the final recital. The recital dates had to be within the last two months of the second semester. In addition, students had to organise their graduate recital poster, programme, and find stewards, compulsory elements stated in the recital regulations.

#### **5.3.d. Data analysis (Phase 4)**

As previously mentioned, I adopted an inductive approach to the thematic analysis. I therefore analysed the data using the six-phase process described in Section 5.2.a.

##### *Phase 1: Becoming familiar with the data set*

After I completed all of the interviews, verbatim transcriptions were made on a word processor. I then read through the entire data set, searching for potential codes by reflecting on the literature I had reviewed. I did not translate all the transcriptions at this stage, as I thought that the original meaning of conversations could be lost if translated. Particular pieces of Chinese were transcribed because I decided to cite them in my data-presenting chapters, which were then translated into English.

##### *Phase 2: Generating initial codes*

When I generated initial codes from the data, I reflected my research questions ‘how TCMs define and perceive MPA?’ and ‘how they self-manage MPA?’ Below is a data extract example:

When the exam was just few days away and I still couldn’t memorise the repertoire, I felt very much more nervous than before. As a result, I did some activities to make me feel calm, such as taking a stroll, listening to pop music, and playing computer games. When I felt nervous backstage, I thought about the first musical phrase. Then, I took a few deep breaths and told myself, ‘I can do it.’

My codes were: few days, taking a stroll, listening to pop music,

playing computer games, backstage, think musical phrase, deep breath, and tell myself. I then made a list of different codes together with the extracts, which I identified from all interview transcriptions, using separate Microsoft Word files, as I conducted my coding in Microsoft Word.

*Phases 3, 4, and 5: Searching for, reviewing, and naming themes*

After the coding list was created, I re-focused on a broader level of themes. Some codes were then named and categorised by timeline (i.e. ‘few days’ and ‘backstage’) and strategies (i.e. physical and absorbing activities, mental rehearsal, breathing, and self-talk).

An example of the list of codes and its categories can be seen in Table 24, below.

*Table 24: Example of list of codes and categories*

Themes	Categories	Codes
Strategies	Mental rehearsal, visual rehearsal, physical activities, absorbing activities, self-talk, increase practice hour, dietary.	Running through the melody in the mind and imagining the scene, swimming, jogging, taking a stroll, listening to pop music, playing computer games, telling myself to practise more, eating a banana.

Timeline	Daily basis/no specific time, early stage, during the week before performance, on the day of performance, backstage, onstage, and after performance.	Often, normally, usually, my daily routine, two weeks before, few days before, three days before, on my exam/concert/recital day, in the morning/afternoon of my exam, ten minutes before, backstage, in the waiting room, walking onstage, sitting on the chair onstage, while listening to the introduction from piano, after performance.
Context	Peer, solitary, teacher, parent, accompanist.	Classmates, cohorts, senior students, junior students, friends, alone, by myself, teacher, parent, pianist, accompanist.

There were two steps when I created my thematic map – the organization of the data by considering the relationship between different codes, codes and themes, and different level of themes.

Firstly, I attempted to answer my research questions ‘How do TCMs define and perceive MPA?’ and ‘How do TCMs self-manage MPA?’ I then created eleven tables (i.e. each year level had three tables, except year four which only had two tables: pre-research and recital) based on strategies used in three performance situations (i.e. pre-research, concert, exam/recital) from three interviews. For example:

- Year1 – Pre-research – list of strategies – codes and categories
- Year 1– Concert – list of strategies – codes and categories
- Year 1– Exam – list of strategies – codes and categories

The next step was grouping the themes from the codes and categories.

For example, many participants mentioned ‘peers,’ ‘teachers,’ ‘parents,’ and ‘accompanist’ when they describe how they used the strategies. These terms could be categorised into different sub-themes, such as ‘strategies used by working with peers’ (see Table 25, below).

These sub-themes were also grouped to form a main theme for a chapter, such as ‘Strategies in context: People and places.’ Based on this coding process, I found four main themes and have presented them in four chapters (Chapter 6 to Chapter 9).

*Table 25: From codes to themes*

Codes	Sub-themes
Peers, teachers, parent support, solitary, group	<ol style="list-style-type: none"> <li>1. Strategies used by working with peers</li> <li>2. Strategies used by working with teachers</li> <li>3. Other strategies</li> </ol>
Main theme (i.e. the title of the chapter): Strategies in context: People and places	

I also examined the interview transcriptions to find codes regarding each participant’s process of learning and coping with MPA through the second semester in order to answer my second research question

'How do TCMs self-manage MPA?' I coded the conversations in relation to 'planning and monitoring of practice' and 'evaluation of performance' based on applying the concept of the development of metacognition in musical learning and managing MPA (see Table 26, below). In Chapter 8, I have presented examples based on the participants who provided the greatest level of detail in the data chapter.

*Table 26: The development of metacognition in musical learning and managing MPA*

Participant	Transcriptions	
Linda	Planning and monitoring	Concept of evaluation in performance
	Interview 1-2-3	Interview 1-2-3

In addition, in order to examine the third research question, I compared how participants managed their own MPA with how they reported that they would help their students to overcome MPA as a teacher, by coding through transcriptions of the third interview, which included the question 'How will you help your students to overcome MPA as a teacher?' Then I developed four sub-themes through grouped codes in order to give clear structure to this complex theme, which is presented in Chapter 9.

#### **5.4. Ethical issues and the consent form**

I followed the *British Educational Research Association: Ethical Guidelines for Educational Research 2011*, which states that the researcher should ensure that all participants are anonymous, that participants are fully informed of the study before participating and are able to withdraw from the study at any time, and that teachers and conservatoires are fully informed of the study. Consent forms were given to potential participants during the recruitment. They listed the ethical guidelines and contained the researcher's contact information, plus participants' year level, major, contact, name, and details of the research procedure.

The ethical considerations of this study were related to protecting the participants from possible risks of using the performance diary, protecting their identities within the study, and ensuring that the researcher could collect data properly. Although my data collection went smoothly, there were two issues, for which I had planned before I started to collect the data in case there were any adverse effects of using the performance diary during participants' performance preparation and conservatoire studies. These two issues were: firstly, if the participant performed badly and blamed the researcher or performance diary, and secondly if the participants' one-to-one tuition teacher opposed them either in participating in the research or in using some of the strategies from the performance

diary.

Regarding the first issue, it related to the argument that students maintaining performance diaries and sharing performing experiences from a psychological perspective could reduce the level of MPA and increase the quality of performance (Patston, 2014). Yet this could have been a risk to my research if the strategies had brought negative effects to participants. If this had happened, if they were willing, I would still have continued with the semi-structured interview and addressed the question by focusing on 'What have been the adverse effects of the PD on your performance?' and 'Why do you think this PD is unhelpful or adversely affecting your performance?' I would also have explained that the role of the PD was as an optional assistive tool and the aim of this research was to understand how the student coped with MPA. If they were not willing to continue with the research, I would have offered to speak to them to explain the PD but would have encouraged them to speak to their teacher about their performance so as to understand why they felt their performance suffered after following coping strategies.

As to the second issue, I would have tried to communicate with the teacher(s) in person to understand the reasons for their opposition. Then, I would have explained the aim of this research by focusing on my role, which was to understand how students coped with MPA, and the PD as an optional and assistive tool only. If the

teachers were still opposed to the research, I would have removed that participant from the research and recruited new participants, as the aim of this research was to investigate how musicians managed their musical study by focusing on MPA issues, rather than breaking their relationship with their one-to-one tuition teachers because of differing opinions about coping with MPA. Neither of these two issues arose.

## **Chapter 6. Strategies used in preparation for different types of performance during different time periods of preparation and performance**

### **6.1 Introduction**

The findings are presented within four themes: 1) strategies used in preparation for different types of performance, during different time periods of preparation and performance; 2) strategies in context: people and places; 3) understanding the strategies: metacognition in musical learning and managing MPA; 4) MPA self-management and the teaching–learning cycle. I will address and discuss them individually in the following chapters.

The strategies used by the students can be of two different types dependent on the time period, that is ‘short-term’ and ‘long-term’ (Roland, 1994). A ‘long-term strategy’ is one that musicians adopt regularly, whether on a daily basis or over the long run (Roland, 1994; Fehm & Schmidt, 2006). A ‘short-term strategy’ is adopted when a concert draws closer, such as the week before performance, on the day of performance, or even immediately before performance (Roland, 1994; Fehm & Schmidt, 2006). Roland found that musicians tend to focus on musical preparedness as a long-term strategy, whereas they use more psychological strategies, both cognitive and behavioural, as the date of performance nears (Roland, 1994). In my research, participants also often adopted MPA-coping

strategies, both cognitive and behavioural, during the performance preparation period.

In this chapter I examine the strategies used by participants in order to self-manage MPA at six points in time during their preparation for performance: at an early stage of performance preparation;<sup>18</sup> during the week before the performance; on the day of the performance; backstage; onstage; and after the performance. I have termed these ‘time periods’ and discuss the strategies used in relation to different types of performance: pre-research situation, formal school concert, final exam, and recital (see Table 27, below, and also Appendix 4 for a comprehensive overview of the strategies used).

*Table 27: Overview of the six time periods of strategy used in the different types of performance*

	Pre-research situation	Concert	Exam	Recital
Early stage of preparation period	<ul style="list-style-type: none"> <li>• MST</li> <li>• MR</li> <li>• Breathing and muscle relaxation</li> <li>• Physical and absorbing activities</li> <li>• Diet</li> </ul>	<ul style="list-style-type: none"> <li>• MST</li> <li>• MR</li> <li>• Breathing and Physical and absorbing activities</li> <li>• CR</li> <li>• CPS</li> </ul>	<ul style="list-style-type: none"> <li>• MST</li> <li>• MR</li> <li>• Physical and absorbing activities</li> <li>• Breathing</li> <li>• Muscle relaxation</li> </ul>	<ul style="list-style-type: none"> <li>• MST</li> <li>• MR</li> <li>• VR</li> <li>• Accept mistakes</li> <li>• Muscle relaxation</li> <li>• Physical and</li> </ul>

<sup>18</sup> ‘Early stage’ means ‘a few weeks before performance’ (i.e. around four to eight weeks).

		(chamber music) • Taper off practice	• Accept mistakes • CPS	absorbing activities • CPS
During the week of performance	• MR • CR • CPS • Taper off practice • MST	• Absorbing activities • MR • CPS • Taper off practice	• MST • CR • CPS • Taper off practice	• Physical and absorbing activities • CPS
On the day	• MST	• Absorbing activities • Taper off practice • Muscle relaxation	• MST	• Taper off practice • Absorbing activities • Follow pre-performance routine
Backstage	• MST • IST • MR • Breathing • Diet • Pre-performance routine	• MST • Absorbing activities • Breathing	• MST • IST • Muscle relaxation • Breathing	• MST • IST • Breathing • Absorbing activities
Onstage	• IST	• IST	• MST • Accept mistake	• MST • IST • Accept mistake
After	None	• Accept mistake	• Accept mistake	• Accept mistake

Key:

MST – Motivational self-talk

IST – Instructional self-talk

CR – Cognitive restructuring

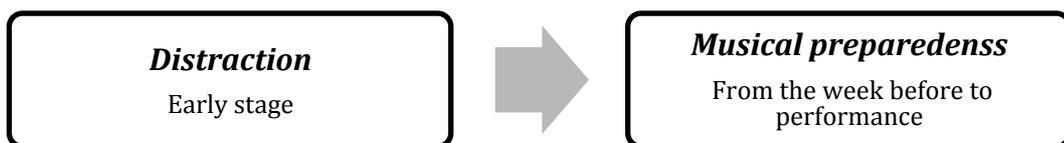
CPS – Contrived Performance Situation

MR – Mental rehearsal

VR – Visual Rehearsal

The overview table shows that there was a route of adopting strategies in different time periods in the pre-research situation (see Figure 5, below). In the early stage of the performance period, participants focused on strategies that created distractions, such as physical and absorbing activities. However, during the week before the performance, they adopted strategies that were more focused on musical preparedness, such as contrived performance situation and tapering off practice.

*Figure 5: The MPA self-management route*



This could imply that participants tended to adopt psychological strategies related to musical preparedness or that could assist musical practice as a short-term strategy. This route was not observed in concert preparation and exam preparation, as participants adopted strategies related to both musical preparedness (i.e. contrived

performance situation and accepting mistakes) and distractions from being anxious (i.e. physical and absorbing activities) in the early stage performance preparation period as well as during the week before performance.

The data suggests that different types of performance and performing environment influenced participants' methods of MPA self-management (see Appendix 5). For example, participants adopted more MST than IST in the exam preparation period, whereas they adopted more IST than MST in the concert-preparation period. Apart from self-talk, participants adopted the strategy of accepting mistakes in exam preparation far more frequently than they adopted it in the pre-research or concert-preparation periods. In addition, many participants mentioned adopting physical and absorbing activities in the pre-research situation, yet few mentioned adopting these strategies during concert and exam preparation.

In the following sections, I will discuss the strategies in detail by focusing on 'when' a strategy was used in relation to which type of performance it was used for. It should be noted that some strategies used were hardly discussed during some time periods, such as breathing and muscle relaxation, physical and absorbing activities, and cognitive restructuring, as these strategies were only mentioned in relation to in a specific time period (i.e. early stage), or no specific time period was mentioned, such as 'I adopt breathing skills when I

feel nervous at any time.'

## **6.2 Cognitive strategies**

### **6.2.a. Self-talk**

In Chapter 3, I discussed the different types of motivational self-talk (MST) and instructional self-talk (IST) based on sport psychology research (Hatzigeorgiadis, 2006; Hatzigeorgiadis *et al.*, 2013). Researchers have identified the effectiveness of using different type of self-talk in relation to different types of sports. For example, researchers found that IST improved performance of fine motor tasks, and a combination of MST and IST improved performance of strength and endurance tasks (Theodorakis *et al.*, 2000), and also that IST increased performance consistency for golfers (Harvey, Van Raalte & Brewer, 2002). Moreover, some researchers have demonstrated the effectiveness of using self-talk in the complex environment of sport competition (Hatzigeorgiadis *et al.*, 2013; Ming & Martin, 1996). In music performance, several studies have pointed out the importance of using and learning self-talk to enhance performance quality (Clark, Lisboa & Williamon, 2014; Wilson & Roland, 2002). However, no research has discussed in detail different types of self-talk in relation to different types of musical performance (i.e. concert or exam).

Given the overall effectiveness of self-talk as an MPA-coping strategy, and the similarities in the mental aspects of performance

between sport and music, as stated in the literature for both sport psychology and MPA research, it is interesting to explore how participants adopted various types of self-talk in relation to different types of performance, and when self-talk was reported. Table 28, below, summarises which types of self-talk participants adopted in relation to different types of performance and time periods.

*Table 28: Self-talk in relation to different types of performance*

	Pre-research	Concert	Exam	Recital
Early stage	MST	MST	MST	MST
During the week	MST (few participants)	none	MST (few participants)	none
On the day	MST	none	MST	none
Backstage	MST & IST	MST	MST & IST	MST & IST
Onstage	MST& IST	IST	MST	MST & IST

*Early stage of performance preparation period*

The data shows that in the ‘early stage’ of all types of performance, participants adopted only MST. Interestingly, there was a participant in the pre-research situation who mentioned that she used MST when she faced a music competition.

If the performance is a competition, I tell myself ‘it is just a performance.’ ‘Don’t worry about result and other people too much’ and ‘your enemy is yourself.’ (Pre-research: Year three student/ Y3 Iris)

This finding can be linked to Hatzigeorgiadis *et al.*’s finding that MST might be more appropriate and effective than IST in the context of competitive sport, as MST has the effect of ‘psyching-up’ and

maximising effort. In addition, MST used in the 'early stage' was focused on building confidence and motivation in order to control anxiety and increase effort, such as 'I am the best,' 'don't be nervous, the exam will end eventually,' and 'everything will go smoothly.'

I watched myself in the mirror and said, 'You are the best.' I believe this method can reduce my anxious feelings. (Pre-research: Y2 Jessica)

I told myself 'don't be nervous, the exam will end eventually.' (Exam: Y1 Daisy)

I told myself 'everything will go smoothly' when I felt nervous during practice. (Concert: Y2 Aya)

I told myself that 'the school exam is just an exam, not a big event, just do your best!' (Pre-research: Y3 Eileen)

It may be that participants only adopted MST in the early stage of performance preparation because they were anxious but still able to focus their attention on performance, meaning they might not have needed to adopt IST (see also definition of IST, Chapter 2.4.c, p. 92). Furthermore, they may have felt satisfied with their practice or physical rehearsal and aimed at achieving the same performance quality during the real event, as Helen and Eileen mentioned, 'I told myself, just like you did it in practice time.'

I always talk to myself: 'Just play like my performance in the practice room.' (Exam: Y2 Helen)

I often talk to myself: 'Just perform like you did in practice or rehearsal.'

(Exam: Y3 Eileen)

*During the week before the performance*

As in the early stage of preparation, participants only adopted MST during the week of the performance.

A few days before exam, I told myself 'don't think you have already made a lot of effort from the beginning of the term so that you have to perform very well.' In this way, I would not expect I will have perfect performance and avoid disappointment with the result. (Pre-research: Y3 Jolin)

I did my dress rehearsal when the exam was close. After every rehearsal, I told myself 'just perform in the exam like I did today in the rehearsal.' Then, I felt my confidence come back and I wanted to do more practice. (Exam: Y1 Abigail)

Yet, the difference is that only a few participants mentioned adopting MST during the week before the performance, far fewer than at the 'early stage.' Moreover, no participants adopted self-talk in concert and recital preparation during this time period. Perhaps participants used other strategies more frequently during the week before the performance, such as mental rehearsal, visual rehearsal, and contrived performance situation. As with the early stage, year one student Abigail used MST as a way to stay motivated during practice in the exam preparation period. Furthermore, Jolin mentioned that she talked to herself, replacing unrealistic expectations with a more

realistic, positive self-statement as a way to reduce her nervousness, such as 'don't think you have already made a lot of effort from the beginning of the term so that you have to perform very well.' Many researchers have indicated that positive self-talk can help with coping with MPA (Roland, 1994; Kenny, 2011). In Chapter 3.1.a, I discussed Kenny's argument (2011) that performers focus on their internal dialogue and substitute more realistic, positive self-statements, or so-called 'positive self-talk.' Based on this argument, the realistic, positive self-statement for the student Jolin may have been to understand that 'effort does not equal a successful performance' in order to manage her expectations of the performance.

#### *On the day of performance*

MST came up frequently when participants experienced excessive anxiety on the day of the performance. For example, in the pre-research situation, Evangeline mentioned that the feeling was like the 'end of the world' and told herself 'don't be nervous.'

On the day of performance, I was very nervous and it felt like end of the world was coming, especially ten minutes before the performance. At that time, I was telling myself, 'don't be nervous,' 'you play very well,' and 'everything will be fine.' But even if I told myself some positive words, the anxious feeling was still there. My hands were still shaking so much that I played the wrong notes on stage. (Pre-research: Y1 Evangeline)

In their exam preparation, some participants adopted MST and tapering off practice together.

On the day of exam, I picked the most difficult passage to practice again and again and told myself I would make it. (Exam: Y1 Evangeline)

I was very nervous on that day. So I kept practising and saying to myself 'everyone feels nervous, not only me,' 'we are all having an exam soon,' and 'if I can overcome my nerves, I will be the best one.' (Exam: Y2 Barbara).

Many participants reported that they had to attend other academic subject courses on the day of their exam, giving them limited time to prepare before the actual exam. The exam normally took place from 6:30 pm, and the last academic courses finished at 5:30 pm. As a result, participants could have very limited time to prepare for the exam on the exam day and to attempt to taper off practice in response to this. Interestingly, although Evangeline mentioned in the pre-research situation that MST was unhelpful as the anxious feeling did not go away, she still adopted MST in exam preparation by using the strategy of 'tapering off practice.' This may be because MST could not only help her build self-confidence but also motivate her to practice.

### *Backstage*

The use of self-talk was often reported backstage. Some participants adopted instructional self-talk (IST) in order to bring

their focus to the present and maintain attentional focus on the present performance. This related to triggering desired actions through internal dialogue (covert and inner speech) and external dialogue (overt and audible conversation) that focused on attentional focus, technical information, and tactical choices (Chroni, Perkos & Theodorakis, 2007). Some participants mentioned only using MST to encourage themselves, whereas others used both IST and MST backstage. Hatzigeorgiadis (2006) stated that different types of self-talk serve different functions depending on the content of the self-talk. The data shows that the content of IST could be divided into three categories: 'focus on the present performance,' 'avoid the judges or audience,' and 'concern about the task' (see Table 29, below).

The participants who were concerned about the performance environment, such as audience presence and the expectations of others, appeared to adopt IST to avoid 'judges.' This is in line with other research that reports harsh judgements from others contribute to MPA, and that anxiety is highest when playing before peers or critics (Gabrielsson, 1999).

*Table 29: Self-talk backstage*

Pre-research	<p><u>IST: Focus on the present performance:</u></p> <p>I did not feel nervous until I got backstage. At that time, I told myself 'listen to the introduction carefully,' and 'think about the first phrase that I am going to play.' (Y1 Jill)</p> <p>Backstage, I told myself 'just focus on listening to the music</p>
--------------	---

	<p>performed before me,' and 'don't think that I am the next one.' (Y3 Dora)</p> <p><u>IST: Avoid judges or audience:</u> I told myself 'don't look at the audience' and 'think nothing, just walk on stage.' (Y1 Selena)</p> <p>Backstage, I told myself 'don't be nervous' and 'just do my best and like I did in rehearsal.' I know all performers in this concert are nervous. Only the least nervous person can have a better quality performance than others. (Y2 Aya)</p> <p>I read the score and told myself I 'must have a normal and calm attitude.' (Y2 Kate)</p> <p>Backstage, I told myself 'don't be nervous,' 'it will end very soon,' and 'just perform like my previous performances.' (Y3 Alice)</p> <p><u>IST: Concern about task:</u> When I felt nervous backstage, I thought about the first musical phrase and reminded myself about what I should do later when I was on stage. (Y1 Cathy)</p>
Exam	<p><u>IST: Avoid judges or audience:</u> Backstage, I told myself, do not watch the judges. (Y1 Cathy)</p> <p>I could see the judges from backstage. So I told myself backstage 'they are all busy writing feedback. So they will not look at you when you are performing on stage.' (Y2 Aya)</p> <p><u>IST: Concern about task:</u> I repeatedly reminded myself what I had to do for the next step when I was backstage. It made me feel calm and peaceful. When I got on stage, I changed to talking to myself with some encouraging words. (Y1 Olga)</p>

	Backstage I talked myself through what I should do onstage step-by-step. When I got onstage, I kept saying positive words to encourage myself in my mind. (Y3 Melody)
Recital	There were two year four students who adopted IST backstage. But my data did not explore the content of IST in detail. For example, Bea said 'I remind myself backstage about what I should do first when I got on stage.'

Participants only mentioned adopting MST in concert preparation backstage, focusing on 'accepting mistakes.' Some participants explained that they did not mention any strategies during the other time periods, as they did not experience MPA when preparing for a concert until they were backstage.

Backstage, I told myself 'everyone would make mistakes, more or less. So, if I made mistakes, it was a normal situation and I was like others.'  
(Y1 Betty)

I told myself 'it is not easy to perform perfectly without any mistakes in front of audiences' and I told my hands to 'stop trembling.' But it was no use. (Y1 Gina)

I didn't feel nervous until I got backstage. At that time, I told myself 'don't be too nervous, nervousness cannot help your performance. It is normal to make mistakes on stage!' (Y1 Ivy)

The most nervous time for me was when I was backstage. At that time, I said some positive words to encourage myself. (Y2 Kate)

As stated earlier, IST only appeared when the participant was

backstage and onstage. This may be because the effects of IST and MST are different: IST enhances performance by triggering desired actions through proper attentional focus; MST builds confidence and motivation to increase effort (Chroni, Perkos & Theodorakis, 2007; Zinsser, Bunker & Williams, 2001). In music performance preparation, participants may seek to build self-confidence and motivation by focusing on themselves as a long-term strategy. When closer to a performance, they may attempt to focus on the performance itself using IST as a short-term strategy.

*On stage*

The most frequently mentioned strategy while participants were onstage was ‘self-talk.’ IST appeared more than MST in onstage situations (see Table 30, below).

*Table 30: Adopting IST and MST on stage*

Pre-research	<p><u>IST:</u></p> <p>I told myself do not look and care about the audiences and keep a peaceful mind as well as acting normally. The only thing I needed to do onstage was to concentrate on the music, the piano, and myself. I didn’t have any specific coping strategies to deal with nerves apart from this. (Y1 Betty)</p> <p>I told myself to ignore the audiences’ and judges’ presence and not to look at them when I was performing. (Y1 Linda)</p> <p>I told myself, ‘don’t think about anything’ and ‘concentrate on the music introduction, which the accompanist is playing now.’ (Y1 Patty)</p>
--------------	--

	<p>I told myself 'I am just practising, not performing,' 'I am in the practice room,' and 'don't think and look at the audiences' when I was performing onstage. (Y2 Gunda)</p> <p>I told myself 'don't look at audiences' when I was onstage. But I still felt very nervous. (Y2 Helen)</p> <p>I felt extremely nervous for the first few minutes when I got onstage. At that time, I told myself 'close your eyes' and only think about 'melody.' (Y3 Bobby)</p> <p>I always remind myself: the first thing I need to do when I get onstage is to find a place to watch in order to avoid eye contact with the audience. (Y3 Melody)</p>
Concert	<p><u>IST:</u></p> <p>Onstage, I told myself I should concentrate on my music and not look at the audience. (Y1 Gina)</p> <p>I played some wrong notes onstage. So, I told myself 'just forget about it and skip over it' at that time. (Y3 Melody)</p>
Exam	<p><u>MST:</u></p> <p>When I got onstage, I told myself some encouraging words. (Y1 Olga)</p> <p>Backstage I talked to myself about what I should do later onstage. When I got onstage, I kept saying positive words to encourage myself in my mind. (Y3 Melody)</p> <p>I made small mistakes, which had never happened during my practice time. When the mistakes happened onstage, I tried to continue to play and focus on the music that I was playing. I then told myself 'I am the best performer' until I got off the stage. I did not think back on the mistakes. (Y1 Nancy)</p> <p>I was very shocked when I played the first wrong note during</p>

	the exam. Then I realised that I should re-direct my attention and focus on my current playing. I told myself ‘a single mistake is nothing, I am still the best.’ The rest of performance was good and fine. (Y2 Jessica)
Recital	<p><u>IST:</u> I always say to myself ‘don’t rush to start playing on stage. Try to think about tempo and first phrase’ when I am on stage. This method can help me to calm down and perform well. (Y4 Catherine)</p> <p><u>MST:</u> I told myself ‘keep calm and handle the situation with a calm attitude.’ (Y4 Jojo)</p>

It seems that the ‘audience’ is the key element in the ‘pre-research situation,’ with participants using instructional words to avoid engaging with those who are watching them perform. In other words, ‘audience presence’ is the factor that they are most afraid of and a factor they cannot eliminate when they are onstage. LeBlanc *et al.* (1997) examined the effect of audiences on MPA among high school students performing solos with an audience present. They found that the audience presence was associated with a significant increase in the MPA, even if the audience was a small peer group. They suggested that music teachers should be aware of the potential for stress in performing for an audience, and they should try to prepare their students for the audience experience in a way that would minimise students’ MPA (LeBlanc *et al.*, 1997). Moreover, setting performance

goals might help manage MPA and take the focus away from the audience as being threatening (Roland, 1994). This implies that it is better to learn psychological strategies to cope with 'fear' rather than 'avoidance' in advance. In concert preparation, the finding was the same as in pre-research situations, in that participants only mentioned adopting IST onstage. Yet, the factor of the 'audience' was not the only key element when participants adopted IST during concert performances. Participants were also concerned with 'accepting mistakes' during performance.

Adopting self-talk during concert performance preparation was found to be very different from during exam preparation. None of the participants mentioned using IST on stage in the concert, more used MST during the exam. In sport psychology, Hatzigeorgiadis *et al.* (2013) found that MST could be more appropriate and effective than IST in the context of competitive sport. It may be the case that the experience of an exam situation is more like competitive sport than is a concert. Some participants talked about their inner dialogue and thoughts when they made mistakes on stage (such as Nancy Y1, in Table 30, above). Buswell (2006) suggested focusing on the current playing while the mistake happened as being the best way to reduce the level of MPA and bring the attention back to the performance. The comments from my participants supported his argument and they also encouraged themselves with phrases such as 'I am the best' after

bringing their attention back to the present performance. The next section will discuss the strategy used in accepting mistakes.

### **6.2.b. Accepting mistakes/errors**

‘Accepting mistakes’ appeared more often in exam preparation than other performance types. In addition, participants adopted it throughout the preparation time periods in the run up to the exam. Compared to other types of performance, it is possible that an ‘exam’ contains more elements which participants believe are related to making mistakes, for instance in marking and judgements. According to Hallam & Bautista (2012), students during intermediate levels of instrumental learning believe evaluation is an educational practice carried out to understand the relationship between the allocation of marks and mistakes (see also Chapter 2.1, p. 36). This argument may support and explain why participants often mentioned ‘mistakes’ as a key motivation for practising music. Betty commented, ‘I believe the fewer mistakes you make, the higher the score you get.’ As a result, in the early stage of the performance preparation period, some participants believed that increasing the number of practice hours and establishing a ‘rescue’ plan for coping with mistakes could be a way to be well-prepared for an exam.

I focused on correcting mistakes, which was to practise more and think about a method for preventing mistakes if I made mistakes or forgot the

music onstage. (Y1 Betty)

I created rescue plans in case I made mistakes on stage. My rescue plans were for things including forgetting notes, playing the wrong note, not playing in time with the accompanist, and experiencing shortness of breath, which causes a short musical phrase. (Y3 Melody)

As discussed above, participants brought their attention back through adopting self-talk when they made mistakes onstage. Buswell (2006) also suggested that 'after the performance,' musicians should take mistakes as feedback and move forward. In my interviews, I asked two questions regarding after the performance: 'How did you feel about your performance? Were you satisfied with your performance?' Only one participant mentioned she regarded mistakes as a type of feedback for her concert performance.

I made some mistakes in my performance. I am not sure whether audiences knew I made mistakes or not as I covered it very well. Anyway, I think making mistakes is a good performing experience and I can learn from it for a better performance in the future. The most important thing is that every performance is a good chance to have either some positive or negative feedback from the audience or judges. For me, it is a very good opportunity to receive different voices from the audience. (Y1 Jill)

Interestingly, participants who accepted their mistakes after the exam reported higher satisfaction than participants who could not accept their mistakes after the exam (see Table 31, below).

*Table 31: Accepting mistakes in relation to satisfaction*

*Accepting mistakes after exam with high satisfaction*

My performance went ok. I only made some small mistakes. But it was still better than last time. (Y1 Evangeline)

My performance was better than the last time (exam). I only made some small mistakes. (Y1 Ivy)

It was better than last time (exam). I made a small mistake, though. The mistake was I forgot to play a few notes on stage, which had never happened during practice time. (Y2 Maggie)

I made some mistakes during the exam. A performance without mistakes, it is not a real exam, is it? (Y3 Fabia)

I forgot some notes and fingering on stage so I made some mistakes. But I think it is nothing. Mistakes always happen during the exam, always! I'm used to it. (Y3 Jolin)

After the performance, I told myself 'the exam is all finished anyway. Mistakes are not important anymore.' (Y3 Dora)

*Not accepting mistakes after exam with low satisfaction*

I didn't feel satisfied with my performance. I messed up the first two phrases. So, I played it again from the beginning. It was a very big mistake. (Y1 Patty)

I didn't feel satisfied with my performance. My Bach piece lacked musicality, and I forgot the music while onstage. (Y1 Cathy)

I didn't like my performance, which was worse than last time (exam), because I made some mistakes in the Bach piece. (Y1 Gina)

I didn't like my performance. It was worse than last time (exam) as I missed some notes on stage because I was feeling anxious. This happened many times during rehearsal. (Y1 Hayley)

Accepting mistakes might be constituted feedback, but the way participants accepted their mistakes was not to take mistakes as feedback. Instead, they attempted to compare their performance quality with previous performances, such as 'better than last time' (i.e. Evangeline, Ivy, and Maggie, Table 31, above) or to ignore the mistake and move forward with a positive attitude (i.e. Fabia, Jolin and Dora, Table 31, above). In situations where students could not accept their mistakes, such as Gina and Hayley who thought their performance quality was worse than their previous performances, they blamed the 'mistakes.' A similar finding can be seen in the concert performance, whereby participants were not satisfied with their performance and blamed it on mistakes, which could result in negative thoughts and self-doubt regarding their performance abilities.

I made some mistakes, which was a very serious problem during the performance. I think if I had not made that mistake, my performance would have been perfect. It is very strange that I have always made a mistake in other parts of the repertoire, except this part. But in this performance, I made a mistake which I have never made. (Y1 Margaret)

My performance was really terrible. I forgot many parts of the music onstage, even though I spent a lot of time memorising the music. When it happened, I kept playing the main melody (my right hand) until I remembered the whole melody. (Y1 Ketty)

The distinction between small and big mistakes is a contributing factor which may influence the participant's acceptance of mistakes after the performance. For example, Evangeline accepted her mistakes

after the performance and stated, 'I only made some small mistakes,' whereas Patty, who did not accept mistakes after performance said, 'I messed up the first two phrases. So, I played it again from the beginning. It was a very big mistake' (see Table 31 above). As Buswell (2006) suggested, this strategy used before performance is to minimise mistakes by setting a rescue plan and, while onstage, used it for self-talk. Strategies used for minimising mistakes may also consider the issue of choking during performance, which relates to self-focus and distraction, also discussed in relation to competitive sport anxiety (see also Chapter 2.4.a, p. 83 and p. 84).

In sum, there are two ways in which most of the participants reported that they accepted their mistakes after performance: 'comparing the previous performance experience' and 'ignoring mistakes and moving forward.' However, the former seems to be riskier than the latter, because if participants think their current performance quality is worse than previous performances, they may have low satisfaction, negative thoughts, and self-doubts about their performance ability. As a result, the way of thinking about how to accept mistakes after a performance is important and musicians should be aware of not just adopting a strategy of comparing previous performance experiences. In addition, it is important to consider how to prevent and minimise mistakes through adopting musical skills (i.e. identifying the most difficult passage and practising it) and various

psychological strategies (i.e. self-talk) before and during a performance.

### **6.2.c. Mental rehearsal and visual rehearsal**

Mental rehearsal (MR) is a strategy for managing practice and anxiety without physical movement and, for some participants, when they cannot practice with their own instruments. The examples below are from the early stage of performance preparation. Some participants mentioned adopting MR often, or on a daily basis, when they could not access their instrument.

When I over-practise or feel tired, I go home and lie down on the sofa. At that time, I automatically start to imagine myself performing on stage and playing from memory. I have no idea how it started. But, anyway, this can help me become familiar with my repertoire and get used to the feeling of performing on stage. (Y3 Alice)

I have rehearsed in my mind many times when I have felt nervous. Sometimes, it occurred when I was waiting outside of the classroom before principal study lessons. It was not a performance. I just wanted to have a quick and mute practice before class. (Y3 Heidi)

Roland (1994) indicated that performers can frequently rehearse mentally the music they are preparing as a natural behaviour that happens in an unplanned way. This seemed to be the case for Alice. Although some participants mentioned the 'natural' behaviour of

mentally rehearsing music, this behaviour may not occur only in an unplanned way, as there were reports of actively using MR as a way to practise and to manage anxiety. It may occur when participants plan to listen to a CD of the repertoire for which they are preparing, for example:

I often listen to the music that I am going to perform from CDs and imagine the performance setting. The imagination makes me feel a bit nervous and makes it feel very real. (Y1 Rachel)

Ida, in year four, mentioned that she often listened to a CD of repertoire, read the score, practised the fingering, and imagined herself performing on stage at the same time. She reported that although she still felt nervous after she did this, it was helpful as she imagined the performance scene in her mind and did not have a big shock onstage in the actual performance.

In addition, listening to a CD of the repertoire might help musicians preparing for chamber music performances. Calvin, in year two, adopted MR when he and his chamber music partners could not rehearse together. This can be seen as mental solo practice before a group rehearsal.

My programme is a string quartet. So I read the score, which was not only my part, and imagined all of us on stage. I also hummed the music of the other parts in my mind. Through this practice, I could predict which parts of the music we would not be playing together or where it would be easy to make mistakes during the actual rehearsal. Then, I

could practise that passage alone in advance. (Y2 Calvin)

A similar result was observed by Bird and Willson (1988), who examined student conductors and teachers and found that the electromyographic pattern (EMG) during mental rehearsal showed similarities to the actual performance. The conductor's mental rehearsal situation is similar to a musician rehearsing a chamber music piece alone.

Rather than imagining a typical performance situation, Olga reported that she used MR to imagine a worst-case performance situation.

I tried to imagine myself performing very badly on stage. But when I performed on stage, it was better than my pre-imagination. Then, I felt I wasn't nervous anymore. (Y1 Olga)

It can be argued that using an 'imaginary success' through stimulating people's memories of previous positive experiences and achievements could increase their self-confidence (Cockerill & Steinberg, 1997).

However, Olga might have had difficulties in adopting 'imaginary success' as she did not have previous positive experiences and achievements in her current context, as she was in the first year of study. As a result, Olga believed a mental run through of the worst outcome of performance could make her realise that the actual performance was not worse than what she had imagined, and could

even be better.

As discussed in Chapter 3, the difference between MR and visual rehearsal (VR) that VR uses movement. Some participants adopted VR to practise or to think about fingerings when they could not access their instrument. They adopted VR by reading the score and listening to the CD at the same time.

When I feel nervous and the instrument is not with me, I read the score, move my fingers on the table, listen to the music from CDs, and imagine the performance situation simultaneously. (Y1 Queena)

When I can't get to the piano, I read the score, listen to the CD, and move my fingers, which is to imagine there is a piano on the stage and I am playing it. (Y2 Gunda)

Both MR and VR involve the creation of an imaginary picture of one aspect of performance (see also Chapter 3.1.b, p. 114–120). However, one participant mentioned that she did not create a mental image but thought about fingerings. This method could help her with both MPA management and musical practice, such as when memorising music.

When I am on my way home, probably on the train, I hold the music score and listen to the music at the same time. At that moment, I think about the fingering. This method can help me memorise the music, familiarise myself with the melody, and recall the feeling of performing on stage. (Y1 Betty)

Although MR and VR seemed helpful, one participant, Aya, in year two,

reported that such practice created a gap between imagination and the actual performance in terms of sound effect in concert preparation.

I imagine myself performing on stage sometimes. The feeling is real, which is close to actual performance. But the sound effect is very different between the actual performance and mental rehearsal. (Y2 Aya)

As discussed in Chapter 3, there are two mechanisms of mental rehearsal that are linked to motor control, which are the internal model and action simulation (Keller, 2012). Auditory and motor images can be triggered when the operating action simulates that during music performance in order to run internal models. Internal models are 'included forward models' (the relationship between motor commands and sensory experiences that are related to their effects on the body and environment) and 'inverse models,' which represent transformations from desired action outcomes (i.e. sound) to the motor commands (Keller, 2012). It seems that Aya encountered an issue regarding anticipatory auditory images when adopting this strategy. Some studies have pointed out that the effect of auditory imagery varies depending on individuals' predictive ability of tempo, accuracy of sensorimotor synchronisation (e.g. playing music with metronome), and amount of musical training (Rankin, Large & Fink, 2009; Repp, 2002). The relationship between greater or lesser levels

of MPA may relate to an individual's predictive ability of relating musical skills (i.e. tempo or tone colour) through auditory imagery.

Another participant argued that MR and VR were unhelpful in managing MPA but could help with musical practice, especially in exam preparation.

I think about repertoire and listen to music at the same time. 'Think,' I mean it is like running through the repertoire and imagining it is a very formal performance in my mind. But I don't think I can manage my MPA through this process. Perhaps it would help me become familiar with repertoire. (Y2 Elena)

Although Elena mentioned MR and VR could help with musical practice, Catherine (year four) did not think these strategies were helpful with practice for recital preparation. Not only were they not helpful, these strategies make her feel very nervous and she could not concentrate on practice. As a result, she would choose not to adopt them.

#### *During the week before the performance*

The purpose of adopting MR and VR changed depending on the time period. In the early stage of performance preparation, in addition to managing MPA, participants' aims were to increase their musical practice and to become more familiar with repertoire when they were unable to access their instrument or as solo practice for a chamber music performance. Yet, during the week before the performance, the

purpose of adopting MR and VR changed to avoiding over-practising, which can cause physical injury, and reserving sufficient physical strength.

A few days before the concert, I decreased my practice hours and changed to thinking about the music in my mind. I wanted to reserve sufficient physical strength and avoid getting any physical injury because of over-practising before the concert. (Y1 Ketty)

When the performance is close, I often rehearse the performance situation and the process in my mind. For example, I hum the melody and imagine myself performing at the same time. I do not do this with my instrument. I just do it at any time I suddenly realise there are only few days left before the performance and I will have enough to practise on that day. If I did not hum the melody smoothly in my mind, I know which part of the music I still have not memorised very well. So I will practise that part of the music with my instrument when I have energy another day. (Y2 Babara)

### *Backstage*

Two participants reported doing 'quick' MR backstage. 'Quick' mental rehearsal for them involved running through the beginning of the repertoire in their mind.

When I was backstage, I had a quick rehearsal in my mind, rehearsing the beginning of the music and then jumping to the last passage. I also told myself don't be nervous and it will be ok, as I had imagined. (Y2 Aya)

I thought about the performance situation and music, especially the tempo in my mind, when I was backstage. But it was just a quick rehearsal in my mind before I went onstage. (Y4 Ariel)

It seems that quick mental rehearsal backstage helped participants both in musical and mental preparation, and also worked in conjunction with motivational self-talk in order to build up or enhance self-confidence. As Aya reported, 'I also told myself don't be nervous and it will be ok, as I had imagined.'

### **6.3 Behavioural strategies**

#### **6.3.a. Contrived performance situation**

A 'contrived performance situation' to stimulate anxious feelings by creating a physical rehearsal with small audiences can prepare musicians for the actual performance and help them to manage their MPA in the real performance situation (Abel & Larkin, 1990). Three elements are needed to create a physical rehearsal with a contrived performance situation. Firstly, participants need to be confident in running through the repertoire fluently. Secondly, they have to have been informed where the performance venue is or at least the potential location. Finally, they need to gather an audience who agree to the arrangement. This normally happens a few days or a week before the performance, depending on the difficulty of the repertoire and the performance types. For example, chamber music rehearsals require cooperation with other chamber music partners' time schedule.

My programme was chamber music. So my partners and I rehearsed together many times. We also went to the performance venue and created a real performance situation together many times. We rehearsed walking on stage, bowing to the audience, starting to play, and walking down stage. We also checked the sound effects and decided the position of each instrument. (Y2 Igor)

My programme was chamber music, which I chose myself. My partner and I had formal rehearsals by inviting some classmates to be the audience three times. We also went to the performance venue to do a final rehearsal by focusing on the sound effects and position on stage. I was well-prepared this time. (Y3 Jolin)

Formal concerts in this school included two types of performance, solo and chamber music performance. The type of performance, solo or chamber music performance preparation, impacted upon the time periods. When discussing the use of a 'contrived performance situation,' participants undertaking chamber music performances reported adopting this strategy many times in the early stages of performance preparation. In other words, preparing for chamber music performance triggered numerous contrived performance situations, as regularly and as early as possible.

Compared with chamber music performance, participants undertaking solo performances often adopted contrived performance situations during the week before the performance. Furthermore, they did so a few times before their performance.

A few days before the performance, I went to the performance venue

with the pianist. We ran through the whole piece and dressed up. But even though I did this, I did not perform very well in the actual concert. I was too nervous. (Y2 Diana)

I had a rehearsal with my accompanist at a performance venue a few days before the concert. She is just like my principal study tutor. She gave me a lot of positive feedback and useful suggestions, which made me feel confident about the upcoming performance. It is very important for me to contrive a performance situation in advance with my accompanist. (Y3 Kiki)

However, there was an exception, a composer who adopted a contrived performance situation at an early stage, even carrying out a solo performance (i.e. solo presentation at the beginning of an ensemble music performance).

I am a composer. I had to do an 'oral presentation about my work' and 'conduct the ensemble music.' When I contrived the performance, I asked my performers to do it together many times. I also found some classmates to pretend to be the audience. However, I was paying too much attention to 'conducting' so I had less practice on the 'oral presentation.' Therefore, on the day of concert, I was anxious about my oral presentation. Fortunately, I had a rehearsal by creating a small audience. Therefore, I wasn't too nervous when I did the oral presentation. (Y3 Gary)

Gary's example of adopting a contrived performance situation at an early stage was probably because a composer needs to deal with two different tasks (i.e. solo presentation and ensemble conducting). It may also be possible that, owing to the form of this composition being

ensemble music, it links to the previous discussion that preparing for chamber music performance may trigger more contrived performance situations, as regular and as early as possible. Another factor determining whether participants adopted contrived performance situations in the early stage of preparation period was 'task difficulty.' In the exam, participants had to play a scale, randomly set by examiners or randomly drawn from a box backstage. Participants perceived a high level of task difficulty in this examination system. As a result, some participants contrived an exam situation by focusing on scales.

I asked my friends to choose a scale randomly for me because we could only know which scales had to be played one minute before exam. This was the most anxious part for me. (Y2 Elena)

I made a box, wrote down the scales on pieces of paper and put them in the box. Then, I brought the box and a timer to the exam venue. I set the timer for nine minutes. And then I pick a paper from the box, which was A-flat major. I started to play the piano from the scale to all the repertoires. It really felt like being in the actual exam. Coincidentally, I did play A-flat major scale in the actual exam. (Y2 Jessica)

As discussed above, during the exam the 'audience' became 'judges,' which could put much greater pressure on participants than previous performance contexts. Thus, students adopted a contrived performance situation earlier than in concert preparation by focusing on experiencing the presence of judges in the performance

environment, even if it was a solo performance.

I tried to find classmates to help me simulate the performance situation, as I don't like judges watching me when I am performing. (Y1 Evangeline)

My classmate and I went to book the exam room together. We had a rehearsal, in which we ran through all the pieces and gave each other feedback. Although the exam was to play music to judges not classmates, they were all audiences for me. There was nothing different. (Y2 Aya)

I created an exam situation with my classmates' support. For example, they picked a scale randomly and asked me to play. After that, I started to run through all the exam pieces. When I did this, I always thought I was in the real exam. They were my real examiners. (Y3 Fabia)

Despite some people paying attention to the presence of judges while they contrived the performance situation, some participants believed it was not necessary to have a small audience to create a contrived performance situation.

I booked the exam room to imitate the situation of the examination. But there was no one there but me. (Y1 Linda)

A week before my performance, I went to the exam venue and rehearsed there alone. If some of my classmates were nearby, I invited them to come. But it was not necessary for them to do it. (Y3 Gary)

It may be that the presence of an audience did not worry Linda or Gary: the other performance factors were more important than the presence of judges, such as sound effect, fluency of repertoires, venue

environment, and fluency of the performance process.

Some participants adopted the contrived performance situation passively in the early stage of the preparation period. For example, participants' tutors designed the course, which included contriving the exam with his/her other students or accompanist. I will discuss this issue regarding the contrived performance situation by working with teachers in Chapter 7. In addition, the place where participants contrived performance situations could vary depending on the time periods of the strategy used. Because the exam venue was unknown in the early stages of preparation, some participants contrived a performance situation in the practice room.

I did my rehearsal in the practice room. Both my classmates and my tutor helped me to contrive the exam situation. (Y1 Nancy)

My school told me that my exam was in the recital hall few days before exam. But they changed the exam venue from the recital hall to the practice room on the date. It made me less nervous than before, as I always practise and rehearse in that room. (Y1 Ketty)

The process of adopting this strategy may depend on the circumstances, such as the difficulty of repertoire and performance types, and may not wholly be in the control of the student.

Participants performing in chamber music performance adopted the strategy earlier than solo performers in the concert preparation period owing to the need to manage a group of people's time

schedules. Nevertheless, adopting the strategy of the contrived performance situation was reported as being helpful by many participants when preparing different types of performance under different performance environments.

### **6.3.b. Breathing and muscle relaxation**

Many participants mentioned adopting breathing strategies backstage.

When I feel nervous backstage, I think about the first musical phrase. Then, I take a deep breath and tell myself 'calm down.' (Y1 Cathy)

When I feel nervous, I take a deep breath. Backstage, I try to breathe smoothly. (Y1 Ivy)

Before I go onstage, I take a deep breath. Then, I watch myself in the mirror and say, 'you are the best.' Although I still feel nervous, it can reduce my anxious feelings, for the most part, I believe. (Y2 Jessica)

If I cannot keep calm and my heart is beating fast onstage, I take a deep breath and look around. It is better not to start playing when you are very rushed. (Y4 Bea)

When I feel nervous in the waiting room, I eat cookies and take a deep breath. Through moving my mouth, I can feel temporarily relaxed. It doesn't necessarily have to be cookies. (Y4 Flora)

However, most of them had not practised the strategy before and did not necessarily learn it in the correct way. This is important as 'taking

a deep breath' as a way of using a breathing strategy should be learned and practised in advance, not just when under stress. It should be practised correctly at all times (Buswell, 2006). Hay (2002) makes a similar argument. She mentions that many performers are familiar with various techniques and mental skills, yet even if they know about such techniques, they may not have learned how to use them, or they may not truly have understood their usefulness or applicability. It is possible that participants adopted breathing and muscle relaxation only when they felt serious MPA and could not play their instrument for various reasons, especially backstage prior to performance. However, this argument did not apply to every participant, as one participant mentioned she did not feel nervous, but she used muscle relaxation on the day of performance anyway:

I didn't feel nervous at the concert. I just tried to warm my hands and did muscle relaxation on the concert day. (Y3 Iris)

Nevertheless, there was no other data related to adopting breathing or muscle relaxation in non-anxious conditions. This may be because participants considered that breathing and muscle relaxation were a way of coping with anxiety which they only needed when they experienced anxiety. It could also explain why participants did not practise these strategies in advance. Some participants took breathing strategies from the performance diary and decided to adopt them only

on the day of performance or backstage.

On the day of the performance, I tried 'breathing' after I read the performance diary, as I felt difficulties with breathing. (Y1 Ketty)

I did muscle relaxation in the waiting room. But I don't like to sit down to do it as the performance diary mentioned. This is because when I am nervous, I like to walk around. (Y3 Kiki)

In addition, there were participants who reported that they practised breathing in the early stage of performance preparation period after receiving the performance diary.

I read the diary. A few weeks before the performance, I tried mental and visual rehearsal, the contrived performance situation, and breathing skills, which were all learnt from diary. Some skills in the diary I had heard of before and some were new to me. (Y1 Gina)

I read the diary. I didn't feel nervous few days before my concert. My nervous feeling happened when I was at backstage. At that time, I had no idea what I should do except wait. Then, I remembered that I was participating in a project about anxiety. So, I tried breathing and muscle relaxation as I had practised them before, when I saw these skills in the diary few weeks ago. Also, they were the only strategies that I remembered when I was backstage and the diary wasn't with me. It was very helpful. (Y1 Ivy)

This finding suggests that the PD may enlighten students' thoughts about managing MPA. Diana stated, 'I tried breathing, which I saw in the performance diary. It was very useful,' while student Elena intimated, 'I have adopted breathing. I took a deep breath twice and blew out slowly, as I learned from the diary.' In sum, breathing and

muscle relaxation seemed helpful and suitable to adopt prior to performance, especially on the day of the performance backstage. Yet it should be noted that these strategies need to be practised in advance and be learned in the correct way.

### **6.3.c. Following a pre-performance routine**

Following a pre-performance routine is a crucial strategy on the day of performance. Performers can become familiar with the performance venue and have some time alone before the audience arrives (Roland, 1994). In my research, when asked, 'How did you spend your day on the day of performance?' some year four participants reported that they arrived at the venue early to get ready and warm up with their instrument. After that, they carried out mental rehearsal and some relaxation techniques. Ariel (Y4) commented that the routine of recital preparation was the same as before other performances.

My recital was in the evening. I booked a practice room close to the recital venue and arrived there in the afternoon. I went through the whole programme with my accompanist. Then I took a rest and had a simple dinner. I did mental rehearsal many times, even when I was having my dinner. Then, I did some breathing and muscle relaxation as I had done for other performances. I also chatted with my friends through e-messages. I remember around half an hour prior to my recital, I warmed up my instrument again, switched off my mobile phone, and took some time alone. (Y4 Ariel)

This is very different from other performance types, as no participant reported following a pre-performance routine on the day of performance or arriving at the venue early. This could be because year four students have developed their own strategies for managing MPA through years of experience, or because the format of a recital is different from a concert or exam. Students may need more time preparing for an hour long solo concert, where the level of the task may be higher than the other two types of performance. In addition, the graduate recital may contain the anxiety-inducing factors of both concert and exam contexts, such as audience pressure, marking, and judgements, and therefore students prepared differently for this situation.

### 6.3.d. Various physical and absorbing activities

Table 32 shows a summary of the different types of physical activities that participants adopted at different times for different performances.

*Table 32: Physical activities*

	Pre-research	Concert	Exam	Recital
Early stage	Jogging, basketball, badminton, table tennis, qigong, swimming, taking a stroll	<ul style="list-style-type: none"> <li>No specific detail on which types of exercise</li> <li>Only two participants mentioned them</li> </ul>	<ul style="list-style-type: none"> <li>No specific details on which types of exercise</li> <li>Only one participant mentioned them</li> </ul>	Jogging and basketball
Few days before	none	none	Swimming	Jogging
On the day	none	none	Not sure or none	Not sure or jogging

Most of the participants adopted physical activities in the early stage of performance preparation in pre-research, so-called chronic exercise; only a few participants mentioned physical activities in concert, exam and recital preparation. Where the type of activity was stated, jogging appeared to be the most popular exercise.

Recently, I started to go jogging with classmates as I need company to

force myself to do it regularly. I feel very relaxed when I take exercise. I forget all the stressful stuff at that moment! (Y3 Dora)

I go shopping and jogging as a way to relax. Through these activities, I can stop thinking about exams and feel relaxed. (Y3 Gary)

I went jogging alone when the practice rooms were closed at night. It stopped me from thinking about performance stuff. (Y3 Alice)

Adopting physical activities as a way of coping with MPA can be discussed in terms of its functions and benefits. Many participants reported that they took physical activity to relax when they felt under pressure after a long day of practising. They believed that taking these activities could help them 'distract anxious focus away' temporarily during their performance preparation. This finding supports the argument that exercise could help with managing MPA as it may force people's mind to focus on the physical aspects of the activity itself without thinking about other things (Taylor, 2000; Taylor & Wasley, 2004).

Some participants mentioned that taking exercise could 'help them feel relaxed' when they faced technical challenges in their musical technique. It could be beneficial because exercise releases endorphins and causes the rhythmic contraction and relaxation of muscles, which reduces tension. In addition, chronic exercise result in small reductions in cardiovascular reactivity that lowers perceptions of activation and enhances feelings of calmness, while smaller changes

in physiological symptoms of alertness are perceived for musicians (Taylor & Wasley, 2004).

I exercise when I face difficult musical techniques. It makes me feel relaxed and happy. My favourite exercise is jogging. I can do a 20 kilometre jog at night alone and listening to pop music. (Y3 Melody)

Apart from reading a book and watching a movie at home, I go jogging, especially when I have no idea about preparing for a recital and I feel annoyed by it. It makes me feel calm and relaxed. (Y4 Bea)

I go jogging and listen to pop music at same time. It makes me feel calm and comfortable. (Y2 Elena)

In relation to pre-performance routines, some participants reported that physical activities could assist them with 'organising life' before a performance. This finding is similar to Rocha *et al.* 2014's research, which found that regular physical activity and an active lifestyle before a performance helped musicians to control their MPA better (see also Chapter 3.2.a, p. 140-141).

I try to regulate my daily life and stay organised. So I go swimming. It can help me sleep early and wake up early in order to be in good health and have a better quality of life. (Y3 Iris)

I try to go jogging every day. I play clarinet. I can control my breathing skill well and have a healthy body through jogging. (Y4 Della)

I do regular exercises, which can help me organise my practice and

regulate my daily life. (Y1 Gina)

Interestingly, some participants took physical exercise because peers or teachers invited them to participate in the activities together.

I sometimes exercised with classmates after practice, such as playing basketball, badminton, and table tennis. (Y2 Igor)

I practised qigong to relax my body, as one of my teachers taught me before. It was helpful in managing my anxiety. (Y1 Ivy)

'Qigong' is a Chinese traditional exercise. It is the integration of physical postures, breathing techniques, and focused intentions. However, it is not common to learn it in school physical education in Taiwan. As a result, in the interview I explored the issue of where the participant learnt this technique and why she thought qigong was useful.

I practised qigong to relax my body as one of my music teachers has taught me before. I tried it once when I prepared for a performance under a stressful situation. I felt my body was very relaxed and my mind was calm when I practised qigong. After that experience, I always did qigong when I wanted to be temporarily relieved from a stressful situation. (Ivy)

Taking activities with peers or teachers as a way to reduce anxiety can also be found in many absorbing activities, such as chatting or reading (see Table 33, below). The function of absorbing activities is to shift people's awareness from their anxiety to neutral things, which is a

cognitive distraction technique (Uys & Middleton, 2004).

*Table 33: Absorbing activities*

	Pre-research	Concert	Exam	Recital
Early stage	Chatting with friends, shopping, seeing a movie, playing video games, watching TV, listening to pop music, taking a bath, and reading books	Reading books and taking a stroll while chatting	Shopping and chatting with friends	Chatting with friends
Few days before	Shopping	Seeing a movie, shopping	None	Attend peer's recital
On the day	Chatting with friends and eating	Seeing a movie	Chatting with friends	Chatting with friends
Backstage	Chatting with friends	Chatting with friends	None	Chatting with friends

'Chatting with friends' is mentioned most frequently by participants throughout all of the preparatory time periods and all types of performance. A similar finding has been found in Fehm and Schmidt's (2006) research, in that talking to teachers, classmates, or friends was used by many participants as long-term strategies, but for most of them talking was not a routine part of coping with performance anxiety (Fehm & Schmidt, 2006). Yet my research found that some

participants reported 'chatting with friends' as a way to cope with MPA both in the long-term (i.e. early stage) and in the short-term, such as backstage (see Table 34, below).

*Table 34: Data of chatting with friends*

<p>From early stage to on the day of performance</p>	<p>Shopping, seeing a movie and chatting with peers can make me feel good for a while and relieves pressure. (Y4 Flora)</p> <p>When I feel stressed, I go to the pub and have some alcohol with friends. The main purpose to go to a bar is to chat with friends in a relaxing place, not just to have alcoholic drinks. (Y1 Abigail)</p>
<p>Backstage</p>	<p>When I feel extremely nervous in the waiting room, I always keep talking to my classmates and convincing myself I am not going to perform soon. (Y2 Calvin)</p> <p>A few minutes before the concert started, I saw my best friend in the aisle. I was very nervous, so I just kept talking to her. It made me feel happy and calm at that moment. (Y2 Findy)</p> <p>Before the concert, my classmates and I give each other positive words and a warm hug. It can make us feel better in a nervous situation. (Y2 Diana)</p>

In addition, the data showed that there were two purposes for chatting, according to the participants: using it as a cognitive distraction technique and as a way of sharing nervous feelings with others. Apart from Diana, who mentioned that chatting was a way to encourage each other prior to the exam, it seems that distracting oneself from anxiety through chatting could be found throughout all

the performance preparation time periods (see Table 34 above). The quotations below present the ways in which participants share their nervous feelings through chatting.

I like to find someone to talk to about my worries. That person is normally one of my classmates or who shares the same principal study major. Only they can understand my worries and offer me some suggestions. (Y3 Iris)

I like to reduce my nerves through chatting with friends. I often share my thoughts and feelings with classmates, who are also going to have a performance soon. (Y4 Bea)

When I feel very nervous, I chat to my classmates, who share the same feelings. (Y4 Ida)

It is interesting that participants emphasised talking to a person with a similar background or performance experience, such as the someone with the same instrumental major or with a performance on the same day.

Apart from chatting with friends, other absorbing activities included shopping and reading, which were also noted in Yen's study (2006). Jojo mentioned that attending a classmate's recital was a way to help her manage MPA and feel relaxed and happy. Chatting with friends also could be regarded as a way to learn from others' experiences of coping with MPA through interaction and communication.

Three days before the recital, I stopped my practice and rehearsal programme. I went to my classmates' recitals and enjoyed their music and performance. It made me feel relaxed and happy. I mean, I loved seeing them accomplish this incredible feat. I knew I would join them soon. More than that, I could understand how other people organised their recital on the day of performance and took their experience to my own recital. (Y4 Jojo)

Other absorbing activities for the purpose of distraction were seeing a movie (e.g. Dora), watching TV or a movie (e.g. Selena), playing video games, listening to pop songs (e.g. Ketty), taking a bath (e.g. Ariel), or reading books (e.g. Elena).

I went to see a movie with classmates when I felt pressure. It made me forget about the exam temporarily. (Y3 Dora)

I like to watch TV and sleep when I feel stressed. I like to engage in the drama, which allows me to totally forget about the reality of the exam. (Y1 Selena)

I sometimes played video games or listened to pop songs to relax and turn my attention to other stuff. (Y1 Ketty)

I took a bath, which helped me to relax and stop thinking about performance stuff. (Y4 Ariel)

I read books when I feel nervous. It can let me forget about performance stuff. (Y2 Elena)

It is very interesting to find that classical musicians used 'pop music' as a way to relax. One participant reported how listening to pop music

helped her in managing MPA. She stated that the melody of pop music and its lyrics let her forget about exam pieces temporarily.

I listened to pop songs, which are lyrics-based songs. It made me relax and forget the melody of the exam pieces. (Y3 Lily)

The other participant, Elena, reported that the music she preferred to listen to had a slow tempo to calm her.

I listened to pop songs that had a very slow tempo. It made me calm and relaxed. (Y2 Elena)

Some clinical researchers have identified the positive effects of listening to music to help reduce pain and to manage anxiety and anger (Goddaer & Abrahams, 1994; Bensimon, Einat & Gilboa, 2015). According to Bensimon, Einat and Gilboa (2015) music for relaxation should be characterised by steady, slow, repetitive, and flowing rhythms at a pace that is similar to the heart rate of a relaxed person (60 to 80 beats per minute). It consists predominantly of low tones and is not perceived as loud (i.e. 50 to 65 dB). This may explain why Elena mentioned her preference for slow-tempo music. However, there is limited research exploring the use of different music genres to manage MPA for classical musicians, as most current research is concerned with MPA in the context of different music genres.

### 6.3.e. Diet

Five participants report that small dietary changes or eating a specific food helped alleviate their symptoms of MPA, either mentally or physically.

When I feel stressed a few days before performance, I drink some hot water. It is sort of a habit, or warms my body, probably. I have had this habit since high school. (Y1 Linda)

I do not know how to manage my nervous feelings apart from by drinking water. I drink a lot all the time when I feel very nervous. (Y2 Elena)

I read the score and keep drinking water backstage. I don't feel a dry mouth. It is just my performance routine or sort of a habit. I feel calm and focused on the performance when I drink water. (Y4 Gigi)

Although some participants mentioned that drinking water to manage anxiety was a personal habit, there are some articles which mention dehydration as a possible cause of anxiety, so water could be a calming tool, as it solves the problem of dehydration. However, such theories have not been tested by professionals.

Eating in response to both positive and negative emotions has been reported frequently in research, so-called emotional eating (Van Strien *et al.*, 2013; Bongers *et al.*, 2013).

I do not know how to deal with anxiety. I believe eating more food can make you feel better. I always feel very nice when I eat until I feel very full. (Y2 Jessica)

I always treat myself to a nice meal after intensive practice. It becomes my motivation to practise harder and also makes me feel happy after having something nice to eat. (Y3 Coco)

The participants' comments above present eating in response to two types of emotions. Jessica mentions that eating helps her manage negative emotions (i.e. anxiety), whereas Coco regards food as a reward after working hard at practising. One participant explained why eating took her mind off the worry of an approaching performance.

When I feel nervous in the waiting room, I eat cookies and take a deep breath. Through moving my mouth, I feel temporarily relaxed. It doesn't necessarily have to be cookies. (Y4 Flora)

Some teachers have suggested that their students eat certain foods (e.g. bananas) to alleviate performance anxiety when students have sought help from them during tutorials.

I asked my teacher how to alleviate my nervous feelings. She suggested to me to eat bananas, but I haven't tried yet. (Y2 Elena)

My teacher said eating chocolate and bananas could reduce my nervous feelings. I have tried them. It does work. So now, I always eat them before I perform on stage. (Y3 Alice)

According to Caroline (2015), foods that boost energy levels, such as bananas, can lift our mood, as the so-called 'happiness hormone' serotonin comes into play. Conversely, foods that interfere with its

production, such as junk food and alcohol, can increase levels of anxiety and depression (Caroline, 2015). Another typical food is chocolate, which has been studied by researchers for the possibility that it could help to improve mood. This is because cocoa and chocolate products may have beneficial effects on the human metabolism, as the high content of flavonoids in some cocoa-based products are associated with cardiovascular health benefits by the maintenance of low blood pressure (Martin *et al.*, 2012). Martin *et al.* (2012) investigated the impact of chocolate-based snacks on postprandial wellness among ninety healthy Dutch adults aged between eighteen and thirty-five. They found that the milk chocolate snack resulted in a decrease in anxiety in highly anxious people because tasting foods containing sugars evokes positive affective responses and can have an immediate effect on alertness, making individuals feel more relaxed. Moreover, participants experiencing negative emotions may feel satisfied, happy, and relaxed immediately after the consumption of foods containing carbohydrates (Martin *et al.*, 2012).

In sum, there are two positive effects of adopting dietary strategies for managing MPA: distraction from anxiety (i.e. moving one's mouth in order to taking the mind off the worry of an approaching performance) and improving mood through eating specific foods (i.e. bananas and chocolate). Consideration should be

paid to the fact that the effects were short-lived or used as a short-term strategy only, as the participants reported that they adopted the strategy only when they felt anxious or immediately prior to a performance, backstage or in a waiting room. Moreover, there is a strong correlation between social anxiety (i.e. perceive anxiety in social or performance situations) and eating disorders such as binge eating (overeating on a regular basis) or emotional eating (Sawaoka *et al.*, 2012; Ostrovsky *et al.*, 2013). Individuals can overeat in response to stress or emotional arousal, which includes both positive and negative emotions (Ostrovsky *et al.*, 2013). It may cause health issues, such as overweight and obesity. This is the darker side of managing MPA: maybe this is something that future research can follow up. All in all, adopting dietary strategies for managing MPA need to be cautious regarding physical health issues.

### **6.3.f. Tapering off practice**

The strategy of tapering off practice combines a number of factors already discussed. It can mostly be found in the time period 'on the day of performance.' Some participants adopted absorbing activities and tapering off practice together. For instance, Evangeline stated, 'I picked the most difficult passage to practise two hours before the concert began.'

Participants needed to be well-organised on the day before the

concert as the school's formal concert was at night. The adoption of absorbing or physical activities could displace anxious focus and tapering off practice could assist musicians in avoiding physical injuries that result from over-practice. Some participants mentioned tapering off practice as a way to improve musical technique and prevent mistakes happening, especially in virtuoso passages. This may also have had the psychological effect of reassuring them that their performance would go smoothly.

A few hours before the performance, I picked the most difficult passage to practise. I also thought about, if I made a mistake in this passage, how would I cover it? (Y2 Jessica)

It is interesting that some participants adopt tapering off without their instrument, which links to Roland's argument that performers, when the performance is nearing, only do sufficient practice, such as running through and reading through the score of their performance (Roland, 1994).

When the performance is close, if I am in the academic courses which are irrelevant to music training courses, I read the music score and hum the melody in my mind. This method can help me to memorise the music and it means I have extra practice time! (Y1 Hayley)

This comment from Hayley explains that a performer might read through a score as a way to prepare for their performance, as they may not be able to access their instrument before the performance.

Linked to tapering off practice, some participants mentioned that they had a practice plan in the early stage of preparation before their performance.

Before a concert, I try to make a practice schedule, which is to practise some difficult passages at separate times. (Y1 Evangeline)

Evangeline mentioned that she created a practice plan in order to practise difficult passages by separating them into different times. This activity can be defined as deliberate practice and regarded as an effective strategy (Ericsson, Krampe & Tesch-Römer, 1993; Chaffin & Lemieux, 2004). Some participants did not create a practice plan for the entire exam preparation period, but they made a one-week practice plan before the exam. For example, Alice comments, 'I made a practice plan a week before the exam. I spent extra practice time, around fifteen to twenty minutes, focusing on the most difficult passages.'

Despite many researchers indicating that effective musical practice might be related to structured activities (Chaffin & Lemieux, 2004), one participant in my study reported that unplanned practice was better than creating a plan. As student Kiki said, 'I don't like to make any practice plans or tapering off. It makes me feel pressured. I like to practise freely. It all depends on my mood on the practice day.' The strategy of musical practice may be determined by individual

preference. As Jørgensen stated, effective strategies depend on individual differences and specific preferences for learning habits (Jørgensen, 2004).

To sum up, two ways of practising tapering off practice were reported: reading through the score or practising the most difficult passages. As to creating a practice plan in the early stage of the performance preparation period, participants did not often mention this strategy. An explanation for this could be that they saw the creation of a practice plan or tapering off practice as something that they did as part of their musical learning, and did not necessarily associate it with managing MPA. Therefore, they preferred to mention distraction strategies (e.g. various physical activities) and anxiety-related psychological coping strategies (e.g. mental rehearsal, visualisation, and contrived performance situations) during the interviews.

### **6.3.g. Cognitive restructuring**

‘Cognitive restructuring’ has been found helpful in reducing the level of MPA for adolescent musicians (Osborne & Kenny, 2008). The strategy helps people to think in a more positive and rational way, and the process involves reassessing and managing the fearful situation more positively (Newman, 2015). In the pre-research situation, a participant reported that ‘adjusting my emotional state’ was a crucial

strategy for preparing for a performance. Fabia stated, 'I adjust my emotional state a few days prior to performance. My stress and pressure decrease after these adjustments and they disappear automatically when the performance has finished.' However, Fabia did not mention specifically his original emotional state or how it was adjusted. This strategy can also be found in the responses relating to the exam preparation period when a participant dealt with the presence of judges in the performance environment. It shows how negative thought can be changed into positive thought.

I was afraid of the judges staring, as I thought they did this because of my bad performance or my mistakes. But now I have changed my thought, which is to take the exam as my concert and the judges as my audience. I don't have to think about their judgements. I only have to think that I came here to show my ability to them and they came here not to find my mistakes. (Y3 Quintina)

Quintina initially imagined the judges' actions with flawed thinking and unrealistic thoughts before the performance. The actions or the thoughts of the judges were imagined by the student prior to performance, which could have had a detrimental effect on her performance. She realised such thoughts were unhelpful and replaced them with a positive view, such as thinking that 'judges are audiences who are not here to find mistakes.' Yet the student did not indicate why she changed her way of thinking or what provoked her to change it. It is possible that she understood and was able to identify what she

was afraid of (i.e. judges staring her). Thus, she mentioned the contributing factors first and then attempted to change the negative thoughts into positive thinking.

Two participants that reported adopting the strategy also provided examples of difficulties in being positive. Diana (year two) had difficulty in identifying positive thoughts and Eileen (year three) believed it was unnecessary to learn, as this strategy was a natural behaviour.

I tried this method. I knew what caused me to feel anxious. But I only had negative thoughts. I could not have any positive thoughts, even though I knew it was wrong. That is why I am always very nervous. (Y2 Diana)

I have heard about this strategy and tried it before. At that time, I did not know its official name. I always did it while preparing for a performance. I think it is a natural behaviour, no need to learn it. (Y3 Eileen)

Diana stated that she was able to identify her MPA's contributing factor and understood that negative thoughts were unhelpful. Yet, it was hard to replace the negative thoughts with positivity. This participant seemed stuck in her negative way of thinking and lacked the confidence to identify her strengths. Teachers or professionals might help students by pointing out their strengths or helping them identify reasonable thinking through conversation or CBT intervention (Stallard, 2005; Hunnicutt & Winter, 2011). As for Eileen,

she believed the strategy was a natural behaviour. This may be because she had many experiences with coping with negative thoughts. Therefore, when she realised that she was experiencing MPA and having negative thoughts, she was able to deal with the situation in a more manageable way.

#### **6.4 Summary**

In this chapter, there are three interesting findings which can be taken into account for both college musicians and music educators. Firstly, it is very important to have a long-term practice strategy. This is because some strategies need to be practised in advance and adopted on a regular basis. Furthermore, it can help musicians if they experience anxiety in general, as MPA occurs not only onstage, but also during offstage playing (Gabrielsson, 1999). Secondly, it is important to be aware of strategies used 'after performance,' especially that of accepting mistakes, as this may relate to satisfaction with the performance as well as the mental health and wellbeing of the musicians (Buswell, 2006). Finally, the types of performance, performance environment, and time periods should be taken into account when adopting coping strategies. For example, chamber music performers need to adopt contrived performance situations earlier than solo performers.

By discussing when each strategy was used in relation to

different types of performance, it can be seen that participants in all year groups adopted the same strategies for managing MPA (see Appendix 6). However, when exploring the participant's strategies in detail by year group, it can be seen that year four students adopted various psychological strategies at the same time in the same period of performance preparation, such as Ariel (see also p. 247). Hallam and Bautista (2012) stated that professional musicians or independent learners require a range of life skills, including planning and organisation skills as well as time management. As year four students are in the latter stages of undergraduate music education, they may have developed self-regulatory skills to support their management of the process of learning and practice. Although, as a glance at the bar chart shows (see Appendix 5), likely students in all years adopted various strategies. Yet, some participants used strategies only when they felt nervous backstage (i.e. breathing) or only used a single strategy in a specific time period, such as year one participant Daisy, who only adopted MST in the early stage of her exam preparation period. Furthermore, it seems that most of participants had prior knowledge of managing MPA through using either a single strategy or various strategies together.

Hallam and Bautista (2012) outlined eight skills essential to supporting learning music: aural, cognitive, technical, musicianship, performance, creative, evaluation, and self-regulation. Self-regulatory

skills support the development of managing the process of learning, managing practice, enhancing concentration, and enhancing motivation, key concepts underlying psychological theories of self-management (see also Chapter 4.1, p. 156). Furthermore, evaluating skills are related to the ability to make comparisons between different types of performances, critically assessing personal performance, and monitoring progress. Both self-regulatory and evaluation skills can be seen in the data regarding the self-management of MPA. As a result, developing such skills is important both in learning music and in assisting students to self-manage MPA. The skills can be acquired through teachers' guidance (Chen, 2011), and metacognition is an important process in applying them in practice (Hallam, 2001a; Hallam & Bautista, 2012). Most of the participants had prior knowledge of managing their MPA and used different strategies. This raises questions as to how they developed self-regulation skills in order to managing MPA and practice. Did they acquire the skills through their teacher's guidance or other assistance? In the next chapter I will explore the people who participants used to help them with their strategies in order to provide more insight into how they developed the skill of self-managing MPA.

## **Chapter 7. Strategies in context: People and places**

### **7.1 Introduction**

According to Ford (2013) the traditional way of developing a Western classical college musicians' ability to perform is through one-to-one tuition that focuses on the mastery of the technical and musical challenges of the repertoire, engaging in solitary practice, and performing in public. College musicians need to be able to play a musical instrument well, be able to perform confidently with no errors, and meet a stipulated performance standard (Zakaria, 2010). In order to achieve such high performance standards, college musicians have to practise and rehearse continuously towards the goal of perfect fluency, excellence, and competence; this is intensified when they have to perform in front of panels, examiners, and judges, and especially for examinations and grading (Zakaria, Musib & Shariff, 2013). As a result, it may be natural for college musicians to have performance anxiety or stage fright before, during, and after each performance, such as in a masterclass or a performance showcase in front of an audience and panel of examiners (Zakaria, Musib & Shariff, 2013). MPA-coping strategies are often introduced in order to bridge the gap between solitary repertoire practice and preparing for public performance. This raises questions as to how college musicians self-manage MPA during solitary practice if the audience is one of MPA's contributing factors. It is important to note that isolation is not

necessarily commonplace in music colleges, as students are part of a community of other students and teachers while learning and studying, and there are many opportunities to learn and play together. Although some MPA-coping strategies may be designed for individuals to adopt on their own, such as self-talk, there are others that need to be adopted in the context of other people (i.e. contrived performance situations) as well as strategies that can be adopted either alone or in working with others, such as absorbing activities and muscle relaxation.

Literature about stress-management and anxiety interventions frequently mentions the importance of the role of consultants or therapists in assisting people to manage mental health issues. However, my research explores how college musicians self-manage MPA, focusing on self-management, where the participants may not have previous knowledge of MPA strategies or may not receive help from professionals (i.e. a therapist or psychologist). As the researcher, I did not act as a therapist or teach the participants the MPA-coping strategies in this study. If participants adopted MPA-coping strategies, they learned them from other sources. Therefore, two questions worthy of exploration are ‘With whom did they use the strategies?’ and ‘Who helped them or worked with them on coping with MPA?’

Based on the data, four categories emerged in relation to the context of use of the strategies: solitary, working with peers, teacher

assistance, and practice in solo-aided conditions, such as working with an accompanist (see Figure 6, below, and Appendix 4). These four categories will be discussed along with different MPA-coping strategies in relation to the pre-research situation and the different types of performance to provide an analysis of the data in relation to the context in which the strategies were used.

*Figure 6: Overview of who the strategies were used with*

Solitary	Peers	Teachers	Solo aided condition
<ul style="list-style-type: none"> <li>•Physical activities</li> <li>•Absorbing activities</li> <li>•CPS</li> </ul>	<ul style="list-style-type: none"> <li>•Physical activities</li> <li>•Absorbing activities</li> <li>•CPS</li> <li>•Practice plan</li> <li>•Beta-blockers</li> </ul>	<ul style="list-style-type: none"> <li>•Physical activities</li> <li>•Absorbing activities</li> <li>•MR</li> <li>•VR</li> <li>•Accepting mistakes</li> <li>•CPS</li> <li>•Breathing</li> <li>•Muscle relaxation</li> <li>•Dietry</li> <li>•Personal tips</li> </ul>	<ul style="list-style-type: none"> <li>•Accompanist support for adopting CPS</li> <li>•Media tools</li> </ul>

*Key:*

CPS – Contrived performance situation

MR – Mental rehearsal

VR – Visual rehearsal

Figure 6 shows that participants adopted various strategies, most often with teachers, followed by peers, solitary work, and then ‘others.’ In addition, the same strategies (e.g. physical activities and

contrived performance situations) were adopted either in solitary work or with teachers, peers, or accompanists. As the role of peers, teachers, and others (e.g. accompanists) could differ in assisting participants' MPA management, this chapter will explore how these roles assisted participants in managing MPA by using the strategies and the impact this had on self-management.

## **7.2 Solitary**

### **7.2.a. Pre-research situation**

'Physical exercise' and 'absorbing activities' were reported often in the pre-research situation. Many participants mentioned details of what activities they did and how they performed them. These fell into four categories: physical exercise alone, physical exercise with others, absorbing activities alone, and absorbing activities with others (see also Chapter 6, Tables 32 and 33, p. 249 and p. 253). Most participants took part in chronic exercise, that is, regular exercise participation. As mentioned in Chapter 6, 'jogging' was the most common solitary exercise mentioned, as these examples from Alice and Melody show.

I go jogging alone when the practice rooms are closed at night. It stops me thinking about performance stuff. (Alice)

I take exercise when I face musical technique challenges. My favourite exercise is jogging. I can take a 20 kilometre jog at night alone, listening

to pop music. (Melody)

Other solitary exercises to relax included taking a stroll, qigong, and swimming.

I do something to make me feel calm, such as sleeping, taking a stroll alone around campus, listening to pop music, and playing computer games. (Cathy)

I practise qigong to relax my body, as one of my teachers taught me. (Ivy)

I often go swimming and jogging alone. (Patty)

Taking qigong, swimming, or going for a jog may not have to be solitary. There are two factors that may influence their reasons for choosing to do physical exercise alone: 1) social physique anxiety 2) time management. Displaying bodies in an exercise setting may bring anxious feelings for people who experience social anxiety about their appearance, which is termed 'social physique anxiety' (Taylor & Wasley, 2004). Although there is insufficient data to understand participants' thoughts when they decide to take solitary exercise, suffering social physique anxiety severe enough to cause unwillingness to take physical exercise with other people is not out of the question. It can be linked to previous discussions that anxiety may cause emotional eating or binge eating, leading to an issue of being overweight (see Chapter 6.3.e, p. 258). Individuals who fail to meet

society's standards of a thin body may experience body image dissatisfaction and social physique anxiety (Ostrovsky *et al.*, 2013). It seems that there is a strong relationship/cycle between anxiety and diet that future research needs to explore further.

Secondly, some participants reported they went for a jog after practising at night (i.e. Alice and Melody). It may be assumed that taking exercise alone made it easier to manage time schedules. Solitary exercise can occur at any time, whenever the participant is free. It may depend on their personal practice routine. For example, some students prefer to practise early in the morning, others late at night. As a result, each student's time schedule of practice and exercise may be completely different.

Other solitary leisure activities included listening to pop songs, watching TV, online shopping, taking a bath, reading a book, and seeing a movie. These also may be attributed to students' time management as an influence on the participants' choice of solitary activities. Seeing a movie is not necessarily done alone, but does have a certain time constraint attached to it. Moreover, participants emphasised the terms 'by myself' and 'alone' when talking about seeing a movie in the interview.

I go to see a movie by myself when I feel very stressed. (Jill)

I frequently go to see a movie alone or read books, which can make me stop thinking about exam stuff or performance stuff and feel

temporarily relief. (Ella)

There is still a lack of detail about the reasons why participants decided to carry out the activities alone, as the interviews did not explore this issue, but the fact that they emphasised that they did it alone is worth noting.

Physical exercise as a distraction, as discussed in Chapter 6, has a positive effect on managing anxiety (Taylor *et al.*, 2004). This was observed when participants reported adopting absorbing activities as well, and time management also seems to be a factor that influences the participants' choice of undertaking activities alone. As a result, considering both the purpose of distraction when taking physical and absorbing activities, and the influencing factor of time management, it can be observed that some participants combined solitary exercise and absorbing activities.

I jog and listen to pop music at the same time. It makes me feel calm and comfortable. (Elena)

I go shopping alone and jogging at night by myself as a way to relax, because through these activities I can stop thinking about exam stuff and feel relaxed. (Gary)

Bea had a different approach, in that she undertook physical and absorbing activities alone, but she chatted with friends and shared her anxious feelings with them.

Apart from reading a book and watching a movie at home, I go jogging, especially when I have no idea about preparing for a recital and feel really annoyed by it. Also, I like to reduce my nerves through chatting with friends. I often share my anxious feelings with classmates, who are also going to have their performances soon. (Bea)

Although physical and absorbing activities can be solitary, such as Bea's, the role of peers still seemed important in managing MPA through 'chatting' with near-peers (e.g. those performing on the same day or the same instrument), even for participants who undertook many solitary physical and absorbing activities. This could be because the near-peers could share suggestions and experiences of coping with MPA. Similar observations can be found in Mistry's research (2016). He investigated near-peer talk to allay student anxieties and misconceptions over assessments among ninety-nine year one medical students at undergraduate level. He found that near-peer's anecdotal contributions gave a perspective on how one student successfully navigated a challenging year and helped with managing anxiety on summative assessment (Mistry, 2016).

In the current study, the peers were acting as a mirror to reflect the students' experiences in order to provide peer support. Another perspective on the role of peers in assisting learning and managing MPA can be seen when participants adopted the strategy of a contrived performance situation. Greg mentioned that he contrived the performance situation on his own but preferred to work with

peers if possible.

A week before the performance, I go to the concert venue around three times and rehearse there alone. I run through all the pieces. If some of my friends are nearby, I ask them to come and give me feedback. I think that it is very helpful to have other peoples' feedback. (Greg)

This shows that the role of peers is important in assisting learning within a one-to-one tuition context. This finding supports Hanken's argument (2016) that peer learning is invaluable in music higher education because peers can provide useful feedback for each other during instrumental tuition or practice, such as listeners stating what they find meaningful in the performance when a performer asks for feedback or opinions on the performance, providing peer learning (see also Chapter 4.1, p. 156).

### **7.2.b. Concert preparation**

Compared with the pre-research situation, where many participants reported that they took solitary exercise, only one participant mentioned taking solitary exercise during the concert-preparation period.

I went to exercise as usual. When I exercised, I did not think about any stuff related to the performance. (Melody)

Although Melody did not mention the exercise in detail or with whom

she did the exercise, it is likely that she went for a jog alone, because she had already mentioned jogging alone in the pre-research situation. It is interesting to find that only one participant persisted in taking exercise when preparing for concert performance. Some participants adopted physical exercise but did not persist with it. For example, Elena and Alice mentioned that they went for a jog in the pre-research situation. But they commented that they only read books and took a stroll during concert preparation.

I read books when I feel nervous. It can help me forget about performance stuff. (Elena)

I remember every day after practice; I went to take a stroll in the college's playground. It made me feel calm and clear-headed. (Alice)

The change of activity used was not only observed in physical exercise, but also in absorbing activities. Twenty-six participants reported they participated in solitary, absorbing activities as a way to relax or distract themselves from being anxious in the pre-research situation. However, only nine participants mentioned undertaking solitary absorbing activities during concert preparation. This is perhaps because participants adopted other strategies rather than physical and absorbing activities (see also Appendix 5). The other possibility is that participants tended to focus more on musical preparation by using other strategies, such as contrived performance situations with

others, rather than distracting their anxious focus during concert preparation.

### **7.2.c. Exam preparation**

In Chapter 6, I found that participants adopted the contrived performance situation in exam preparation earlier than in concert preparation because they felt anxious about the presence of judges and the difficulty of the tasks they had to complete in the exam. In this chapter, I have found that even if they are feeling anxious about the presence of judges, they may still adopt this solitary strategy, as some participants commented they contrived a performance situation on their own.

A week before the exam, I tried to contrive the exam situation in the music room, but it still felt different. I didn't feel nervous during the contrived situation. This was because there were no teachers or panels in the music room. (Cathy)

I felt very nervous. But it was my third time having a final exam in this school. I knew where my exam venue would be. Therefore, I always practised in the potential exam rooms. It helped me become familiar with the effect of the sound, the performance situation, and so on. (Iris)

The reasons for a change of strategy can be attributed to time management, task, and audience. Although time management could be one of the factors that influenced the participants' choice of performing activities alone, and a contrived performance situation

might normally involve others, it could be that participants liked to contrive their performance situation easily at a time when they were available, as the audience was not necessarily the element that the student wished to contrive.

For example, Iris mentioned she was focusing on the 'task' in her contrived performance situation, such as the effect of the sound. This shows that the main purpose of adopting a contrived performance situation could be to practice a 'task' and become more familiar with it, and 'task difficulty' may therefore determine whether participants adopted contrived performance situations in the early stage of preparation period. As a result, they may have taken this 'practice' as solo practice akin to their daily solo practice after one-to-one tuition, rather than contriving an audience situation with others.

Ford (2013) stated that although music students are expected to perform in public, they do most of their training by focusing on solitary work, such as one-to-one instrumental lessons and solo practice. It might be seen as the traditional way of developing music students' ability to perform. On the other hand, Cathy commented that the 'presence of judges' was a key point to contrive in a performance situation. She played alone at first but did not find it helpful without an audience present. In this case, she needed the presence of others in order to successfully contrive the situation that would be of most help

to her.

This tells us that if participants consider the factor of audience presence important, they will carry it out with other peoples' support rather than performing alone. If they do not, some may undertake this activity on their own. There are exceptions: two participants reported that they contrived a performance situation by *imagining* the audience. This happened most frequently when participants were preparing for a recital.

#### **7.2.d. Recital preparation (Year 4)**

The examples below are of participants' comments about contriving a performance situation alone through the imagination.

I did physical rehearsal in the recital venue three times. I was trying to run through all the repertoire and all the performance in detail, as in the actual situation. For example, I walked on stage, bowed and smiled to the audience, and started to play, and walked down the stage. I also practised making eye contact and smiling to the audience during the performance as I was imagining there were many people in the auditorium. In addition, I rehearsed expressing my thanks to my tutor, family, and the audience after the performance, as I am not good at making a speech and interacting with the audience while I'm onstage. This was my first time in having a recital and it was my final, graduate recital as well. (Ella)

I arranged a contrived performance situation six times at the recital venue, but only did it once with the teacher and accompanist there together. The other five times, I was alone. I imagined there were many

people in the auditorium and I ran through the programme without the accompanist. It was because my teacher's schedule did not always match my accompanist's schedule. Also, I did not want to spend too much money on rehearsing with the accompanist. And my classmates were too busy preparing their own recitals, as I was the first one to have a graduate recital. (Gigi)

Gigi commented on the difficulty of managing other people's schedules and that finding an agreed time between her teacher and her accompanist were the key elements that made her decide to contrive the performance situation alone through imagination. As in the pre-research situation, some participants reported that they adopted solitary exercises because of time management issues (see Section 7.2.a, p. 273). Only Bea reported that chatting with friends was a way to relax during recital preparation as well as being used as a distraction strategy and to find peer support.

I went for a jog at night alone after practice. I always keep this hobby. It can make me feel relaxed. I sometimes went out with friends or chatted with them by phone if I did not go for a jog. Chatting with friends can make me feel relaxed and as if I am having fun. (Bea)

However, many participants reported chatting with peers was helpful in other types of performance preparation (i.e. concert and exam), whether they either took solitary exercises or absorbing activities. Therefore, the next section will discuss the role of peers in assisting MPA management, even if participants adopt some solo strategies.

### **7.3 Working with peers**

The literature on peer learning in music performance suggests that peer learning is a way of describing the process of becoming acculturated into a specific discipline (Reid & Duke, 2015). Reid and Duke (2015) have found that peer learning is related to managing MPA. In this research, the definition of 'peer' was a student in the same learning situation (i.e. same year level of study) or a student majoring on the same instrument. However, owing to a lack of details in the interviews, those considered to be peers may have been from other backgrounds.

Two categories of 'working with peers' emerged in this research. One situation was that participants worked together, sharing life experiences and empathy. Often, this was mentioned in relation to adopting physical and absorbing activities. The other situation was that peers learnt from each other and supported each other through practice sessions, which happened most often when adopting contrived performance situations. In the pre-research situation, some participants reported that they often took physical exercise with peers, for example playing basketball, badminton, table tennis, or jogging. In Chapter 6, it was stated that some participants took physical exercise because peers invited them to do (see Chapter 6.3.d, p. 249). In this chapter, I explore why participants invited peers to take physical activities together.

Recently, I started jogging with classmates as I needed company to force myself to it regularly. I feel very relaxed when I take exercise. I forget all the stressful stuff at that moment! (Dora)

Dora mentioned that jogging with peers could help her exercise regularly. This comment differs from those of participants who took solitary exercise (see Section 7.2, p. 273). It can be assumed that taking exercise with peers helped participants persist with exercise, as I have found that solitary exercise did not result in persistent exercise (see Section 7.2.b, p. 278). However, both solitary exercise and exercise with peers had their own benefits, depending on individual preferences and needs, as physical preparation before performing is a very individual choice (Roland, 1994).

Apart from physical exercise, absorbing activities with peers were also mentioned frequently, such as chatting, shopping, having a meal, seeing a movie, or playing video games. Chatting with peers was very popular and frequently mentioned by participants. As I found in Chapter 6, there were two purposes for chatting: as cognitive distraction technique and as a way of sharing nervous feelings with others (see Chapter 6.3.d, p. 249). As has been seen, chatting with peers can be combined with other absorbing activities, such as shopping and having a nice meal. Participants tended to deflect their anxious focus through such activities instead of sharing anxious feelings, lived experiences, or empathy with peers. The data below

shows how Aya, Coco, Ketty, Dora, and Gunda adopted the combined strategies.

When I feel nervous about an upcoming performance, I always invite my classmates, who also feel nervous, to go shopping together. It makes us feel temporary relief from pressure. (Aya)

When I feel fatigue about practising instruments, I hang out with classmates. Most of time, we go shopping and having a nice meal together. (Coco)

I sometimes play video games with my classmates or listen to pop songs to relax and turn my attention to other stuff. (Ketty)

I go to see a movie with classmates when I feel pressure. It can make me forget about the exam temporarily. (Dora)

When I feel under stress, I go shopping with classmates. But I know it is not helpful as the nervous feelings come back after I have finished shopping. (Gunda)

Gunda commented that absorbing activities did not help her to manage her MPA. Perhaps the effect of adopting absorbing activities by focusing on deflecting anxious thoughts was short-lived for her. The importance of adopting strategies of working with peers was also found when participants reported adopting contrived performance situations in the pre-research situation.

Sometimes my friends came into my practice room while I was playing. As a result, they gave me feedback as if they were the audience or the panel. Their feedback helped me a lot. (Olga)

We had a group rehearsal a few days before the school's formal concert. Our group members were all going to perform in the concert. So when one of us got a booking at the performance venue, we would all be there to rehearse together and give each other feedback, especially on sound effects. (Elena)

A few days before the performance, I booked the venue where I would play the concert. Then, I found classmates to be my audience members. Their mission was to help me double check that I remembered all of my notes on the score correctly. (Jessica)

I got nervous easily when thinking about my exam. So I found classmates to contrive the exam situation with me, especially a few days before the examination. (Heidi)

Greg mentioned he created a solitary contrived performance situation in the pre-research situation but preferred to work with peers if possible (see Section 7.2.a, p. 273). As a result, when preparing for a concert performance, he changed from a solitary strategy to a peer strategy.

I asked my classmates to come to my rehearsal and to pretend to be audience members. I ran through the whole programme. It really felt like being in the actual performance. And my classmates were all attending my actual performance. So it was very helpful to contrive a performance situation by inviting friends before the performance. (Greg)

Owing to the school's formal concerts having different forms of performance, including chamber performances (i.e. string quintets), participants needed to set a practice plan with peers and rehearse

together.

We had regular practice times, once a week. We created a practice plan together. For example, we practised one movement the first two weeks and then moved to the next movement. Then, we ran through the complete repertoire including adjusting our positions onstage through contriving the situation with other classmates. Our classmates gave us feedback about sound effect and musical elements, which helped us a lot. We needed a plan because we were a string quintet. It was very hard to practise alone and not easy to get all the partners together once a week. So we definitely needed to have a practice plan. It is not same when you create a plan for your solo concert or exam. (Findy)

This example provides further insight to the findings in Chapter 6: that preparing for a chamber music performance may trigger numerous contrived performance situations, as regularly and as early as possible.

Eileen provides another example. She had a duet performance. She and her partner had a regular practice time and a contrived performance situation. She mentioned that the contrived performance situation was no different to than the actual event.

My performance was a duet. I went to the performance venue and imitated the real performance situation with my partner once a week. We had a regular practice time once a week as well. So I found nothing different between our dress rehearsal and the real performance.  
(Eileen)

Heidi reported that creating a small audience with classmates helped, and through role-playing she experienced the feeling of an actual

performance in order to prepare for the performance and understand how to self-manage MPA in the real performance situation.

I invited some classmates to help me create a performance situation. It made me feel very nervous and I felt like I was in a real concert. (Heidi)

Betty reported that, although she contrived a performance situation during the concert preparation period with peers by role-playing, she still felt there was a difference between the contrived situation and the real concert. She pointed out that performing in front of strangers was different to performing in front of friends.

I did some rehearsals together with friends. They pretended to be the audience when I was on stage. Then, we exchanged roles. But for me, this method was not very useful, as I felt there was a difference between performing in front of friends and performing in front of strangers. (Betty)

The same was reported in the exam preparation period. One participant found that performing in front of judges and peers was different.

I had an informal rehearsal and asked my cohorts to be the audience. But it was still very different from the actual performance situation as cohorts are not judges. I am afraid of judges. (Lisa)

As the purpose of contriving a performance situation is to stimulate the same feelings that occur when participants perform in the real

event, awareness of selecting the type of audience when contriving a performance situation is very important. But it seems that Betty and Linda did not experience the feeling evoked by a real performance when they contrived the situation and therefore there might have been a better contrived audience to invite, such as senior peers. Gina adopted a contrived performance situation with peers both in concert preparation and exam preparation. In concert preparation, she sought peers' feedback, which supports the argument that working together with peers was for purposes of peer learning, i.e. learning from each other. In the exam preparation period, Gina changed from receiving peer feedback to having them role-play, imitating the 'judges' presence':

If I met my classmates, I asked them to listen to my rehearsal and give me some feedback. I also did the same thing for them. (Concert: Gina)

I gathered all the first year students majoring in piano to create the exam situation. For example, one person performed on stage, others pretended to be judges. I think it was very helpful. (Exam: Gina)

The role of peers in a contrived performance situation has two functions: giving feedback and pretending to be audience members. Whether for learning or support, peers seem crucial in preparing for performance and very helpful for most of the participants when adopting strategies such as persistent physical exercise and contrived performance situations.

In addition, the role of peers may also influence the strategies selected for some participants. I found that one participant took beta-blockers when she chatted with peers, sharing her anxious feelings. She mentioned that her best friend recommended this to her, as her friend had also experienced MPA and found beta-blockers helpful. This type of advice is cyclic, as her friend had learned about beta-blockers from other peers. She also commented that beta-blockers are very easy to get from a pharmacy.

I heard from my best friend that beta-blockers were helpful, as they made you feel calm. I don't have a sort of habit of taking medicine and I had not tried it before either. But one day before the recital, I could not sleep until 4 a.m. in the morning. So on the day of recital, I happened to hear about beta-blockers and took one pill, which my friend gave to me. She said it is easy to get from every pharmacy. Honestly, I didn't feel any difference, even though I took it on the day of my recital. (Gigi)

Both Roland (1994) and Fishbein *et al.* (1988) mentioned that some performers used beta-blockers for medical reasons or without a doctor's prescription. In some studies, half of the performers took natural remedies on a regular basis (Roland, 1994; Gabrielsson, 1999). Some researchers found that there was a significant effect and success in reducing MPA after using beta-blockers, such as better bow control for string players and an increase in the quality of performance for brass players when used at a single music performance, (James & Savage, 1984; Fishbein *et al.*, 1988; Taborsky, 2007).

However, it should be noted that other studies have found that beta-blockers can diminish the emotional intensity of a performance or have other negative effects (Gabrielsson, 1999). It may be appropriate to consult a doctor or other health professional before taking beta-blockers, as levels of anxiety differ from individual to individual. In light of this finding, the misinformation circulating within peer groups may have an impact on the way participants self-manage MPA. It is possible to turn to uncertain coping strategies, such as taking beta-blockers without doctor's prescription, which may not be helpful either in managing MPA or for students' long-term health.

The strategy of a contrived performance situation by only working with peers during the recital preparation period was not mentioned by year four students in this research. In a previous section of this chapter, some year four participants mentioned that they had adopted a contrived performance situation as a solitary activity by imagining the audience when preparing for a recital (see Section 7.2.d, p. 282). Some year four participants reported that they adopt a contrived performance situation by working with teachers.

Researchers have found that the outcomes of peer learning can reduce the workload of teaching staff, but graduate students may still rely on teacher support when facing important events (Reise, Samara & Lillejord, 2012). The important event in this research could be associated with year four students' graduate recitals. If year four

students believe the graduate recital is an important event in their undergraduate journey, it may explain why most of the year four students stated that they adopted a strategy of working with teachers.

#### **7.4 Teacher assistance**

As detailed in Chapter 4 on literature related to MPA self-management, Kenny (2007) states that the features of stress-management intervention have been focused on educational rather than psychotherapeutic issues. That is, those delivering the interventions act as educators, rather than establishing a therapeutic relationship. For example, deliverers help people set their own goals and assist them to undertake self-monitoring. When Kenny's statement is applied to this research context, it could be considered that teachers may be more appropriate to deliver coping strategies, as they are the educators in music colleges.

Some researchers suggested that pre-university music educators can help prepare their students for the stressors of university music study by helping them develop coping strategies, fostering awareness of anxiety and depression as common and treatable conditions, promoting the acceptability of seeking treatment when necessary, incorporating interventions into regular instrumental lessons, and cultivating a more supportive atmosphere during the instrumental lessons with less pressure and more

encouragement (Fehm & Schmidt, 2006; Wristen, 2013). Therefore, the role of teachers in supporting students' self-management of MPA is worth exploring in detail.

#### **7.4.a. Pre-research situation**

Participants reported that some teachers provided relaxation skills such breathing, muscle relaxation, qigong (in Ivy's example: see Chapter 6.3.d, p. 249) and personal tips regarding healthy lifestyle, performance routine, and performance strategy on stage, but that teachers did not explain clearly how to use these strategies.

My teacher told me you 'must take care of yourself before performance,' 'very important to keep a regular routine', 'don't believe and eat anything without medical evidence,' and 'remember just make your life as usual as the normal way.' (Faye)

My teacher taught me some coping strategies, such as deep breathing. She said I should give myself time alone before going on stage and not chat with other people at that time. If I still feel very nervous, I try to do deep breathing and look around the audience while I'm onstage. She said everyone will wait for you, so there is no need to start playing in a rush. (Bea)

My teacher taught me to take deep breaths and stay calm when I feel nervous. (Jojo)

Moreover, some teachers focused on the strategies used to practise repertoire. For example, teachers suggested that students listen to

music, read the score and imagine performing on the stage at the same time.

My teacher taught me to listen to the CD of the repertoire often. When listening to the CD, it is better to move the fingers and imagine the performance situation in my head. I followed her suggestion and was is very helpful when preparing for a performance. (Yvonne)

My teacher taught me to listen to the music, humming the melody and imagining myself performing on stage at the same time. She said if I could not hum the melody fluently, it meant I had not memorised the music well and needed to practise more. Otherwise, I might feel anxious because I was not well prepared. (Jojo)

It seems that teachers tried to provide the strategies of mental rehearsal or visual rehearsal. However, they may not have known the 'names' relating to the strategies, or they may have considered that the main purpose of adopting these strategies was to practise repertoire rather than manage MPA. As a result, Jojo mentioned that the strategies her teacher provided were for her to practise more and memorise repertoire.

According to O'Connor (2001), there are three elements that can help musicians achieve a successful performance: technical skill, physical fitness, and mental skills. Teachers in this research may not have thought that the strategies they mentioned were dealing with MPA or were strategies related to mental skills, or they might have believed that these kinds of 'technical skills' were crucial, in

enhancing musical performance ability. The data in this study is limited in explaining why the teachers provided these strategies for coping with MPA, as this research did not include interview these teachers.

#### **7.4.b. Concert preparation**

In the pre-research situation, teachers proactively provided strategies such as relaxation skills (i.e. qigong, breathing, and muscle relaxation), mental and visual rehearsal, and personal tips regarding a healthy lifestyle, performance routine, and performance strategy onstage. In the concert preparation period, it seems that for some teachers the main strategy provided was a 'contrived performance situation.' That may be included as part of the principal study session as a pedagogical strategy, as Graham and Debby reported.

My tutor gathered all students for a physical rehearsal together. One student performed on stage and the rest pretended to be judges. I feel it was very helpful. (Graham)

My teacher organised the rehearsal and gathered all of her students together. Not all of us ran through the whole piece of music, only half of it. But it was still quite helpful. (Debby)

Conversely, Kate reported that her teacher suggested that she find classmates to attend the rehearsals as role-playing judges or audiences in order to help her have a feeling of performing in the

actual event. Kate believed the strategy to be helpful, but she did not organise it. This may be because Kate's teacher did not actively provide the strategy and organise it as a part of the course. As a result, Kate may have lacked the motivation to adopt the strategy by herself. In other words, Kate's teacher only 'suggested' it, which seems less proactive than Graham and Debby's teachers. As a result, Kate did not follow her teacher's suggestion.

Similarly, Elena's teacher suggested she create a 'practice plan,' but she did not know how to do this or how it would work. As a result, she did not follow the teacher's suggestion.

My teacher suggested I make a practice plan to be well-prepared for the concert. But I did not. I don't know how to make a good plan and I don't have time to do it. I could not even memorise the music. How could I have time to think about a plan? (Elena)

Fehm and Schmidt (2006) argued that it is important to incorporate MPA interventions into regular instrumental lessons. Perhaps incorporating strategies into regular instrumental tuition would help students fully understand its effects, functions, and importance. Moreover, teachers should explain how these strategies work in detail rather than making suggestions or leaving students with questions.

However, making suggestions can also be considered from the perspective of MPA self-management. Students may be able to find coping MPA strategies through the development of expertise (i.e.

through their own learning process). The role of the teacher is to support this development or assist learning, for example by fostering awareness of MPA and providing a range of strategies that can be transferred in different performance situation. As a result, students may not to rely as much on their teachers in developing the ability to manage MPA themselves.

One participant mentioned the strategy of 'accepting mistakes.' Again, the teacher did not explain clearly how to use the strategy, leaving the student with questions.

My teacher told me to think about mistakes when they are happening on stage. How do you manage it? What will happen? (Rachel)

When mentioning 'mental rehearsal' or 'visual rehearsal,' teachers were trying to describe the details about how to use the strategy and how it worked. Yet, in this case, if students did imagine mistakes happening on stage and could not create a rescue plan in advance by themselves, it could result in fear of mistakes happening on stage, thereby increasing the level of MPA for students. Adopting the strategy of 'accepting mistakes' before a performance could help individuals to minimise their mistakes, practising the most difficult passage and preparing a personal rescue strategy (Buswell, 2006). But without clear explanation of the strategy to be used it might bring about negative effects, such as catastrophic thoughts. Even though

students might not necessarily make mistakes in the actual event, or might not be aware of the mistakes, the strategy introduces the idea of making mistakes. It would be more appropriate to have an open discussion regarding accepting mistakes with students than to leave the questions for them to answer when participants have not yet made any mistakes on stage.

Jolin's teacher did not mention how to manage mistakes that might happen in the actual event. Instead, the teacher discussed mistakes that happened in the rehearsal and set a rescue plan for the next rehearsal.

My teacher asked me to rehearse as much as I could. If I made a mistake during rehearsal, I had to set a rescue plan before the next rehearsal.  
(Jolin)

Using different ways to describe the way the mistakes occur might give students different perspectives. Although neither teacher gave a rescue plan or explained how to make a rescue plan in detail, Jolin's teacher seemed to be giving the students more motivation to practise rather than negative thoughts, especially in talking about 'unknown mistakes' in future performances.

#### **7.4.c. Exam preparation**

Teachers played a leading role in contrived performance situations during the concert preparation period. In the exam

preparation, two different learning conditions emerged from the data:

1) one-to-one tuition and 2) small group classes with principal study tutor support/ tutor supervision. The first situation involved contriving a performance situation during one-to-one tuition without creating a small audience. The second situation was where the teacher organised a small group class and taught them together, similar to a masterclass, but with the difference that all the students had the opportunity to rehearse the performance programme during the class. Alice's comment is an example of the first learning condition.

My teacher booked the exam venue for me. We had a one-to-one tuition at the exam venue with the accompanist. She taught me which position would have the best sound effect, where I should stand, where I should put my music stand, and ran through all the repertoire. Also, she told my accompanist that if I made any mistakes how to help me make up for them. Finally, she told me that the exam would be perfect, like we did in rehearsal that day. That really made me more confident. (Alice)

The teacher did not create a small audience, perhaps because the teacher did not realise the importance of creating a small audience for contriving the performance situation or believed that 'technical skill' was more important – in line with the discussion above related to the purpose of the contrived situation, the teacher may have deemed an audience unnecessary. As the participant said, 'The teacher taught the accompanist how to help me make up for mistakes if they happen during exam.' This finding could also support the previous discussion

that teachers in this research might not think the strategies they suggested were for dealing with MPA, or that they believed that technical skill was more important, which could enhance music performance ability.

Findy gave an example of the second learning condition. The use of a small group class was often reported in both exam preparation and concert preparation (see Section 7.4.b and 7.4.c, p. 296 and p. 299). Findy reported that it was very helpful, as she could learn how to deal with the situation in advance.

My teacher gathered all her students and had a group rehearsal together. The feeling was same as the exam. It helped me to understand the real exam situation and feel like I was really in the actual exam. I could learn how to deal with that situation in advance through this rehearsal. (Findy)

Barbara's teacher organised a small group class, as did Findy's teacher. However, Barbara commented that her anxious feelings were because of the senior students and peers who were majoring in the same instrument, as she was afraid to be the worst one during the contrived performance situation. Barbara reported that she received negative feedback from a peer, which gave her more motivation to practise.

My teacher gathered all her principal study students in a teaching room. She asked each of us to run through all the exam pieces on stage. When a student performed on stage, the others were judges. After each performance, she asked each of us to give feedback to the performer

immediately. She didn't give any feedback. She was just like an organiser. I was very terrified. There were many undergraduate seniors and postgraduates. I was afraid I was the worst one. By the way, I got negative feedback from a postgraduate. But that comment became a motivation. I made my mind up that I would perform better in the real exam. (Babara)

There is a contradiction in adopting a contrived performance situation by involving peers. It is important for teachers who contrive performance situations by organising a small group class to be aware that in this case, the role of peers could result in peer pressure, which is not the original purpose behind adopting the strategy. As a result, once again the choice of the type of audience in the contrived performance situation requires careful attention, this time for a different reason.

Eileen mentioned that 'teacher presence' was important for the contrived performance situation, as she needed professional feedback. Interestingly, the teacher did not play a leading role when she adopted this strategy.

When my teacher asked me to run through all the exam pieces with an accompanist, I did it at the exam venue. Although my teacher did not ask me to create an exam situation in the class, I thought I should do it for myself. It was not easy to do a rehearsal without my teacher present as I needed an expert in my rehearsals to give some professional feedback. (Eileen)

The importance of the contrived performance situation that was

student-led but involved working with teachers was mentioned more often in the recital preparation period.

#### **7.4.d. Recital preparation**

Although teacher presence in contrived performance situations was more often related to recital preparation, participants reported similar reasons to those who discussed this in relation to exam preparation – that teacher presence could give them professional feedback (see the example of Eileen, above).

I needed to find some teachers, especially my principal study teacher, to create a recital situation with me. It was very important for me to have experts present. (Ho)

I had three rehearsals in the recital venue with my teacher during principal study class. It was very formal, like a real recital. It was helpful and I felt like I was ready to perform. (Catherine)

I contrived the situation. I ran through all the repertoire with my accompanist. My tutor also gave lots of useful feedback. (Jojo)

I went to the performance venue three times with my tutor. He helped me to adjust my position onstage and the sound effect. One day before the recital, we went there and contrived the situation. (Della)

Some participants mentioned a contrived performance situation during one-to-one tuition with their tutors and accompanists together. This is different from other types of performance preparation (i.e.

exam), as participants did not emphasise the importance of involving the role of an accompanist during the exam preparation period. In addition, adopting a contrived performance situation at this stage for participants might not only have helped students manage their MPA but might also have enhanced their technical skills in relation to the repertoire, as other researchers have mentioned (i.e. Aufegger *et al.*, 2017).

Teacher-led contrived performance situations were mentioned less frequently in the recital preparation period compared with the pre-research, concerts, and exam periods. Instead, student-led contrived performance situations were often mentioned during graduate recital preparation. This finding could be explained from two perspectives: more developed self-management skills in the final year, or more developed metacognition.

In the literature, self-management is described in relation to the ways that professionals develop interventions by incorporating psychological theories to help people self-manage their issues more effectively when people find it difficult to do so on their own (Mulligan & Newman, 2007). In my research, teachers who helped participants contrive performance situations could be said to be helping students to self-manage their MPA by incorporating psychological theories through adopting contrived performance situations during the concert and exam preparation periods. Year four students may have

had a certain capacity to self-manage MPA, as they may have had well-developed metacognitive skills gained from their previous experiences of coping with MPA during the previous three years of undergraduate study. It is important to note that when adopting this strategy, year four students showed more concern for musical technique, for which they needed professional feedback from experts, such as their tutors and professional accompanists. In other words, the role of teachers when adopting this strategy had changed from active to passive, but it was still crucial. Nevertheless, this raises questions as to why they organised small group classes when supporting students preparing for concerts and exams, but not in the recital preparation period.

### **7.5 Practice in solo aided condition**

Some of the participants reported that they contrived performance situations with professional accompanists. The difference between a contrived performance situation with an accompanist and rehearsing a performance with an accompanist is the audience's presence, as performing in front of an audience can generate anxiety so one can rehearse the feelings experienced in an actual performance (Abel & Larkin, 1990). The role of an accompanist in assisting practice and contriving a performance situation can be seen in two ways; accompanist-led and student-led. In the

pre-research situation, Diana commented that:

A few days before the performance, my accompanist found some people to rehearse the performance situation with us. My performance in rehearsal was worse than in solo practice. So, he suggested I get more practice in public performances or find more people to listen when I did solo practice without him. (Diana)

Diana's accompanist seems to have been playing a leading role in assisting her to contrive the performance situation. As discussed in Chapter 2, MPA can occur in offstage playing, although it is usually less pronounced (Gabrielsson, 1999). Diana may have experienced MPA during rehearsal or practice with her accompanist. In other words, this student may have believed she played better in solitary practice than when she played with the accompanist owing to her anxiety. As a result, the accompanist may have thought that she was afraid of performing in front of people and so suggested she needed more practice in performing publicly. But the explanations from both the accompanist and the student could be inaccurate. There are other reasons for a result that is worse in a performance in rehearsal than in solitary practice, such as unfamiliarity with the accompaniment or poor teamwork between the soloist and accompanist. If students believe the performance ability of the accompanist is higher than their own ability, they may believe the accompanist is like their instrumental tutor. This can be found in the example below of a

student-led contrived performance situation with an accompanist. In the concert preparation period, Karen mentioned that:

My accompanist was just like my teacher. She was an experienced accompanist and a professional pianist. We had many rehearsals before performance. Her feedback was really helpful. My teacher admired her performance ability. It was very important for me to contrive performance situation in advance with my accompanist. (Karen)

However, the effectiveness of using the strategy of the contrived performance situation with an accompanist may depend on individual needs. David reported that he adopted it with an accompanist and in the performance venue, but he still did not perform well in the actual performance. Therefore, he felt it was unhelpful for managing his MPA.

A few days before performance, I went to the performance venue with a pianist. We ran through whole piece and dressed up. But even though I did this, I did not perform very well in actual concert. I was too nervous. (David)

Unlike David's example, Eileen reported that a contrived performance was helpful with an accompanist. However, she mentioned financial issues regarding rehearsing frequently with an accompanist. As a result, she used pre-recorded music to replace the role of an accompanist in her normal practice time. Researchers have mentioned the pros and cons of doing solitary practice with

recordings (i.e. YouTube, CD, and mp3).

The advantage is that the recordings provide the opportunity for practice with an accompaniment when an accompanist might otherwise be unavailable. Although the soloists can augment solitary practice by simulating work with a live accompanist or ensemble through the use of accompaniment recordings devoid of the solo voice, these recordings can be limiting. This may be something we can learn from popular music, using idea of karaoke. However, the intonation of the accompaniment is generally not easy to manipulate, forcing the soloist to conform to the intonation of the recording. Tempos are predetermined by the recorded accompanist and are unalterable by the soloist for practice purposes or to develop independence in temporal expressiveness (Sheldon, Reese & Grashel, 1999). Sheldon, Reese and Grashel (1999) have also stated that instrumental solos are often performed with the assistance of musical accompaniment. Interaction between accompanist and soloist is necessary in the performance experience, but limited accompaniment availability sometimes inhibits this interactivity.

Time spent working with accompanists may be restricted owing to financial constraints and the availability of competent accompanists. Apart from financial issues, one participant reported that she had only one formal rehearsal by contrived performance situation because it was difficult to arrange her accompanist's and her

teacher's schedules before her performance.

I had six contrived performance situations at the recital venue, but I only had one with my teacher and accompanist together. The other five times, I was alone. This was because my teacher's schedule did not always match my accompanist's schedule. Also, I did not want to spend too much money on rehearsal with an accompanist. Furthermore, my classmates were too busy to prepare for their own recitals as I was the first one to have a graduate recital. (Gigi)

Severe limitations in time available or the ability of the accompanist might result in poor musical performance or necessitate selection of music that requires no accompaniment (Sheldon, Reese & Grashel, 1998, cited in Sheldon, Reese & Grashel, 1999). However, the selection of music may not depend on performers themselves. For example, in the school exam, the guidelines stated that first year cello major students needed to perform a movement from a concerto. The second-year students needed to perform a piece with no accompaniment, and third-year students had to choose a sonata. As a result, students might have had no opportunities to select their exam pieces with or without an accompanist required.

Some schools do not have a system to provide accompanists free of charge, including the school in this research. As a result, some students may seek their peers' help, such as asking classmates majoring in piano to be their accompanists for free. The purpose of a contrived performance situation is to make the rehearsal like the

actual event. However, the limitations of accompanists may be a serious issue, which makes the strategy more difficult to implement with success. According to Jojo's comments, the role of teacher and the role of accompanist were equally crucial for preparing a recital.

I contrived the performance situation three times in the performance venue. Every rehearsal for me was formal and like in the actual performance. My accompanist and tutor were in my rehearsal. They gave me very nice and professional feedback. (Jojo)

This may be because suggestions from the teacher and accompanist were from different perspectives. In addition, the interaction between accompanist and soloist is necessary and some pieces may need an accompanist. Moreover, teachers can give a more comprehensive view of a complete rehearsal than if the rehearsal is solitary. Furthermore, the frequency of rehearsals between soloist and accompanist has also been shown to affect adjudicator ratings in solo and ensemble performances, with those meeting more frequently with accompanists generally receiving higher mean adjudication scores compared to the ratings of those who met less frequently (Sheldon, Reese & Grashel, 1999; Hamann & Banister, 1991).

With the development of technology, contrived performance situations can be recreated with technological support, such as the performance simulator at the Royal College of Music (see also Chapter 2.2, p. 64). Other researchers have found that intelligent digital

accompaniment systems have raised the sophistication level of accompaniment simulation. Sheldon, Reese and Grashel (1999) examined differences in performance quality ratings between instrumentalists who prepared solo music selections in three different conditions (with no accompaniment, with live accompaniment, and with intelligent digital accompaniment) and gave subsequent performances in two different conditions (without accompaniment and within the prescribed accompaniment mode) among forty-five undergraduate instrumental music education majors. They used the Vivace intelligent digital accompaniment system, which could be run without the solo part, with the solo playing alone, or both solo and accompaniment. The system can also repeat or practise specific segments. The system can follow the tempo the soloist or student sets. They found that there was both negative and positive feedback.

Negative comments from students included difficulties in getting the microphone to respond, frustration because the accompaniment would not 'wait' even if it had not been programmed to wait and did, and difficulties in knowing whether the accompaniment was going to begin when the instrumentalist began.

Playing with the digital accompaniment was not fun until the solo had been learned. Motivation to practise was the major positive feedback from students as the players could be inspired to spend more time on the task. The researchers stated that digital

accompaniment might not be useful for everyone. The precise way of using the tool needed to be carefully considered, as individual performance capabilities are different and MPA-contributing factors are varied (Williamon, Aufegger & Eiholzer, 2014). Music teachers could assist in determining the methods that provided the best practice environment for the student soloist (Sheldon, Reese & Grashel, 1999).

## **7.6 Summary**

This chapter discussed ‘with whom did students use the strategies?’ through four categories. It found that some participants adopted solitary physical exercises (i.e. jogging, qigong, and swimming) and absorbing activities (i.e. listening pop songs, watching TV, online shopping, taking a bath, reading a book, and seeing a movie) owing to time management. For example, solitary exercise is more flexible than working out with other people. Yet, it also found that taking exercise with peers could help participants persist with the activity.

Task and audience may influence participants’ choice of with whom they performed these activities. For instance, if participants considered the factor of audience presence important, they may have adopted contrived performance situations by working with other people. If not, they may have undertaken this activity alone. Although

there were a few participants who reported that they adopted contrived performance situations with an imagined audience when preparing for a recital, rather than in concert and exam preparation, they did not mention audience presence as one of their MPA-contributing factors. In other words, the difference between contrived performance situation with real audiences and imagined audiences was that in the latter 'audience presence' was considered as only one aspect of the performance elements, not a contributing factor for MPA. Apart from the fact that working with peers could help students persist with exercises, sharing life experiences and empathy (i.e. chatting) as peer support, as well as learning from each other in practice session such as peer learning, might help participants self-manage their MPA.

It should be noted that contrived performance situations with peers could have positive effects, such as receiving useful feedback and support. But the role of peers could also be negative influence, such as peer pressure. In addition, the role of peers could influence the selection of unsuitable or potentially damaging strategies for some participants; one participant took beta-blockers without a doctor's prescriptions following a peer's suggestion. In addition, the types of performance could influence participants' decisions regarding with whom they should use the strategies, as researchers have found that graduate students still rely on teacher support when facing an

important event (Reise, Samara & Lillejord, 2012).

The teacher's role was crucial in assisting students with managing MPA. Some teachers actively provided relaxation skills (i.e. qigong), personal tips regarding healthy lifestyle, performance routine, mental rehearsal, visual rehearsal, and performance strategy (i.e. accepting mistakes). Yet the current research found that some strategies that teachers provided were not clearly explained. This could bring about negative effects if students misunderstand how to implement the strategies. In terms of the strategy of contrived performance situations, some teachers adopted it during one-to-one tuition without creating a small audience or organising a small group class. The former was frequently mentioned during the recital preparation period and was student-led; the latter often appeared in both exam preparation and concert preparation periods and was teacher-led. Nevertheless, seeking professional feedback from teachers and the importance of teacher presence at contrived performance situations were common elements adopted for this strategy of working together with teachers.

In solo-aided situations, the role of the accompanist in assisting practice and contriving performance situations can be discussed into two ways, accompanist-led and student-led. In accompanist-led situations, if students believed the performance ability of their accompanist was higher than their own abilities, they might have

believed the accompanist was like their instrumental tutor and desired their professional feedback. However, financial issues regarding the cost of rehearsing with an accompanist was crucial for some of the participants. As a result, some of them used media tools (i.e. YouTube) to replace the role of an accompanist in normal practice.

Although it may seem unrelated to coping with MPA, the purpose of the contrived performance situation is to make the rehearsal like the actual event. The limitations of an accompanist could be a serious issue, which makes the strategy of a contrived performance situation more difficult. Ford (2013) argued that literature on acting emphasises inter-ensemble dynamics through group teaching and the recognition that the audience is an integral part of performance.

While references have been made to the potential for music performance to involve an interaction between performer and audience, it is not clear from the literature how this could be realised during preparation, other than by the student visualising the audience while practising (Ford, 2013). This could be seen in my research, in that some teachers contrived performance situations by organising small group lessons regularly. The role-playing among peers when adopting this strategy could be seen as a way of coping with MPA. It may also be seen as learning how to interact and communicate with

audiences through daily practice.

Ford also stated that preparation for performance was described as teacher-led and, as a consequence, there was a high degree of consistency in the acting students' accounts of how they prepared for performance both in the long term and on the day itself. Thus, the students' preparation can be said to have been institutionalised through a pedagogical practice that emphasised performance as a goal of rehearsal (Ford, 2013). Teacher-led performance preparation either for coping with MPA or enhancing technical skills were both apparent in my research. However, this may depend on individual teachers' intentions and their own pedagogy, which was not led by the institution.

My data shows that teacher-led performance preparation had a positive effect, as students reported that it was helpful both in learning to play an instrument and in coping with MPA. The special learning condition in the conservatoire featured in my research was that instrumental tutors could teach their students in their own way. As a result, what the data points to is an interaction between coping with MPA and musical learning. Teachers were found to be suggesting strategies for the purposes of musical learning, but these strategies were also used (or not used) by students to self-manage MPA. The increased reports of student-led strategies in the fourth year appeared to be the result of a combination of developed

metacognition in learning and developed skill in self-managing MPA.

Year four students appeared more likely to follow suggestions independently, whereas students in other years may have believed the strategies to be helpful but may also have relied on their teacher to organise them. In other words, the development of independence in learning and the development of self-management of MPA are potentially symbiotic. The pivot between the two is metacognition.

## **Chapter 8. Understanding the strategies: metacognition in musical learning and managing MPA**

### **8.1 Introduction**

As argued in Chapter 7, 'student-led' strategies in the management of MPA were commonly reported by year four students preparing for the graduate recital. It is possible that they had a certain capacity for self-managed MPA developed through reflecting on previous experiences of coping with MPA. This argument can be linked to the concept of 'learning to learn,' which is also known as metacognitive activity. The metacognitive strategies in musical learning are concerned with the planning, monitoring, and evaluation of learning and performance (Hallam, 2001a). Managing anxiety, practice, and mobilising arousal specifically for performance is crucial for public performance preparation and related to the development of appropriate metacognitive skills (Hallam, Cross & Thaut, 2016).

However, there are considerable differences in the development of metacognitive strategies between individuals and the level of study, such as novice versus expert (Hallam 2001a; 2001b). As discussed in Chapter 2, Section 2.1, conceptual change in instrumental learning can be divided into three phases: 1) first years of instrumental education; 2) intermediate levels of instrumental education; and 3) advanced-level students. Hallam and Bautista (2012) have also discussed the learning concept, learning strategy, and

conception of evaluation in each phase (see Table 6, p.44).

In the first phase, learners are usually novices between eight- and fourteen-years-old. The learning concept is concerned with playing notes correctly, and the main learning strategy is repetitive practice. The concept of evaluation is external judgements made by teachers, including numerical assessment of students' achievements. In the intermediate level, up to the age of twenty, the learning concept changes to a more sophisticated interpretative position. Students consider the dimensions in sequence, such as technical skills, syntactical features, and performance dimensions. The learning strategies also change from repetitive practice to being more organised and systematic (Hallam & Buatista, 2012). For example, students attempt to familiarise themselves with the repertoire first through reading music and reproduction. Then they start to memorise the repertoire, enhancing expression and their communication with the audience. Their concept of evaluation is educational practice aimed at allocating marks and correcting mistakes.

In the advanced-level (over twenty-one years of age), the learning concept is based on constructivism, whereby music should be interpreted artistically and be full of personal meaning. The conceptual change towards constructivism requires the capacity to re-interpret implicit assumptions into explicit knowledge (Bautista *et al.*, 2012). Bautista *et al.* (2012) adapted Pérez Echeverría *et al.*'s

research (2001) and explained that the development of constructive theory in a concept of learning is a capacity to integrate multiple perspectives. For example, instrumental learning strategies focus on reflection and self-regulation, and are used strategically to operationalise an artistic and expressive image of a musical score. Learners' concepts of evaluation concern understanding how different interpretations of the same repertoire can be equally valid and have a formative function (Hallam & Bautista, 2012). However, it should be noted that all three phases can be identified at all developmental or educational levels, while conceptual change may not occur in all individuals (Bautista *et al.*, 2012). Moreover, it is difficult to identify the influencing factors of the conceptual change process, as it can be age, level of musical expertise, educational level, knowledge of theories of learning, or other factors that future research needs to explore (Hallam & Bautista, 2012). As a result, there may be some problems with categorising students, as it is possible to find participants in my study displaying characteristics of those describe as being at intermediate and advanced levels in all year levels.

Hallam and Bautista (2012) suggested that, once a certain level of expertise has been attained (around Grade Eight standard or entry to higher education), it is possible to identify similarities to professionals. They state that professionals have well-developed metacognitive skills, which include self-awareness of personal

abilities, extensive knowledge regarding the nature of different tasks and what would be required to complete them satisfactorily, and strategies which could be adopted in response to perceived needs (Hallam, 2006). However, there are considerable differences among musicians and novices at the same level of competence (Hallam & Bautista, 2012). McPherson and Renwick (2001) found that over a period of three years, as students became more self-regulating in their practice, a higher percentage of practice time was focused on improving performance, with less time spent responding to distractions, such as talking to others, daydreaming, or expressing frustration. The participants in this research were studying music performance in higher education which, based on Hallam and Bautista's (2012) argument, suggests that they could all have been at the advanced level and be expected to have well-developed metacognitive skills. While they may be at an advanced level of instrumental learning, their metacognitive skills in managing MPA might not be the same level, or could still be developing.

Chapter 7 demonstrated that student-led strategies for managing MPA were often mentioned among year four students, and it could be assumed that those students had a certain capacity to manage causes of anxiety or possess well-developed metacognitive skills for managing MPA. Indeed, this was not often observed in other year levels. In addition, MPA strategies might have been incorporated

into participants' instrumental learning and practice, and some factors contributing to MPA could be associated with learning concepts and the concept of evaluation.

In this chapter, I will examine the interviews with respect to planning and monitoring, and the concept of evaluation in performance to show what this tells us about how far participants had developed metacognitive skills in instrumental learning and managing MPA. The data will be presented in chronological order (i.e. pre-research situation, concert preparation, and exam preparation), and I have focused on the stories of three students from each undergraduate year group (year one to year four). The selection of examples has been based on those participants who provided the greatest level of detail during the interviews in response to the question, 'What did you do when you were preparing for a performance?' This question also generated feedback about the performance diary (PD), and its role in supporting the development of metacognition is examined.

## 8.2 Year one students

Table 35, below, is Alex's story. He was a year one student at undergraduate level, majoring in French horn.

*Table 35: Alex's story*

Pre-research	<p>I went to the pub and had some alcoholic drinks with my friends. The main purpose of going to a bar was to chat with friends to relax myself from pressure and anxiety, not to have alcohol. Besides, I would practise music more than before. I often practised music around one-and-a-half hours per day. When the time of the examination was approaching, I practised music for around two hours every day. Actually, my lifestyle did not change before the performance. I kept the same routine as usual. After the performance, I did not listen to the feedback from judges, as I was afraid of it without knowing the reasons. I discussed my performance only with my tutor. I didn't worry about any mistakes I made during the exam. I believed through discussion with my tutor, I would understand where I could improve and perform better in my future performances.</p>
Concert	<p>I didn't feel satisfied with my duet performance at the concert. I did not have good teamwork with my partner. Before the performance, I tried to keep my daily routine regular and I did not rehearse many times. The reason why I chose duet performance is that I had not prepared well for my final exams, which were all solo pieces. If I had been ready to perform one of my final exam pieces, I wouldn't have chosen duet performance this time.</p> <p>Feedback from PD: I didn't feel nervous when preparing for the duet performance, so I didn't need to cope with anxiety and read the PD, as it was a duet not a solo performance. Also,</p>

	the duet piece for this concert was much easier than the solo pieces for the final exam. The final exam, which was to be held soon, was more important than this concert.
Exam	<p>I tried breathing to make myself feel calm. Also, I tried to contrive the exam situation in the music room, but it still felt different. This was because there were no teachers or panellists in the music room. Backstage, I told myself 'do not watch the panellists.' But the sound effect in the exam venue was very dry and I was standing very close to the auditorium, which made me very worried and nervous. Actually, performance was better than the previous time (the first term exam). But I didn't feel satisfied. I made a small mistake in the exam; that is, I couldn't find the pitch of the first note when I played the orchestral excerpt. Then, I felt panicked and anxious. The orchestral excerpt was the last part of my exam.</p>
	<p>Feedback from PD: I read the PD two weeks prior to the exam.</p>

In pre-research, Alex mentioned three dimensions most: distraction from being anxious, increasing practice hours, and keeping his regular daily routine. He reported 'chatting with friends' as a relaxing strategy. It can be argued that Alex was developing the metacognitive skill in relation to knowing which strategy should be adopted in response to his perceived needs. In addition, 'I kept the same routine as usual' may be seen as a way of monitoring practice and life, suggesting that he knew what routine worked for him, a key element in the development of metacognitive skills.

During concert preparation period, apart from 'keep my daily

routine regularly,' he did not mention any other strategies, compared to the strategies he reported using in the pre-research situation. He explained that it was because his performance was 'a duet, not a solo performance.' Moreover, he mentioned the level of task difficulty at the concert (i.e. duet performance repertoire) was less than the level of a solo piece in an exam (i.e. exam repertoire). As a result, he did not feel anxious and so didn't need to manage his MPA and practise much.

However, he did not feel satisfied with his duet performance, which he attributed to poor teamwork. Although he did not report what happened regarding the teamwork and how they prepared for the duet performance, it could be assumed that his metacognition was more developed in relation to solo performance than chamber music performance. Although the poor teamwork may have related to musical techniques, the other possibility could be the 'MPA' issue. It is possible that Alex's partner was experiencing MPA, which they meant they needed to contrive their performance together as regularly and as early as possible. However, Alex reported that he didn't feel nervous and didn't rehearse many times. This argument could also be associated with the previous argument that preparing for chamber music performance could require numerous contrived performance situations, as regularly and as early as possible (see Chapter 6.3.a, p. 238). We should be aware that some participants may also have more developed metacognitive skills in relation to solo performance than

chamber music or other types of performance, such as playing in an orchestra. What is interesting is that they may well have more experience of solo performance than chamber or orchestral performance and so, in contrast to Hallam and Bautista's (2012) suggestion, may occupy different levels of novice, intermediate, or advanced concepts of their learning and evaluation at the same time. This would suggest that these levels are more fluid than Hallam and Bautista categorisation allows.

During the exam preparation period, Alex was not only starting to develop his metacognitive skills in coping with MPA, but was enhancing his musical skills at the same time. For example, he mentioned that he 'contrived the exam situation in the music room,' which can be seen as a way to practise musical skills and cope with MPA, instead of 'increased practice hours,' which suggests a focus on musical skills. As well, absorbing activities changed from 'chatting with friends' to 'breathing and positive self-talk.' Perhaps, this change in strategies between pre-research and exam could be attributed to the PD. Regarding his concept of evaluation, Alex mentioned he discussed 'mistakes' with his tutor for improving his future performance. The emphasis on discussing 'mistakes' with his tutor could be seen as Alex having a metacognitive awareness of his musical skills as well as an MPA-coping strategy when preparing a performance. However, it could also be seen as Alex considering a

'mistake' as an important issue with his performance, resulting in dissatisfaction with each of his performances owing to the 'small mistakes' he made.

The table below is Benita's story. She was a pianist. The difference between Alex and Benita is that Alex described the strategies used for distraction from being anxious whereas Benita did not. She focused on musical preparedness (i.e. mental practice and tapering off practice).

*Table 36: Benita's story*

Pre-research	I am not a confident person. I often feel nervous. About my last performance, I remember I practised in the morning around one to two hours and two hours in the evening. I kept my daily routine regular and did not change it because the performance was close. I didn't practice more because of nerves or because the exam was approaching. Besides, I often held the music score and listened to the music at the same time. At that moment, I thought about the fingering. It helped me memorise the music and familiarise myself with the melody. Anyway, everything was the same, even if the performance was close. After the performance, I discussed my performance with my tutor to know where I should improve for the next concert or exam.
Concert	I did feel a bit nervous, as the musical techniques of the chosen piece were very difficult. I was afraid of making mistakes on stage. Before the performance, I practised my instrument very hard. Sometimes, when I was on the bus, I imagined I was playing in the concert and got positive feedback from the audience. I had some rehearsals together with my friends. They pretended to be the audience when I was on stage. Then we exchanged roles. Also, backstage, I told myself 'more or less

	<p>everyone will make mistakes, so, if I make mistakes, it is a normal situation, like the others.' I didn't feel satisfied with my performance. It was ok at the beginning of performance. Then, I made some mistakes at the end of the music. I remember I told myself to move on and forget about the mistakes when it happened at that time.</p>
	<p>Feedback from PD: I read the performance diary. Most of the skills that are mentioned in the PD are useful. I had heard some of strategies before I read the PD.</p>
Exam	<p>The MPA-coping skills I used were the same, both in the concert and the exam. The only difference was that I changed the method of memorising the score. This was because I forgot the music on stage in the last exam, owing to nerves. Also, I focused on accepting mistakes, which was to practice more and think about preventative methods if I made a mistake or forgot the music on stage. My performance was okay, and I didn't spend too much time preparing for the exam. Anyway, I believe 'the fewer mistakes you make, the higher score you get.'</p>
	<p>Feedback from PD: I did not read the PD again because I thought I read it when I prepared for the concert. The content of the booklet was the same and I remembered it all.</p>

In the pre-research situation, Benita had regular practice times, approximately two hours in the morning and two hours in the evening. She monitored herself not to over-practice when the performance was close. During the concert preparation period, she reported that she 'practised...very hard' with both physical practice and using her imagination. From the perspective of enhancing musical skills, she still

monitored herself not to over-practice physically and to keep practising regularly. Her metacognitive awareness of her musical skills was still developing and maturing as well as her capacity to manage MPA. In concert preparation, she perceived MPA, and attempted to find more strategies to manage it than in pre-research, such as contrived performance situations by working with peers, self-talk, and the strategy of accepting mistakes during performance. This is in comparison with the pre-research situation, where she mentioned a few MPA-coping strategies (i.e. mental practice, keeping a daily routine, and tapering off practice). In the exam preparation period, she mentioned that she adopted the same MPA-coping strategies both in the concert and the exam. These remarks show that Benita examined her previous performance and learnt from it. Learning from our own learning and finding the best way to learn, which may be from a previous learning experience, is the key element to developing metacognition. In addition, in the exam preparation, she changed her learning strategy for memorising music, which she learnt from her previous performance experience.

Benita's concept of evaluation was to focus on 'correcting mistakes.' She believed that the main purpose of the exam was the mark, which was related to 'making mistakes.' She emphasised that the fewest mistakes made for the highest score in the exam. Moreover, Benita mentioned that she had heard of some of the strategies before

she read the PD. This can be linked to my pilot study's finding that some students had heard about MPA-coping strategies before and felt that they were very helpful in preparing for their performance, but had not realised that they had previously learnt them until they saw the strategies again (Huang, 2014). Nevertheless, the role of the PD in Benita's example is unclear, as she did not mention how the PD had worked for her.

Table 37 is Elsa's story. She was a pianist. Elsa was a typical example, compared to the Alex' and Benita's stories, in that her comments revealed that she was coping with MPA in the pre-research situation both for distraction from being anxious (i.e. diet) and musical preparedness.

*Table 37: Elsa's story*

Pre-research	<p>In the days before a performance, I kept my daily routine regular. I sometimes tried to listen to music and read the score at the same time. It helped me memorise the passage as well as familiarise myself with the music. As well, I went to a hospital to perform the music. I think it enhanced my courage on stage. On the day of the performance I was very nervous and it felt like the end of the world was coming, especially ten minutes before the performance. At that time, I was telling myself 'don't be nervous, you play very well,' and 'everything will be fine.' But it was not working. I still felt very nervous. My hands were shaking, so I played the wrong notes on stage. Oh, I also tried eating sweets. This is because when I eat sweets, I can enjoy the sweets and forget other things.</p> <p>I examined my performance after exam to see where I could improve. But it will not affect my confidence for the next performance.</p>
--------------	--

Concert	<p>Before the concert, I tried to practise some difficult passages more, those passages in which I believed I would make mistakes onstage. In addition, I saw a movie to relax myself and picked the most difficult passage to practise prior to the concert. Also, I imagined the performance situation and that I was playing onstage. It did stimulate the nervous situation and I felt like I was really playing on the stage. It helped me manage the anxious feelings that happen on stage, as I felt that everything was almost the same as I had previously imagined.</p> <p>I didn't feel satisfied with my performance, as I made some mistakes that I had never made before.</p>
	<p>Feedback from PD: I read the performance diary. After I read it, I paid more attention to MPA than before and tried my best to overcome it.</p>
Exam	<p>I think my exam went ok. I only made some small mistakes. But it was still better than last time. I used most of the same MPA-coping skills that I used for preparing for the concert. The mental and visual rehearsal I felt helped very much. Also, I tried to find classmates to help me contrive the performance situation, as I don't like people watching me when I perform. On the day of the exam, I picked the most difficult passage to practise again and again. When I was backstage, I told myself 'I can make it' and 'I am the best.' But I still felt nervous. I felt nothing different between preparing for a concert and an exam. As I said, I don't like people watching me when I'm playing. This feeling is stronger in an exam than a concert. That is why I contrived the performance situation with my classmates.</p>
	<p>Feedback from PD: I didn't read PD again. I read it when I prepared my concert.</p>

Elsa demonstrates her understanding of which strategies could be adopted in response to her perceived needs, both in enhancing musical techniques and MPA self-management. For example, listening

to music and reading the score helped her to memorise and familiarise herself with the music. Performing in the hospital was a way to gain more performance experience, which she believed could enhance her courage onstage in future performances. Adopting motivational self-talk (i.e. 'everything will be fine') and the strategy of dietary choices (i.e. eating sweets) prior to performance could help her self-manage MPA. In the concert preparation period, Elsa's strategy changed from gaining more performance experiences in order to stimulate the anxious feelings as in an actual event. When the performance was close, she adopted 'tapering off practice,' which is to pick the most difficult passage to play prior to performance, instead of just adopting motivational self-talk and dietary changes.

In the exam preparation period, Elsa not only changed the strategies she used, but also described more specifically how to use them in greater detail than in the concert preparation. The terms of strategy that Elsa reported changed. For instance, in concert preparation, she described how she organised her practice with a simple sentence; in the exam preparation, she used academic terms, such as 'visual rehearsal,' 'mental rehearsal,' and 'contrived performance situation.'

Although she reported that she used the same strategies as in the concert preparation, she could clearly describe what factors contributed to her MPA, and what strategies assisted her in managing

it in the exam. This shows her understanding that managing MPA runs not only in the direction of 'what you feel' and 'what you do,' but also includes 'thoughts,' which is the way of thinking affects feelings and actions. For example, she mentioned that did not like people watching her playing because it made her feel nervous. As a result, she contrived a performance situation by working together with her classmates. Identifying the MPA-contributing factors helped the participant find a better MPA-coping strategy in order to response personal needs, as MPA-coping strategies are varied and need to be person- and performance-specific (Papageorgi, Creech & Welch, 2013). This is also metacognition in relation to MPA self-management. Metacognition in learning is to understand how you learn and adapting your learning. Accordingly, metacognition in MPA self-management is recognising what makes you anxious and understanding how to manage your MPA and adapt your behaviour.

Elsa's concept of 'mistake' changed between the concert and exam. She did not feel satisfied with her performance in the concert owing to the mistakes she made. However, she reported that the performance went 'okay,' as she only made some small mistakes in the exam. Nevertheless, there is no data to explain how Elsa changed her thoughts from the concert preparation period to the exam preparation period. One might conclude that Elsa adopted the strategy of accepting mistakes after the performance as she

mentioned 'it was better than last time.' As to the feedback from the PD, Elsa stated that she read the PD during the concert preparation period, so that meant that she did not read the PD during the exam preparation period. She also reported that the PD provided insight and inspiration on the issue of MPA management for her, which was also true for Alex. However, it raises a question about the feedback regarding the PD, in that she only read it once but could detail the strategies and use the correct terminology for them in exam preparation. Perhaps, it she read PD when she took the interview so that she could use correct terminology. We don't know, but we do know that there is an anomaly between what she says and other things that she reports.

These three year one students highlight four things. Firstly, year one students' development of metacognitive skills in relation to instrumental learning seems more developed than their abilities to manage MPA. It is possible that some year one students were not aware of MPA until they entered their undergraduate programme, whereas they had been aware of learning their instrument for many years prior to becoming a music college student. As a result, they were in the beginning stages of developing metacognitive skills in MPA self-management, whereas their metacognition in relation to learning their instrument was more developed. This is similar to the suggestion above related to metacognition in solo performance and

chamber/orchestral performance, and suggests that, unlike Hallam and Bautista's static categories, there may be layers of metacognition that students move between depending on the activity.

Secondly, I found that there were individual differences in the development of metacognitive skills in managing MPA between year one students. The evidence is found in the pre-research situation, where Elsa demonstrated her understanding of which strategies could be adopted in response to her perceived needs, whereas Alex and Benita did not. In other words, Elsa demonstrated and explained how she would adopt a strategy to help her manage MPA (even though she found it unhelpful), compared to Alex and Benita who mentioned more about what strategies they adopted in the pre-research situation. This questions the categorisation of the level of learning by age or educational level.

Thirdly, the performance diary may bring participants' attention more to MPA issues than had been the case before, and could help with the development of metacognitive skills for MPA. For example, participants could realise that their thinking affects their feelings and their actions, rather than concentrating on 'what you feel' and 'what you do.' Through this process, they could find the most suitable strategies by themselves in order to help manage their MPA.

Finally, satisfaction seemed to be correlated with making mistakes and selected year one students' concept of evaluation. This

could be linked to the literature stating that the students at the intermediate level of instrumental learning, up to age twenty, conceive evaluation as educational practice aimed at allocating marks and correcting mistakes (Hallam & Bautista, 2012). If this is the case, it will be interesting to see how other year levels (i.e. year two to year four) conceive evaluation in the next sections.

### 8.3 Year two students

Table 38, below, is piano major Aya’s story. Aya has demonstrated metacognition in her performance skill, evaluative skill, and self-regulating skill.

*Table 38: Aya’s story*

Pre-research	I do care about evaluation from others, so I thought I should have more performance experiences and practise more. But I enjoy performing on stage and feel like I am a superstar. I like everyone watching me. When I feel nervous about the upcoming performance, I always invite my classmates, who also feel nervous, to go shopping together. It makes us feel temporary relief from pressure. On the day of the performance, I eat less than usual. When I’m backstage, I do a quick rehearsal in my mind about rehearsing the beginning of the music and then jump to the last passage. I also tell myself don’t be nervous and it will be ok, as it was in my imagination. After the performance, I do not examine my performance too much. This is because I think everything is finished, so there’s no need to blame myself for making mistakes.
Concert	My performance was ok, but the final exam should have been better than it was this time. I was feeling ok before the performance. I started to get nervous when I was on stage. This was my second time performing at school. Last time, I

	<p>was very nervous from the preparation period until the performance finished. I suppose this was because I had already got used to the feeling of being onstage this time. When I prepared for this performance, I imagined myself performing onstage sometimes. The feeling was real, close to the actual performance. But the sound effect was very different between the actual performance and mental rehearsal. Also, I talked to myself, saying 'everything will go smoothly' when I felt nervous during practice.</p>
	<p>Feedback from PD: I read the PD and used it. It helped me understand MPA. Before that, I only knew that 'I am nervous' and nothing else.</p>
Exam	<p>My performance was ok. I gave myself six out of ten, as I made a small mistake in the Beethoven sonata. Actually, I felt less nervous in that exam than in the concert, as I practised much more for the exam than the concert. This was because I only had to prepare one piece for the concert, but more than one piece for the exam. Before the exam, I tried breathing many times, which made me feel calm. My classmate and I went to book the exam room together. We ran through all the pieces and gave each other feedback. Although the exam was to play music to judges not classmates, they were all audiences for me, so nothing was different. I could see the panellists from backstage. So I told myself backstage, 'they are all busy writing feedback and will not look at you when you're performing on stage.'</p>
	<p>Feedback from PD: I read and used the PD. The strategies I used were the same as in the concert. I think they were helpful, so I will continue to use the same strategies.</p>

In the pre-research situation, she invited classmates to do absorbing activities together. Yet in exam preparation, she rehearsed with

classmates and they gave feedback to each other. In a manner similar to year one student Alex's example (see Table 35, p. 323), she adopted the strategy of working with peers to distract herself from anxious feelings to focus on musical preparedness. Moreover, she explored the factors contributing to MPA as well as the pros and cons of the strategies she used in three performance situations, and found that she was afraid of evaluation from others. As a result, she attempted to gain more performance experiences in pre-research, imagination in concert preparation, and contrived performance situations by working with classmates in exam preparation. It seems that she was seeking the best strategies for managing her MPA and this could be seen as a process of development of metacognition. In addition, both in the concert and exam period interviews, she mentioned that she was getting used to performing on stage. In the exam, she made a comparison with her preparation for the concert and for the exam, which exhibited a good understanding of managing different tasks and personal perceived needs.

As to evaluation, Aya reported she gave herself six out ten, owing to a small mistake she made in the exam. This can be linked to the finding that year one students' believe that making mistakes correlates to satisfaction after performance. The other interesting finding is Aya's self-reflection after each performance. She compared her performance with the latest past performance in both concert and

exam situations. It can be seen that she attempted to improve her performance quality by learning from her previous performance experiences. Similarly, the PD gave her information. She found the strategies of the PD useful and decided to adopt the same strategies both in the concert and the exam. Aya pointed out how the PD helped her to understand the issue of MPA.

A similar finding can be found in Boa's story. She was a violinist and explained why the PD was useful (see Table 39, below).

*Table 39: Boa's story*

Pre-research	I had regular practice, which is two hours in the morning, afternoon, and in the evening. I didn't practise too much before the exam. This is because I feel the more practice I have, the more confidence I lose. So, I kept my practice hours the same as usual. But I went to bed early and did my normal routine. When the performance is close, I often rehearse in my mind about the performance situation and the process. After the performance, I examine my performance and identify my weaknesses in order to have a better performance in the future. I think what makes me feel pressure is the mark. This is because I believe piano is my major and it will influence my future career.
Concert	My performance was good. At least, I did not make mistakes. I had a chamber music performance. When I felt nervous, I asked myself 'What is making me feel nervous?' I answered to myself, 'Nothing.'
	Feedback from PD: I read the PD. I think it gave me a direction. When I felt nervous, I found some methods from the PD. At least I wasn't panicking, not knowing what to do. I am not sure if it helped or not. I think I should try the skills more.

Exam	<p>My exam went well. My teacher gathered all her principal study students in a teaching room. She asked each of us to run through all the exam pieces on stage. When a student performed on stage, the others were panels. After each performance, she asked each of us to give feedback to the performer immediately. There were many undergraduate seniors and postgraduates. I was afraid I was the worst one. By the way, I got negative feedback from a postgraduate. But that comment became motivation for me to practise. I promised myself I would be the best in the real exam. I was very nervous on that day. I think the difference between concert and exam was my mental state. I kept talking to myself, saying 'everyone feels nervous, not only me,' 'we are all having an exam soon,' and 'if I can overcome nerves, I will be the best one.'</p>
	<p>Feedback from PD:  I read the PD again. I think the PD is like a tool. When you feel nervous, you know there is something in the PD that can help you. I mean the PD makes me feel calm, and not feel panicked anymore.</p>

Boa demonstrated her self-regulating skill in the pre-research section in keeping regular practice hours. Yet, in the concert and exam, she did not mention monitoring her own practice. The most interesting fact that shows Boa's development of metacognitive skill was in her thinking. In the pre-research section, she reported, 'I believe piano is my major and it will influence my future.' She reckoned that the 'mark' was the most important thing in the exam, which also made her feel stressed. In the concert, she changed her thinking into 'nothing can make me feel nervous' through self-questioning and answering. In the exam, she realised she had to change the thought from negative to

positive. As a result, she told herself, 'if I can overcome my nerves, I will be the best one' as well as 'everyone feels nervous, not only me.'

The factor that influenced her concept of evaluation was still mistakes. Boa was very satisfied with her concert performance and reported that the concert went well; at least, she did not make any mistakes. However, negative feedback became 'positive motivation' to Boa as she mentioned contriving the performance situation in her exam preparation by working with her teacher and peers. 'Positive motivation' is a response that takes place when an individual's performance is driven by previous reinforcing behaviours (Ruskin, Proctor & Neeves, 2007). As to her feedback about using the PD, it seemed that the PD was an assistant tool, which gave direction on managing MPA and comfort to Boa while she experienced feeling vulnerable during the preparation period.

Table 40, below, is Jessica's story. She was a flautist. It is very interesting to find that Jessica reported she had no idea of how to cope with anxiety, but she adopted various MPA-coping strategies, such as motivational self-talk. It may be argued that she was not aware that she was developing her metacognitive skills in MPA-coping issues in pre-research, as she may have believed that 'coping strategy' was something that should be learned from professionals (e.g. Alexander Technique).

Table 40: Jessica's story

Pre-research	<p>I did not know how to deal with anxiety. I believed eating more food could make me feel better. I always feel very nice when I eat until I'm very full. I also watch myself in the mirror and say 'you are the best.' Although I still feel nervous, it can reduce my anxious feelings somewhat, I believe. Before I get on stage, I take a deep breath. Then I watch myself in the mirror and say, 'you are the best.' Although I still feel nervous, it can reduce my anxious feeling.</p>
Concert	<p>I was not very satisfied with my performance. But I didn't feel disappointed in it. I mean, I knew I could play better next time. I always encourage myself through internal dialogue. But I did not do it this time. It was because I did not finish practising until the day before performance. I totally gave up. I did try to contrive the performance situation in the practice room and invited some classmates to listen to my practice about a week before my performance. A few days before the performance, I picked the most difficult passage and thought, 'if a mistake happened in this passage, how would I recover from it?'</p> <p>Feedback from PD:</p> <p>I read the PD, but I did not use it. This is because I feel performing on stage is just a routine. It is not a big thing and I am used to it. Also, I changed my thought process. I used to care a lot about other people's evaluation and criticism. But now, I believe performance is just a performance. I only need to focus on the music; the rest is not my business.</p>
Exam	<p>My performance was better than in the last exam. It went okay. Actually, I was very shocked when I played the first note wrong during the exam. Then, I realised I should get my attention back and focus on my current playing. The rest of the performance was good and fine. When preparing for the exam, I made a box, wrote down the scales on pieces of paper, and put them in the box. Then, I brought the box and a timer to the exam venue. I set the timer for nine minutes. Then I picked a paper from the</p>

	<p>box, which was A-flat major. I started to play the piano, from the scale to all the repertoire. It really felt like in the actual exam. Coincidentally, I did play A-flat major scale in the actual exam. The difference between concert and exam is the length of preparation and audience. I didn't have enough time to prepare for the concert so as to feel nervous. Also, I did not know who would come to my concert, yet I did know who my examiners would be.</p>
	<p>Feedback from PD: I did not read the PD. This is because I didn't feel nervous. I was well-prepared for the exam.</p>

Jessica's development of metacognitive skills for enhancing her overall performance ability became more and more informed and detailed. For example, in the pre-research section, she mentioned various strategies, but did not mention specific times. One might conclude that she adopted strategies only when she felt nervous. In the concert, she reported the strategies used with specific timelines, such as during the week before performance. In the exam, she demonstrated how she practised and enhanced her music technique in detail. More than that, she realised that 'internal dialogue,' or self-talk, could enhance her performance confidence and ability. The motivational self-talk can be found in the pre-research and the instructional self-talk that appeared in the exam preparation. The positive thought and positive attitude influenced her concept of evaluation. For example, she mentioned she could play better next time after the concert performance and indeed she did so in her exam.

More than that, she did not interpret her mistake as a failure. She believed progress was most important, as she reported that her performance in the exam was better than in her previous exam. Although Jessica did not use the PD, she had been developing her metacognitive skills. She engaged in self-reflection after each performance, made a comparison of different tasks, analysed the causes of MPA, and identified the most suitable coping strategies for herself.

There are three points that could be summarised from these three year two students. First of all, it seems that the year two students were more aware of how their thinking affected their feelings and actions through self-questioning or self-reflection. They believed that the causes of MPA were their negative thoughts. In addition, some of them had a good understanding of managing different tasks by comparing the preparation for the concert and exam. It can also be seen as a path to gradually becoming a professional, as the professionals have well-developed metacognitive skills, including extensive knowledge regarding the nature of different tasks and what would be required to complete them satisfactorily (Hallam, 2006). All three participants were aware of MPA issues and demonstrated self-awareness of their personal abilities before reading the PD.

Secondly, it seems that the PD was an optional or assistive tool for managing MPA and fostering metacognition for some year two

students (i.e. Aya and Boa, rather than something that introduced them to MPA-coping strategies, as was the implication from year one students.

Thirdly, satisfaction seemed not to be correlated with making mistakes for selected year two participants (i.e. Jessica), comparing to selected year one students. The year two student adopted the strategy of accepting mistakes before, during, and after performance. This may be the reason that making mistakes did not correlate to satisfaction after performance. Year two students were still in the intermediate level, according to Hallam and Bautista (2012). Yet, the concept of evaluation at the intermediate level was not all focused on the mistakes (i.e. Jessica evaluated her overall performance quality by comparing it with a previous performance rather than how many mistakes were made). As the evidence challenged Hallam and Bautista's levels of development, it will be interesting to see if a conceptual change in instrumental learning occurred in year three and year four students who, according to their categories, would be classed as advanced-level students.

#### **8.4 Year three students**

Table 41, below, is Eileen's story. She was a violinist. At the beginning of the interview she stated that she had more confidence in herself than before. It seems that she found her own way to increase

her level of self-confidence through metacognitive processes.

*Table 41: Eileen's story*

Pre-research	I have more confidence in myself than before. Besides, I have regular practice hours, which makes me feel well-prepared before each performance. I like a regular routine, so I never change my routine. I told myself the school exam was just an exam, not a big event. So, just do your best!
Concert	I was very nervous this time as the repertoire was very difficult. My performance was a duet. I went to the performance venue and imitated the real performance situation with my partner once a week. We had regular practice time once a week as well. So, I found nothing different between our dress rehearsal and the real performance.
	<p>Feedback from PD:</p> <p>I read and used the PD. I had heard about this strategy and tried it before. At that time, I did not know its official name, but I always did it while preparing for a performance. I think it is a natural behaviour; there is no need to learn it. That is why I did not know its name. Anyway, the PD gave direction and made me more organised in managing my practice.</p>
Exam	My performance was worse than in rehearsal. I suppose this was because I was a bit nervous, so my fingers could not move smoothly. Actually, I got the black draw. But I didn't feel too bad. On the contrary, I believed I could perform all the pieces that I practised hard in the previous few months. I think I was afraid of the senior students hearing my performance outside the exam room before. But now, I am the senior student, so I am not afraid of it anymore. Also, I believe taking the exam is only for getting a degree and examining my effort.
	<p>Feedback from PD:</p> <p>I read and used it. The strategies I have used are the same as I used for the concert.</p>

In the pre-research situation Eileen demonstrated well-organised skills in managing musical practice and positive thoughts in evaluation (i.e. she believed the school exam was just an exam). She monitored her practice and kept it regular, as she felt she could become more confident in her performance ability through regular practice.

Regular practice was also applied by Eileen in the chamber music performance. In the concert, she mentioned that she and her partner had physical rehearsals in the venue and regular practice once a week together. Apart from well-organised skills in musical practice, positive thought changed her concept of evaluation, which can be seen in the exam section. She reported that she got the 'black draw' (see definition of black draw, p. 198) in the exam, yet she took this as an opportunity to demonstrate her effort to the examiners.

Eileen believed school was just for examining her efforts and obtaining a degree. Although Eileen thought her performance was worse than in rehearsal, she did not mention mistakes. Instead, she reflected on her performance, attempted to find the factors and cope with it. The feedback on her use of the PD was positive. Although she noted the strategies that responded to her needs, she thought that the PD had a role in assisting her in managing her practice and becoming more organised. This finding is the same as Boa's, that the PD could be an assistive tool and provide direction, merging both musical learning

and managing MPA (see Boa's story, p. 339-340).

Table 42, below, is Ily's story. She was a percussionist. In Ily's story, I found that she reflected her experiences of performance preparation from year one to the present. It seemed that she was seeking to find her MPA-contributing factors and coping with it, as she mentioned that 'thought' in evaluation was a key element of her MPA management.

*Table 42: Ily's story*

Pre-research	When I was a first year student, I was very nervous when hearing the word 'performance.' But now, I don't feel nervous performing on stage. I suppose it is because I have changed my thought. For example, I don't care about evaluation and marking anymore. Besides, I keep my routine regular, which makes me feel calm, especially when the performance is coming close. I go swimming. It helps me sleep early and wake up early so I am in better health. I like to find someone to talk to about my worries. That person is normally one of my classmates or same principal study major. Only he or she can understand my worries and offer me some suggestions. I always find something to do in order to distract myself from anxiety, such as watching TV and listening to music. If the performance is a competition, I tell myself, it is just a performance; don't worry about results and other people too much. Your enemy is yourself.
Concert	The performance was good. I didn't feel nervous in the concert. This was because the repertoire was my favourite, and there were four other people on stage with me. I just tried to keep my hands warm and did muscle relaxation on the concert day.

	<p>Feedback from PD: I read and used it. It was very helpful. But I cannot remember the details at this moment. I will read it again if I use it in the future.</p>
Exam	<p>I didn't feel any difference in my performance between concert and exam. I often practised in G11 practice room, where the exam was held. But I did have more time to prepare for the exam than the concert. It made me feel more confidence as well.</p>
	<p>Feedback from PD: I did not read the PD. I think I have adopted many strategies already, which I learned from other resources.</p>

Ily mentioned that she kept a regular routine in order to feel calm when the performance was closer. This strategy is the same as Eileen's (see Table 41, p. 346). It is possible that the definition of 'keeping a regular routine' is planning and monitoring practice for Ily and Eileen, which could be seen as a way to demonstrate metacognitive skills for enhancing overall performance ability. As a result, neither of them mentioned an experience of serious MPA issues. Ily also identified her predominant MPA-contributing factor, which was receiving negative evaluation and marking. She then changed her negative thoughts to positive, resulting in her concept of evaluation being related to the music itself and to herself, and how she was feeling rather than about mistakes and marks. Although she did not explain her thoughts on evaluation after her performance, she mentioned that the 'repertoire was my favourite' and the 'enemy is

myself.'

There is a contradiction regarding the PD feedback used between concert and exam. The PD did work for Ily in concert preparation. Yet, in exam preparation, she reported she believed she had already adopted various strategies learned from other resources, so she did not read the PD. It is possible that Ily didn't think the PD was a very important tool for MPA management, because she had learned many strategies already. It may also be considered that PD reminded her which coping MPA strategies she had learned from other resources.

The concept of evaluation relating to the music itself and the performer can also be found in Melody's story. She was a pianist (see Table 43, below). Melody's concept of evaluation was associated with her personal standard and expectations. This is similar to Ily, who believed the enemy was herself.

*Table 43: Melody's story*

Pre-research	Actually, I was not good at expressing myself on stage. With the improvement of musical technique and my teacher's encouragement, I now understand more about the feeling of performing on stage and how to control the feeling better. I think I cared too much about my performance, so I felt extremely nervous and made many mistakes on stage. Sometimes, I exercise when I face musical technique challenges. I always remind myself: the first thing I need to do when I get on stage is to find a place to watch in order to avoid eye contact with audience members.
--------------	---

Concert	<p>My performance was not good, as it did not reach my standard. I exercised. The preparation was the same as usual. I practised my instrument regularly and took exercise. When I exercised, I did not think about any stuff related to the performance. I knew it is good to take a deep breath when I feel nervous. I tried it. But I didn't know how to do it, as I didn't feel any changes after taking a deep breath. I played some wrong notes on. So, I told myself 'just forget about it and jump it' at that time.</p>
	<p>Feedback from PD: I read and use the PD. It gave me some ideas about how to organise my practice.</p>
Exam	<p>My performance met my expectation. It was better than the concert. I suppose it was because I was afraid of a big audience. The exam was only three judges. I did make some mistakes. Fortunately, I had rescue plans if I made mistakes on stage. My rescue plans included problems such as forgetting notes, playing the wrong notes, not playing with the accompanist, and feeling short of breath, which causes short musical phrases. I think the cause of my mistakes was memorisation. I was afraid of performing from memory. In the concert, I was afraid of the audience. As a result, I used positive self-talk and breathing more than in the exam. But in the exam, I spent more time on memorising pieces.</p>
	<p>Feedback from PD: I used the strategies from the PD a week before. I mainly focused on relaxing skills.</p>

At the beginning of the interview, Melody identified her strengths and weaknesses, as well as the appropriate way to learn and manage practice prior to performance in the pre-research section. This is a good demonstration of the process of metacognition. It is also worth

noting that in the examples of the year three participants, they identified their weaknesses, factors contributing to MPA, the best strategies they used to meet their perceived needs, and self-reflection on each performance. Interestingly, Melody believed the PD could give her ideas about how to manage practice, as did Eileen and Boa.

To sum up, year three students clearly understood how to organise their preparations for performance, which could be seen as way of self-regulation of both musical practice and managing MPA. MPA-contributing factors and strategies used for managing MPA were various and depended on individual needs. The participants showed self-awareness of their own abilities and coping strategies, which could be adopted in response to their perceived needs. This could be seen as nearly approaching the stage of becoming experts, in Hallam and Bautista's (2012) terms, which is demonstrated by well-developed metacognitive skills.

As with the year two students, self-awareness of MPA issues before reading the PD and self-reflection on learning strategies was found among year three students. The role of the PD for year three students was as an optional tool to reinforce existing strategies, as well as to introduce new ones, as I found was the case among year two students. Unlike years one and two, whose satisfaction of performance seemed to be based on making mistakes, the satisfaction of performance seemed to be related to the performers themselves or

their concept of the exam. For example, participants reported that ‘my performance met my expectations’ and ‘the exam is only for getting a degree and examining my efforts.’ So, although there was some difference between the year two and three students, it is not as striking as Hallam and Bautista’s categories suggest it might be.

### 8.5 Year four students

Year four students had a recital at the end of the academic year, which is also equivalent to an exam for a Bachelors’ degree. There were three judges present at the recital and students could invite friends to attend, as it was like a concert. To prepare for the recital, students had to organise it on their own, including administrative work, such as designing the poster, writing invitation cards, and finding stewards. The recital was an hour long and included mainly solo pieces and minor chamber music performances.

Table 44, below, is Della’s story. She was a clarinettist.

*Table 44: Della’s story*

Pre-research	When I was young, my performance anxiety was serious. But now the condition is better. I think each age group has different feelings of anxiety. Perhaps I had a lot of performance experiences and a lot of positive feedback from others. I often go for a jog, as I am a clarinettist. It helps me to train my control of breathing and I feel good after exercise as well. A few days before the performance, I try to keep my practice hours the same as usual. It helps a lot. After the performance, I examine my performance and feel happy that
--------------	--

	<p>everything is finished. Actually, I was very dissatisfied after my performances when I was young. I think it was because I could not allow any mistakes. If they did happen, I then felt very frustrated. But now, I know the mistake is a process of learning.</p>
Recital	<p>I was very satisfied with my recital, as it reached my standard and expectations. Before the recital, I went jogging. I also listened to religious music as I have religious beliefs. When I listen to religious music after a long day of practice, it makes me feel peaceful and calm. I also did breathing exercises many times when I felt I stressed. This time, I followed the instructions of skill in the PD. In addition, I rehearsed mentally many times when I couldn't play the instrument physically. It helped me to memorise the music and feel more familiar with repertoire.</p>
	<p>Feedback from PD: I read the PD. It helped me to contrive the performance situation, which was almost the same as the real event.</p>

Both in the pre-research and recital, she monitored herself for regular exercise and practice. Moreover, she identified her weakness and found the way to change it. For example, she realised that accepting mistakes as a process of learning could help her feel better after a performance. She showed how her concept of evaluation changed through the years of learning her instrument, as she mentioned that each age group has different feelings of anxiety. Gaining more performance experiences and receiving positive feedback from others may have helped her reduce the level of MPA. As to the role of the PD, it assisted her in managing her practice by introducing various

strategies.

Table 45, below, is Jojo's story. She was an oboist.

*Table 45: Jojo's story*

Pre-research	I think it is very normal to feel nervous on stage. I know I am afraid of the judges, the audience, negative feedback, and the atmosphere of the performance situation. I sometimes imagine myself performing on stage. It helps to feel the actual feeling as if I'm in a real event. I also read the score and listen to the music at same time. It helps me to memorise the music and to analyse the music and its expression. As I mentioned, I know I am afraid of the audience, therefore I hope my recital will not have too many audience members, except my family and friends. Family and friends' presence can make me feel confident.
Recital	My recital performance was the same as usual in previous exam situations. Before the recital, I contrived the performance situation three times, twice in the performance venue. Every rehearsal for me was formal and like in the actual performance. My accompanist and tutor were in my rehearsal. They gave me very nice, professional feedback. I also liked to do mental rehearsal, which was to imagine myself playing music onstage. But I did not do it all the time. This was because I could only do MR when I was already familiar with and had memorised the melody. It normally occurs a month before performance. If earlier than that, I still practice and try to memorise the music. Moreover, I repeatedly tell myself that whether my performance goes smoothly or not, the audience will have to stay in my recital until it is finished. I heard this thought from other friends. I felt it made sense and was helpful. A few days before the recital, I stopped practice and rehearsing the programme. I went to my classmates' recitals and enjoyed their music and performance. It made me feel relaxed and happy. I mean, I

	love to see them accomplish this incredible mission. I knew I would join them soon. Moreover, I knew how other people organised their recital and took their experience into my own recital.
	Feedback from PD: I read the PD. I knew some of the strategies already from other people. They were helpful and good for organising practice.

JoJo has identified her MPA-contributing factors as judges, the audience, negative feedback, and the atmosphere of the performance situation. In knowing this she found some strategies by herself to overcome her MPA. Although she did not mention how she identified the factors and the MPA-coping strategies, it demonstrates her awareness of how she could efficiently organise her practice by incorporating MPA strategies, in turn demonstrating her metacognition in self-management of MPA.

In the recital preparation, she talked about how she adopted those strategies in detail and how she used them in response to her perceived needs. Her satisfaction with her performance seemed to be correlated with the performer herself, as she mentioned that ‘my recital performance was the same as usual, like the previous exam.’ As to the feedback from the PD, she mentioned that she had heard ‘some’ of strategies before, which implies that she didn’t know all the strategies in the PD. However, she reported that the PD was a good tool to help her organise her practice. The role of the PD was to assist

her to organising her performance preparation and reinforce the strategies she learnt from other resources, rather than learning new strategies in order to manage MPA.

Table 46 is Ariel's story. She was a bassoonist. Her thoughts about performing on stage also changed over her years of instrumental learning.

*Table 46: Ariel's story*

Pre-research	My feelings about performing on stage have changed a lot. I was very afraid of performing on stage a few years ago. My hands trembled seriously, and I had trouble controlling my breathing, which was very bad for a bassoonist. But now I am really enjoying performing on stage. Especially when I get on stage and I see the spotlight and the audiences' eyes, they all make me feel excited. I know I am not afraid of performance, except in an exam. This is because I always think about the result of an exam, (e.g. low mark result or failing the postgraduate entrance exam). Before the performance, I do some relaxing leisure activities. Besides, it's no use hearing things like, 'don't be nervous and you will be fine' from other people. The most useful thing is to make yourself feel ready and practise sufficiently. This is exactly what my teacher told me, but I have never had that feeling of being ready to perform. After performance, I tell myself making mistakes is a learning process. Anyway, it is all finished.
Recital	I was very satisfied with my performance and I did not feel nervous. This was because I had prepared for this recital for almost a year. I rehearsed and contrived performance situations. I learned that from the PD. When I was on stage, I knew my fingers were not moving smoothly owing to nerves. So I tried to keep looking at my family and my teachers, who were in the auditorium. It made me feel calm and less nervous.

	It was just like I was playing the music for my loved ones, not for the judges.
	<p>Feedback from PD:</p> <p>I read it. Some strategies I had heard of before. But this time I did them very carefully and followed the instruction from the PD, which was good and helpful.</p>

Ariel reported that she had been afraid of performing on stage in the past but had now learnt to enjoy it and feel excited. Although Ariel did not mention how she reappraised her anxiety, from feeling anxious to feeling excited, she did reveal that ‘it is no use hearing things like don’t be nervous’ and ‘it is useful to make yourself feel ready.’ This may be linked to Brooks’s research (2014), which mentioned that reappraising anxiety as excitement is an alternative strategy by using of self-talk, mind-set, or just a simple message (e.g. get excited). It can help individuals perform better than attempting to keep calm (Brooks, 2014).

Furthermore, Ariel reported that performing in the concert and in the exam was different. She still experienced MPA in exam situations because of her fear of exam results. She found various strategies to manage her MPA, such as self-talk, positive thought, relaxation skills, and accepting mistakes. The role of the PD seemed important to Ariel as it reinforced her MPA strategies. Although she had learnt of some strategies from other resources before using the PD, she had not adopted these strategies at that time. The satisfaction

correlated to the performer herself. In both Della and Jojo's cases, they felt satisfied once the performance had reached their standards and expectations. Ariel felt satisfied because she felt she had done her best in her preparation.

It may be possible that year four students understand more about their overall performance abilities than other year levels. As a result, they understand what the optimal performance is, and this may be different for each individual. However, it could also be due to the nature of the recital being different from the exam. As to the role of the PD for Ariel, it provided details on how strategies work and assisted her in learning the strategies correctly.

## **8.6 Summary**

Hallam, Cross and Thaut (2016) stated that managing anxiety, practice, and mobilising arousal specifically for performance is crucial for public performance preparation and is related to the development of appropriate metacognitive skills. The metacognitive skills explored in this research are concerned with how the participants planned and monitored both instrumental practice and MPA issues. Hallam (2001a) found that there are considerable differences in the development of metacognitive strategies between individuals of different levels of study, such as novice and expert. Studies on conceptual change in instrumental learning were discussed through educational level, but it

has been recognised that these may not apply to all individuals (Hallam, 2001b; Hallam & Bautista, 2012).

In this research, it seems that the conceptual changes occurred not only in instrumental learning but also in managing MPA, but the possibility of dividing this according to educational level was more blurred. In the planning and monitoring of performance, the students from higher year levels understood more clearly how to organise their preparations for performance in both instrumental practice and managing MPA, and they found it easier to identify their strengths and weaknesses through self-reflection than did students from lower year levels. In addition, with more years of undergraduate study, the participants seemed more aware of how thinking affected feelings and actions, through self-questioning or self-reflection, and they could change negative thoughts into positive ones by themselves. Some participants also realised through many years of learning that the cause of their MPA was their negative thoughts.

However, there were differences in the level of understanding of how to plan and monitor learning in the different activities – solo and chamber performances. Also, there were elements of self-reflection in the earlier years. For example, some year one and year two students improved their performance quality through self-regulation and self-reflection on learning strategies (i.e. keeping a regular routine, monitoring practice, and reflecting on learning

strategies after each performance). It was also clear that the concept of evaluation changed from correcting mistakes (i.e. years one and two students) to focusing on the performers themselves, or their concept of the exam (i.e. year three and four students).

The satisfaction with the performance seemed to be correlated with mistakes among year one and two students. Yet, among year three and four students, satisfaction with performance seemed to be correlated with the performers themselves or the concept of the exam. For instance, some year three participants reported that 'my performance met my expectations' and 'the exam is only for getting a degree and examining my efforts.' Year four students may have understood more about their overall performance abilities than other year levels due to their greater experience. As a result, they could understand what the optimal performance was, which could be different between individuals.

Finally, the role of the PD in assisting participants to manage their MPA provided an interesting insight into how developed their metacognition was. There is some evidence that the higher year levels used the strategies in the performance diary as combined strategies to manage both learning and MPA. The higher year students found it easier to identify their strengths and weaknesses through self-reflection than the lower year levels of students did, but there were still strategies in the PD that the students had not been aware of.

Although it appeared that the first years used the PD differently, and some didn't feel they needed it, there is evidence at all levels that the PD either introduced new strategies to the students, or reinforced strategies that they already knew.

All in all, this chapter provides a new perspective regarding how MPA can be self-managed by participants through engaging metacognition and how support networks and assistant tools helped participants' development of metacognitive skills of managing MPA. As has been seen in previous chapters, as the students became more enlightened in their own management of MPA through the research study, they employed fewer distracting strategies and more strategies related to musical learning. In other words, they tended to move away from diverting attention away from the performance and became more able to manage their MPA through their own musical learning strategies.

## **Chapter 9. MPA self-management and the teaching-learning cycle**

### **9.1 Introduction**

How will participants teach their prospective students about MPA issues in the future? This chapter relates to my third research question. In the interviews, I asked all participants 'if you were a teacher, how would you teach your students when they have MPA issues?' This question was designed to provide insight into the potential application of this research and was asked at the end of the research study. According to Mills (2002), who investigated undergraduate students' perceptions of the characteristics of effective instrumental and vocal tuition at a conservatoire in the UK, there are three teaching styles which were perceived as being effective by students: 1) transmission, that is teachers telling students what to do; 2) collaboration, where teachers work together with students on what and how they should improve; and 3) induction, that is teachers teaching students how to learn to be a musician. Mills found that although students valued the most effective teaching styles in response to their needs in instrumental learning through one-to-one tuition, they were not necessarily learning how to transfer these skills into a teaching context.

This research can be applied in learning MPA strategies in some aspects of my research. For example, 'will participants be able to

transfer their own MPA-coping strategies into their teaching context during their future career as a teacher?' In other words, when the participants become teachers one day how will they teach their students to cope with MPA? Will it be the same way as they learned, for example transmission, collaborative, or induction? My findings revealed four circumstances, which from the most to the least common are:

- 1) Participants transfer their own coping strategies into the teaching context.
- 2) Participants learn strategies from the PD and apply them to their teaching context.
- 3) Participants learn strategies from teachers and transfer them to their own teaching context.
- 4) Participants are unable to transfer/apply their own MPA-coping strategies into a teaching context.

The first three circumstances seem similar, but there are in fact nuanced differences, especially when the learning resources of managing MPA are from different places and in different teaching contexts, as anticipated by the participants. The phrases 'applied in teaching method' and 'transferred to teaching method' are different; the former means participants teach their students through a collaborative or inductive teaching style, whereas the latter uses a transmission style. This will be explained further in the following

section.

## **9.2 Participants transfer their own coping strategies to their teaching context**

When asking the participants, 'how will you teach your prospective students about MPA-coping strategies?' some participants reported that they would recommend the strategies that they had tried and found helpful. However, the participants did not mention where they had learned the strategies. The reason why the participants did not mention this may have been that they learned them through their own learning experience, which can be seen as the process of metacognition. In addition, the participants managed their MPA issues with various strategies, but when speaking about future teaching, they only mentioned some specific strategies, not all of the strategies that they had adopted when they were dealing with their own MPA. The example below is from Elsa, a year one student who commented on strategies and teaching:

### **Elsa's strategies:**

Before the concert, I tried to practise some difficult passages more in which I believed I would make mistakes onstage. In addition, I watched a movie to relax myself and picked the most difficult passage to practise prior to the concert. Also, I imagined the performance situation as if I was playing on stage. It stimulated a nervous situation and it made me feel like I was really playing onstage. It helped me manage the anxious feelings that I experienced on stage, as I felt everything was almost the same as I had imagined. I sometimes said something positive to myself

to motivate myself.

**Future teaching:**

I will contrive the performance situation and find some people to pretend to be the audience. More than that, I will say something positive to him/her. I do the same thing myself during the preparation period and I've found it helpful.

Elsa adopted accepting mistakes, absorbing activities (i.e. watching a movie), visual rehearsal, self-talk, and tapering off practice. However, when speaking about future teaching, she only mentioned 'contrived performance situation' and 'self-talk.' It is possible that the most helpful strategy for Elsa is the one she mentioned in reference to 'future teaching.' In the last sentence, Elsa mentioned that imagining the performance situation can simulate the feeling of being in the actual event, which she found very helpful. Besides, it is possible that the strategies she used could be transferred into her future teaching methods. For example, Elsa adopted a contrived performance situation on her own by using her imagination. But in a 'future teaching' situation, she wanted to contrive the situation physically.

In my discussion of metacognition, I discussed the strategies Elsa used and the development of metacognitive skills and found that she had shown her understanding of which strategies could be adopted in response to her perceived needs, both in order to enhance musical abilities and for MPA management (see Chapter 8.2, p. 330–334). This could lead to a further explanation – perhaps Elsa was not yet fully able to understand the role of the teacher as facilitator of

independent learning. The strategies she mentioned in her future teaching were strategies that actively needed a teacher, but she could not see how a teacher could support the development of accepting mistakes, visual rehearsal, or tapering off of practice.

Another example is Sally, whose situation was similar to that of Elsa. She mentioned various strategies at one time, but when speaking about a 'future teaching' situation, she reported 'contrived performance situation' and some strategies to avoid eye contact with the audience or judges when performing on stage. Furthermore, in reference to 'future teaching,' she specifically mentioned the strategy in some detail.

**Sally's strategies:**

I tried breathing, and told myself I could make it when I was backstage. I also tried self-talk, mental and visual rehearsal, leisure activities, contrived performance situation, and tapering off practice. I did them all often when I prepared for a performance.

**Future teaching:**

If I were a teacher, I would tell my students to do a dress rehearsal and find people to pretend to be judges or audience members. I would also teach them to focus their attention on something onstage, rather than looking at the audience or judges. It can reduce your nervous feelings. I use the same method.

However, it is important to observe that, in the last sentence, Sally mentioned, 'it can reduce your nervous feelings. I use the same method,' which can be explained as her desire to transfer her own learning strategies into a teaching context. In other words, once an

individual has identified his/her specific learning strategy as successful/helpful, this specific learning strategy may then be transferred to his/her teaching method. This argument can be also applied to Elsa's situation. Owing to the success of the strategy of imagining the performance situation during her study as a learner, she decided to adopt the strategy in a future teaching context, and also changed it to a teacher-led contrived performance situation, physically creating a rehearsal instead of doing it by imagination.

Dylan is a good example to support this argument. He did not read his PD but tried various MPA-coping strategies, such as self-talk, mental rehearsal, and creating a practice plan.

**Dylan's strategies:**

I told myself 'don't be nervous, it will pass eventually.' I also tried to imagine myself on stage or in the situation of the exam. But it did not help me reduce my nervous feelings. I went to the performance venue to practise, but I didn't invite my friends or tutor to rehearse with me. I created a practice plan, to force myself to practise every day.

**Future teaching:**

I will tell my students, 'don't be nervous' and advise them to create a good practice plan.

Dylan mentioned that self-talk and visual rehearsal did not help him to manage his MPA. Given the argument that individuals may use teaching strategies that they have identified as effective while learning, it is possible that Dylan did not mention strategies other than 'making a good practice plan' in his comments about future

teaching because this was the only strategy that he believed was helpful for coping with MPA.

The examples above demonstrate that participants acquired coping strategies through their own learning experiences. As the development of MPA management can be acquired in different ways, such as with assistant tools and support networks, the next section examines the implications of learning from the PD.

### **9.3 Participants learn strategies from PD and apply them to their teaching context**

Some participants acquired coping strategies through self-exploration and the process of metacognition. Once they identified a useful strategy, they would be able to transfer it to their future teaching method. Some participants reported that they learnt their coping strategies through the PD. These participants therefore intended to use these strategies in their own future teaching context. The example below is Florence's case. She read the PD and decided to adopt the contrived performance situation and breathing when coping with her own MPA. She also said she would apply these two strategies in future teaching contexts.

#### **Florence's strategies:**

I read the PD. When I knew exam venue was the concert hall, I felt so nervous and thought the task was really tough. As a result, before the exam, I tried a contrived performance situation, breathing, chatting to

friends, and discussing practice progress with classmates. Backstage, I was doing nothing but watching my classmate's performance, as she was the one before me.

**Future teaching:**

I will ask my students, why are you nervous? And I will teach them how to relax, such as breathing if they need it. I will help them contrive the exam situation through more discussion on performance stuff in order to get used to the actual feeling while performing on stage and to see what else they need to improve and prepare.

As previously discussed, the role of the PD may account for limited provision of information about MPA. Although it is an optional and assistive tool to help musicians manage MPA, it is still worth noting that the PD may have an effect on participants' belief about their future teaching skills. While they may have used a PD to develop metacognition using prior knowledge and problem-solving skills finding those that are most suitable for them, they could still apply the strategies in their teaching method as teachers. They may also help their students with the development of students' metacognition for managing MPA.

This finding is important for two reasons. As has already been stated, if the PD is used without professional help, it may become an important way for musicians to obtain useful information to help them cope with MPA; in turn, they will be able to help their prospective students. Secondly, in Roland's research some performers indicated that they had no formal training in coping with MPA and

obtained information about that from colleagues, teachers, and non-music professionals. Thus, it is possible for performers to gain unexplored information about MPA-coping strategies, which may not have been examined by researchers or professionals. As a result, if the original information about MPA-coping strategies is correct and is the result of research by professionals (i.e. information from the PD), the proper strategies may be learned and go on to help prospective students. If they have not been, the strategies may be counterproductive and lead to poor teaching.

In Wanda's case, she learned MPA-coping strategies from her PD and adopted strategies in preparing for her performance. She reported that she had heard about some of the coping strategies but had not noticed how important and helpful they were. After she read the PD, she started to pay attention to her MPA issues and attempted to find suitable strategies for herself. She then noticed that some strategies were helpful, but not for everyone. As a result, she stated that she would ask her students 'why do you think you are nervous?' and 'what do you really feel nervous about?' in order to provide her students with suitable managing strategies.

**Wanda's strategies:**

I read the PD and it changed my thoughts on performance preparation. I mean, I know more about how to solve my own MPA issue psychologically. I had heard of MPA-coping strategies before I read the PD, but at that time I did not realise its importance. All I wanted to do was practise, practise, and practise. After I read the PD, I had a rethink

and reorganised my plan for performance preparation, and I tried some psychological strategies. I found that some relaxation skills were helpful, but some were not. Maybe it depends on individual differences and needs. Anyway, now I have my own strategies to cope with MPA.

**Future teaching:**

Actually, I don't know how I would help my students cope with MPA. It is very difficult to tell. Perhaps I would ask my students, why do you feel nervous? What are you afraid of? Judges? Results? If my students did more with me, I could help them find their own suitable strategies. Probably, I would give them some examples, and my own example.

There is a strong relationship between teachers and learners about learning MPA-coping strategies, especially when adopting specific coping strategies. Wanda's example is different from Florence's in that, through the development of metacognitive skills, she realised that MPA-coping strategies could be different, depending on individual needs. As a result, she understood that it would be important to help her students in an assistant role rather than directly transmitting MPA-coping strategies. Although Wanda mentioned that she would share her coping strategies, she also stated that she might give other examples to her students. Whether assisting students to find their own MPA-coping strategies or directly transmitting the strategies to them, it seems that reflection on experiences as learners is most important for participants to apply in a teaching context (González, 2012).

Wanda's teaching strategy could be regarded either as a

collaborative teaching strategy, where teachers work together with students, or an inductive teaching strategy, in which teachers teach students how to become a musician instead of teaching them what to do, such as by transmission (Mills, 2002). Perhaps a PD would enlighten participants about how to teach their students by assisting them with the development of MPA management, playing a role similar to Daubney and Daubney's (2017) practical guide for teachers.

Some participants learnt MPA-managing strategies from the PD and attempted to find different ways to apply these strategies in their future teaching. For example, one participant said that she did not know how to apply the strategies in future teaching, but would like to keep the idea of the PD as reference or material for her own future teaching. She mentioned that she read the PD and adopted strategies that she had not learnt before, such as breathing, muscle relaxation, visual rehearsal, mental rehearsal, accepting mistakes, and cognitive restructuring. She reported that she referred to the PD when she needed to adopt strategies, as she could not remember all the strategies at the same time. As a result, she stated that she did not know how to help her students to manage their MPA before she had read and used the PD. Now, she could help her students. But she needed to read the PD again before teaching, as she still could not remember how the strategies worked.

**Elizabeth's strategies:**

I tried all the strategies in the PD as an experiment. Some of the

strategies were really helpful, especially breathing and muscle relaxation. I have always had a problem with short and quick breathing when I feel nervous. Actually, I don't really remember the details about the strategies. Can I look at my PD in order to answer your questions? [during the interview] Anyway, the PD gave me more ideas and a clear direction about how to manage my MPA.

**Future teaching:**

Now I know these useful strategies. In the past, I didn't know how to tell my students. By the way, I am a teacher and I teach some primary and junior high school students. So, I told them practice makes perfect and do not think any negative thoughts. I don't know if it helped them or not. But now, I will share these strategies with them. I may have a look at the PD before I teach these strategies to them, as I can't remember how to do these strategies correctly and clearly.

It can be seen that Elizabeth understood the importance of transmitting the correct MPA-managing strategies to her students. As she was not familiar with the strategies she had used, or lacked practice in the strategies, she had to refer to the PD both when she needed to apply the strategies in her own learning and in a future teaching context. Wanda and Elizabeth share a common perspective, in that they would like to provide various strategies for their students so that the students can have flexible choice of strategies and find the most suitable one. Wanda and Elizabeth's thoughts of providing flexible choice come from their own process of learning MPA-managing strategies. This finding could link back to González's argument that reflection on experiences as a learner is most important for conservatoire students learning to teach without prior

teacher training. This then raises a question: if participants learn the strategies from their teachers, and think the strategies are helpful, can they identify which strategies have actually helped them so as to pass those strategies on to their prospective students?

#### **9.4 Participants learn strategies from teachers and transfer them to their own teaching context**

As previously discussed, there is a strong tendency for MPA-coping strategies to be passed from teacher to student. Margaret's example shows how teachers directly transmit their own MPA-coping strategies, learned from unresearched resources when they were students. As a result, some unevaluated information about MPA-coping strategies, not studied by researchers or professionals, could remain in the teaching and learning cycle. Here are two examples of participants learning specific strategies from their teachers that they would transmit to their prospective students.

##### **Margaret's strategies:**

Before the concert, I tried to imagine a picture of me performing on stage and reading the score at the same time. Backstage, I took a deep breath as well as eating a banana, as my teacher said it could help me feel calm. And it did work. My teacher said eating a banana could help manage anxiety symptoms. I tried it, as it is not a medicine, so I don't need to worry. I am not sure if it helped or not, but at least I did something to cope with MPA.

##### **Future teaching:**

If I were the teacher, I would ask my students to perform in front of

strangers or their cohorts frequently. I would also tell them to eat some fruit. More than that, it is better to do some extra activities to distract yourself from stress and anxious feelings, such as exercises.

It is interesting that Margaret adopted mental rehearsal during her performance preparation but would like to help her students with a contrived performance situation, as did Elsa. It may be because, owing to the successful strategy of imagining the performance situation in her own study, she decided to transfer this strategy, but in a more physical context such as the contrived performance situation, rather than bringing the strategy of imagining into her future teaching context. Another successful strategy that Margaret used that she would like to transmit to her prospective students was eating fruit. She said, 'Backstage, I ate a banana, as my teacher said it can make me feel calm and it did work' and 'I will tell my students to eat some fruit, such as bananas.'

Margaret's teacher just mentioned that eating bananas could reduce the symptoms of MPA, which seems to lack an explanation of how a banana could actually help. When speaking of her future teaching context, Margaret also mentioned that she would recommend that her students eat some fruit, which could include other types of fruit. The scientific evidence that examines why eating a banana might reduce anxiety was discussed in Chapter 6 (see Chapter 6.3.e, p. 258). Given that the scientific studies did not suggest that all

types of fruits would have the same effect, it seems that this unsubstantiated information could be misunderstood or explained in different ways through the teaching and learning cycle. This finding can be linked to previous arguments that: 1) there is a strong relationship in learning MPA-coping strategies between teacher and learner in one-to-one tuition; 2) uncertain information about MPA-coping strategies may be transmitted through the teaching and learning cycle; and 3) participants' own learning experiences may influence their teaching methods.

Cheryl's example could link to the first and third arguments above. Although she learned the strategies from various sources, she would apply only the strategy she learned from her teacher in her future teaching context.

**Cheryl's strategies:**

I learned some strategies from the PD. It reminded me that my teacher taught me to write down positive thoughts and read them when I lost confidence. My teacher also taught me to start to play the part of the repertoire I was most confident about when I felt nervous. It is just like some people starting with simple questions then moving onto difficult ones in an academic exam.

**Future teaching:**

I would share my own coping experience with my students. For example, I might tell them to think about what part of repertoire they are most confident about playing and tell them to try to play it when they feel nervous or have lost confidence. If that did not work, I might suggest other strategies.

Cheryl mentioned that 'I would share my own coping experience with my students,' which suggests that participants' ways of learning how to manage MPA may be the most influential factor in determining their own teaching pedagogy. The influence of teachers' suggestions of MPA-coping strategies is more crucial than the role of the PD during the participants' learning process, and the strategies that may pass from one generation to the next. Therefore, from my perspective, if teachers could provide helpful MPA-managing strategies, the role of the PD could become a tool to assist students in learning or practising strategies. The MPA-coping strategies that teachers provide may play the most important role in participants' future teaching contexts; however, there are still exceptional examples in which participants did not transfer or apply the strategies in their future teaching context, even when they acquired the strategies from their teachers.

### **9.5 Participants are unable to transfer or apply their own MPA-coping strategies in teaching context**

Dolly mentioned that she was managing MPA by using strategies such as mental rehearsal, physical rehearsal without an audience presence, and creating a practice plan. When speaking about future teaching, she had no idea and could only think of giving oral encouragement to her students.

#### **Dolly's strategies:**

Well, I did not read the PD. I forgot I had this tool. I told myself 'don't be nervous, it will pass eventually.' I also tried to imagine myself on stage or in the exam situation. I also went to the performance venue to practice, which my teacher suggested. But I didn't invite friends or my tutor to rehearse with me. I created a practice plan to force myself to practice every day.

**Future teaching:**

I don't know... I might tell my students, 'don't be nervous.'

Dolly reported that she had not read the PD, as she had forgotten she had it. The PD might assist participants with self-monitoring and self-recording their positive behaviour. It could encourage people to keep positive behaviour and repeat it (McNamara, 2001). Through this process, the experiences of successful strategies may be reinforced. In this way, once individuals have identified that a specific learning strategy is helpful, this strategy could become part of the individual's own teaching pedagogy. As a result, Dolly could gain more ideas about how to teach her students through her previous learning experiences as a student if she adopted the PD during her own learning process.

It is also possible that Dolly could still develop her own coping strategies through metacognitive processes. As a result, she might not transfer her MPA-coping strategies to future teaching contexts. If this was the case, it might be irrelevant to use the PD. Given the argument above, that she had not identified the most helpful MPA-coping strategies during her own learning, the teacher's suggestions

regarding going to the performance venue to practise may not be suitable for her to transfer into her future teaching context either, because she may not think this strategy was helpful.

There are examples other than Dolly's where participants adopted MPA-coping strategies during their own performance preparation as students, but did not think of transferring the strategies to their future teaching. All of these participants mentioned that they would use oral encouragement with their students (e.g. you can make it, don't be nervous, the performance is nothing, and you are the best).

It is difficult to explain from the data why the participants did not report that they would teach the MPA strategies to their students even if they knew how to deal with their own MPA. It could be because of poor learning outcomes of MPA strategies and undeveloped metacognitive skills. Poor learning outcomes of MPA strategies are where participants do not fully understand the function of the strategies or do not agree with their importance. As to the development of metacognitive skills, this is where participants have adopted strategies but are still learning and finding their own MPA-coping strategies and may not be fully aware of how they work for them. Either way, the outcome of learning MPA-coping strategies and the development of metacognitive skills for managing MPA is relevant to an individual's future teaching pedagogy.

## 9.6 Summary

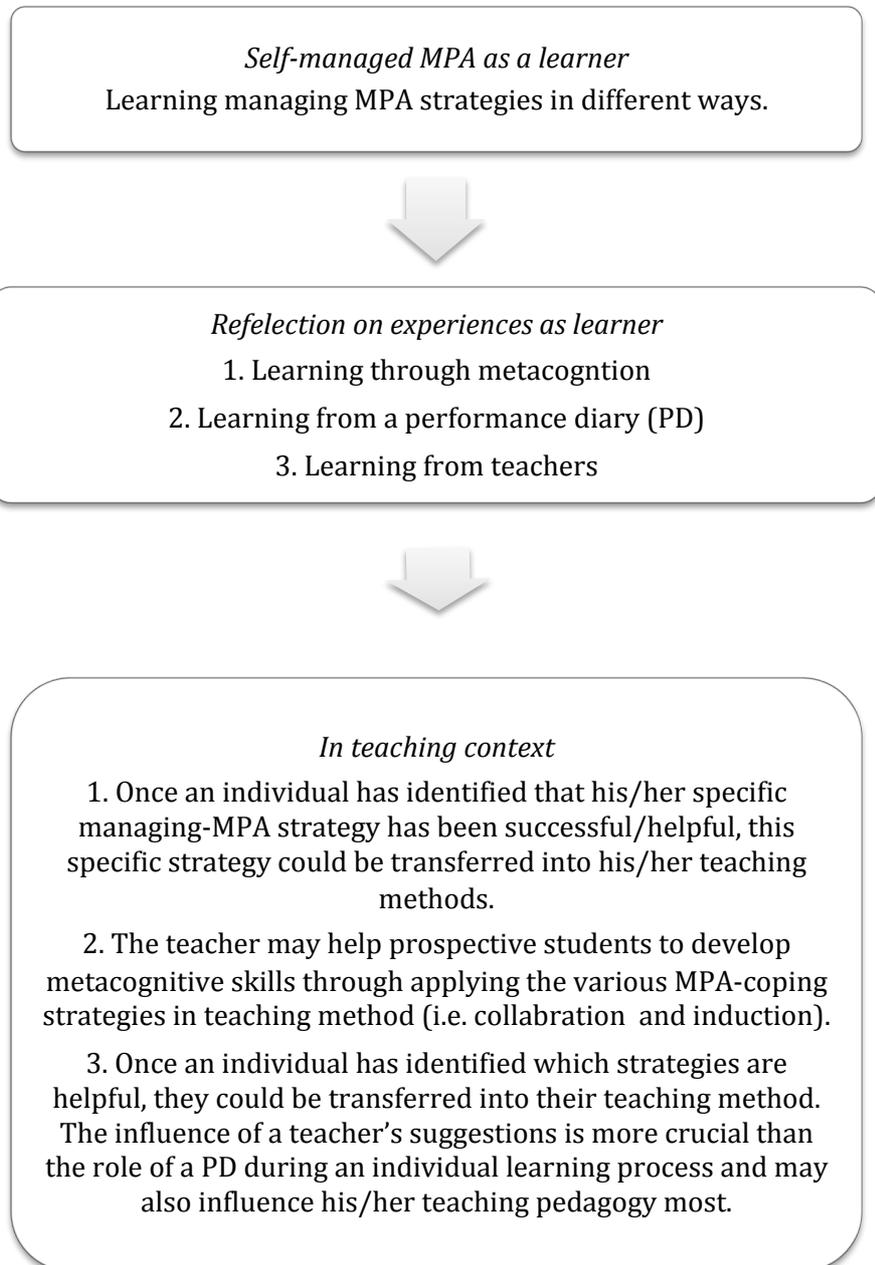
Figure 7, below, summarises the implications of managing MPA in regard to the relationships within the learning–teaching cycle. I have found that participants learn MPA strategies through metacognition, performance diaries, and their teachers, either formally as MPA-coping strategies or informally as part of their standard pedagogy. These strategies could manifest in different ways in the participants’ future teaching careers. Participants learning through metacognition could transfer specific MPA-coping strategies into their teaching context once they have identified the those they find most helpful (see the first point in Figure 7, below).

As to participants learning MPA strategies through the PD, they could apply various strategies in their own teaching methods, such as helping students’ development of metacognition for coping with MPA through a collaborative or indicative teaching strategy (see the second point in the Figure 7, below). This could be because the PD may enlighten participants as to how to teach their students by assisting them in developing their own management of MPA through reflection on their experiences as learners.

Finally, the influence of teachers’ suggestions of MPA-coping strategies is more crucial than the role of the PD during participants’ learning processes as students. Once individuals identify the best strategies, learnt from their teachers, they can transfer these

strategies to their own teaching without changes, which is similar to learning through metacognition (see the third point in Figure 7, below). We should be aware that if a teacher gives unsubstantiated information about MPA-coping strategies (i.e. eat a banana or any type of fruit), this could be transmitted through the teaching–learning cycle, and this uncertain information may pass from one generation to another. Overall, individuals’ MPA-coping strategies, obtained by learning in different ways, may change their pedagogy during their careers and the strategies may remain in a learning–teaching cycle from one generation to another. Therefore, we may need to consider how to transmit knowledge about MPA and its coping strategies into the cycle in relation to different teaching styles.

*Figure 7: Implication of learning self-managed MPA strategies and teaching pedagogy*



## **Chapter 10. Limitations of the research, implications, suggestions for future research, and recommendations for practical application**

### **10.1. Introduction**

This research has explored the ways that college students self-manage MPA through metacognitive processes and support networks in the conservatoire environment (e.g. peers and teachers) and with various external resources (e.g. a performance diary). Although participants' year level in relation to their ability to cope with MPA isn't a simple algorithm (i.e. students in higher year levels are better to cope with MPA), it was found that the participants in higher year levels were more able to reflect by themselves on the strategies used (either learnt from support networks or the PD), as well as plan and monitor their practice during performance preparation in order to manage their MPA. This finding may explain Hamann's argument (1982) that students with the highest years of formal study performed better under anxiety-producing performance conditions than students in lower year levels (see also Chapter 2.1.c, p. 47). However, it should be stressed that this varies, depending on the individual's development of metacognition in relation to MPA management rather than their educational level alone.

It was also found that some one-to-one tuition teachers embedded MPA interventions into their teaching curriculum.

However, the MPA-coping strategies introduced to the participants were like pieces of a puzzle scattered across the school, as opposed to being coherently fitted together. Thus, institutions could help participants put the pieces of the puzzle together into a complete picture, which could be a structured programme offered to all students. In addition, because such an MPA self-management programme would likely require the participation of teachers, students, and institutions, my suggestions for future research will vary depending on the role of participation in assisting with college musicians' MPA self-management. Based on the findings in Chapter 9, suggestions for developing a structured MPA management programme will need to consider the impact of MPA self-management on the teaching–learning cycle. Before discussing the implications, recommendations, and potential applications of this research, it is important to acknowledge the limitations.

## **10.2. Limitations of the research**

This research was concerned with understanding how college musicians cope with MPA through self-management and examining coping strategies and their impacts through a 'naturalistic study.' However, there are a number of limitations that need to be taken into account. Firstly, this research did not investigate MPA-management issues from the teachers' or the institution's perspectives. As the data

found that there are various ways in which college musicians could acquire MPA-coping strategies, the institution and teachers' input into the way students manage MPA would need to be explored, and perhaps could have given useful suggestions from all perspectives and provided a wider picture of MPA self-management. This would enable research to explore how MPA self-management could be improved at this school, thus developing educational practice by using research evidence.

Secondly, the data may not be representative of all college musicians in Taiwan, as the data in this study was drawn from one school only. Different schools could have different learning environments, course structures, and features: for instance, some schools might offer MPA-relevant courses. These factors affect the results in the investigation of college musicians' MPA self-management. My research findings may not represent all contexts, further limiting the generalisability of the conclusions.

Thirdly, there are many types of performance and the MPA strategies used may differ depending on the type of performance (see Chapter 6, p. 208). My data was only collected for three types of performance (concert, exam, and recital), which may limit the conclusions in terms of understanding how MPA-coping strategies are used in other types of performance, such as auditions. Finally, the participants in this research were all undergraduate students. In

order to have a complete picture of MPA self-management in this school, future research might need to consider postgraduate students' MPA issues, which my research did not explore. These are limitations in this current research provide a starting point for future research.

Finally, data collection through phone interviews may bring both advantages and disadvantages. The limitation is that the researcher could not capture the nonverbal cues from participants, such as description of specific strategies that participants did not know terminology for or description of the performance environments (e.g. interaction with audience) during their performance. Yet, conducting a phone interview can create a rapport and allows for easy time scheduling for both researcher and participant (Farooq, 2015): both can talk freely by selecting a preferred interview venue where they are comfortable and relaxed (Farooq, 2015). If participants regarded the process of coping with MPA or sharing performance evaluation as sensitive issues, a phone interview can provide more details for the researcher's data collection than a face-to-face interview.

### **10.3. Discussion of filling current research gap**

By combining the findings from the previous data-presenting chapters (i.e. Chapter 6-9), a picture emerges of the way that the students in this study perceived and self-managed MPA. This picture

can be viewed and discussed in relation to three overarching narratives: 1) a detailed account of the strategies used; 2) the conceptual change of MPA management and the role of the performance diary in this change; and 3) the learning environment in the music college. These three narratives have strong connections with each other. For example, the MPA-coping strategies used may be influenced by learning environment (e.g. peers or teachers), by assistive tools (e.g. the performance diary), and by a conceptual change regarding MPA and its management. In addition, the development of metacognitive skills for managing MPA may also relate to these themes. For instance, the performance diary may be seen as an optional and assistive tool to support participants' awareness of MPA which allowed them to start to manage it rather than distracting them from being anxious. In turn, this might impact musical learning.

The fact that the higher-year-level students could more clearly understand how to organise their preparations for performance in terms of managing MPA and found it easier to identify their strengths and weaknesses than did the lower-year-level students could be seen as being the result of better developed metacognitive skills. The role of the PD might be changed from being that of introducing students to MPA and self-management strategies to becoming a tool for reinforcing ideas.

The other influencing factor supporting the development of metacognition is the role of teachers (see Chapter 7.4, p. 293). According to Hallam and Bautista (2012), the function of the teacher in the musical learning process at any educational level is to support the development of metacognition. The importance of teacher-led direction in performance preparation, either in coping with MPA or enhancing technical skills, has been found in this research to be particularly strong in the lower years. The data shows that teacher-led performance preparation had a positive effect, and that students reported that it was helpful both in learning to play their instruments and in coping with MPA (see Chapter 7, p. 270). Yet, we may need to be aware of the issues regarding students' development of metacognitive skills. As Burwell (2006) stated, some teachers tended more towards a transmission model of teaching, rather than facilitating students in taking responsibility for their own learning and developing their own skills of musical interpretation, which could result in an over-reliance on the teacher, as has been found in some of the interviews.

The interaction between student and teacher and its relationship approach to teaching style and learning is crucial (Gaunt, 2011). It may have an impact on students' learning, personal, and professional development (e.g. transfer a learning style into the teaching context), which future research could explore (Gaunt, 2011).

Hallam and Bautista (2012) stated that teachers could support students' learning by questioning and demonstrating, as well as the provision and discussion of a range of strategies. Most important is to ensure that students understand what is required, provide appropriate opportunities for feedback and reflection, support the development of metacognition, and motivation (Hallam & Bautista, 2012).

### **10.3.a. Detailed account of strategies used**

Research in managing performance anxiety has explored useful strategies, including cognitive strategies, behavioural strategies, and cognitive behavioural strategies (Steptoe & Fidler, 1987; Steptoe, 1989; Wolfe, 1990). However, the existing research has provided limited details of how the strategies work in practice, as well as how they are applied in managing MPA and musical practice. This may be because some studies have adopted quantitative methods (e.g. a survey) to understand the most common strategies used by musicians. For example, the results from Steptoe's study found that during the period prior to an important performance, 28% of professional musicians reported that they tried to distract themselves, 38% of musicians engaged in deep breathing, and 23% used muscle relaxation. However, details about how participants distracted themselves from being anxious, what absorbing activities they did,

when they adopted deep breathing and muscle relaxation, and what types of performance and performance environment they adopted these strategies in, were all lacking.

In my research, I have explored the strategies used in detail by discussing them through a specific timeline leading up to a performance, from four weeks before right up to the actual performance itself, in relation to various types of performance (i.e. concert, exam, and recital). I found that the strategies used were influenced by different factors, such as type of performance, time periods, and performance environment (i.e. audience or judges present), bringing different research insights to those previously obtained by other researchers. Accordingly, such factors need to be considered not only when students adopt MPA-coping strategies, but also for researchers when they investigate relevant studies, such as the effectiveness of coping strategies and MPA management.

Roland's study in 1994 made the same argument, that studies related to performance anxiety-coping strategies using a survey approach do not allow for an exploratory and detailed account of the strategies used by successful performers in managing performance anxiety. As a result, in his research, he took a qualitative approach and explored the strategies through semi-structured interviews, providing details about the strategies used.

Nevertheless, there are still two issues with his study. Firstly,

in Roland's research 'performance context' tends to be more likely to be 'concert' rather than 'exam' or 'recital'; his data is presented using the terms 'concert' and 'performance.' In addition, the types of performance in his research included both solo and ensemble, but he did not discuss the strategies used for each. My research shows that the type of performance and the strategies differ in different performance environments, and also that these environments may influence participants' strategies. For example, participants adopted more motivational self-talk (MST) than instructional self-talk (IST) in exam preparation, whereas they adopted more IST than MST in concert preparation. The difference in strategies used in concert and exam preparation may result from the experience of an exam situation being more competitive than a concert (see discussion in Chapter 6.2.a, p. 213).

In my study, I found as well that, owing to cooperation with other chamber music partners, preparing for chamber music performances may trigger numerous contrived performance situations more regularly and earlier than in preparing for solo performance. This is in comparison to Roland's research, in which he only mentions that 'a majority of performers used self-talk as a way of preparing for performance' and that simulating the performance was seen by performers as essential in long-term preparation and the management of MPA (Roland, 1994).

This raises a question: if the performance in Roland's research had been an exam rather than a concert, would the results have been different? However, the answer to this is not clear because some performance situations in other studies may be similar to the school exam in my research context rather than the formal school concert, but they have not made this distinction. Therefore, as is evident from my research, there would be greater clarity if researchers (i.e. Liu, 2016; Roland, 1994; Fehm & Schmidt, 2006; Yen, 2006) distinguished and identified the performance context before discussing the strategies used.

Secondly, the timeline of the preparation stage may influence the strategies used by the musicians. Although Roland has argued that psychological strategies tend to be used more frequently in short-term preparation, and musical strategies were used more in long-term preparation, the definitions of long-term and short-term are unclear in relation to the specific timeline (e.g. during the week before performance, on the day, and backstage) in his research. For instance, Roland found that a majority of performers used self-talk as a way of preparing for performance in order to affirm the performer's sense of self-worth and preparedness, especially when the performance was getting closer.

In my research, either MST or IST was reported when the performance was close, especially in backstage and onstage. But the

vocabulary of the self-talk used in preparation for concerts and exams was different. For instance, participants tended to use more motivational words on stage when they were in the exam and more instructional words on stage when they were in the concert performance. Participants reported using IST on stage to avoid engaging with those watching them perform during the concert, whereas they need to encourage themselves in order to increase their self-confidence and affirm their self-worth during exam situations. This can be attributed to the competitive nature of the exam situation. This implies that students may have different level of MPA or manage different MPA-contributing factors depending on the performance context, and use different strategies to manage it.

One of Roland's participants, an opera singer, mentioned that he/she would use positive self-talk with motivational words if it was a 'big occasion,' but it is not clear what types of performance and performance environment made for a 'big occasion.' Based on my narratives, if the 'big occasion' is a performance in a highly competitive situation, such as an exam or audition, it can be supposed that the participant used MST as the performance date came closer. However, as there is a lack of detail in Roland's data, the use of self-talk could change depending on the type of performance and performance environment. Some performance environments may be similar to either a formal school concert or exam.

What is clear from my research is the way the learning environment impacted upon the strategies used, whether the students had previously used them or were introduced to them during the research. In addition, my research also demonstrated the ways in which the students managed their MPA and the way that the conceptual understanding of the strategies changed as the study progressed. Metacognition is important here, and this leads to the second narrative – the role of the performance diary.

### **10.3.b. The conceptual change of MPA management and the role of performance diary**

At the start of my research, most of the participants reported that they had no formal training in coping with MPA, and that the school provided limited information on what MPA was and how to deal with it. Although some participants reported that they had heard of it and had learned a few coping strategies from other external resources (e.g. friends, teacher's personal experience, books, and television), the main method of gaining suitable MPA-coping strategies in response to personal needs was through self-exploration and 'learning to learn,' or so-called 'metacognition.'

Hallam and Bautista (2012) found that, in the musical learning process, teachers play a role in supporting the development of metacognition. However, if both the teacher and the school are unable

to provide the information on coping with MPA that students require, other ways are needed of introducing students to MPA-coping strategies. This research found that providing information about psychological strategies in a performance diary could help participants become aware of MPA, giving them the direction they needed to find their own way of managing MPA, and supporting them in developing the metacognitive skills they needed to cope with MPA, especially for first year undergraduate students (see Chapter 8, p. 318).

In addition, one of the most important skills for the development of metacognition has been shown to be 'self-monitoring,' as metacognitive strategies are concerned with the planning, monitoring, and evaluation of learning (Hallam & Bautista, 2012). The performance diary is also a tool to assist participants' self-monitoring and self-recording of positive behaviour in certain strategies (e.g. motivational self-talk and cognitive restructuring). McNamara (2001) found that the benefit of self-recording is that the recording of positive behaviour encourages people to adopt the behaviour and repeat it, as the act of recording the positive, desirable behaviour functions as positive reinforcement.

Another issue is that some participants reported that MPA was problematic, while other participants believed it rendered the performance more exciting. In Roland's research, he found that his participants viewed performance anxiety as a natural part of

performing which could raise the quality of the performance. But most of his participants thought it would be of benefit to provide assistance to help them manage MPA, or at least to understand the processes involved in MPA. This contradiction was also found in my research. Yet, understanding the processes involved in MPA can be seen as a way to help musicians develop the metacognitive skills they need to manage their practice and performance, whether the musicians experience MPA or not. Besides, some MPA-coping strategies may be multifunctional, managing both practice and anxiety for some participants, such as mental rehearsal. As a result, it may be beneficial to learn and gain a basic understanding of MPA and its coping strategies through a PD.

Other researchers have developed a booklet for music teachers to assist students in dealing with MPA over different time periods and to embed the strategies through creating a positive and supportive climate, such as through parental support (Daubney & Daubney, 2017). According to Daubney and Daubney (2017) music teachers could provide practical strategies to integrate into the development of their students' MPA management over time by incorporating such strategies into music lessons. Since MPA-coping strategies are varied and suitable for a wide range of students, it is important that it is left to the professional judgement of a teacher to decide what adaptations may be required, based on knowing their students well (Daubney &

Daubney, 2017). However, we should be aware that while some teachers understand the importance of their role in helping students manage MPA, other teachers may be unaware of it. Moreover, some teachers may prefer to share their personal strategies as opposed to reading from a practical guide. If that is the case, the PD may fill this gap and help students develop their own MPA management.

### **10.3.c. Learning environment in the music college**

Ford (2013) stated that the traditional method of developing music students' ability to perform is receiving one-to-one tuition that focuses on musical challenges, mastery of technical skills and engaging in solo practice. These imply isolated pursuits, yet music students are expected to perform in public and engage with their audience. Therefore, the traditional learning environment is different to the performance environment. As a result, this traditional training process creates a gap between the learning environment and the performance environment, and this could cause issues such as MPA. Ford suggested that instrumental tutors should address performance matters to a greater extent in lessons (see also Daubney & Daubney, 2017; Fehm & Schmidt, 2006; Patston, 2014).

This argument is supported by my research in relation to the role that teachers play in supporting students to contrive performance situations. Some participants' teachers organised a small

group class or contrived the performance situation during one-to-one tuition (see Chapter 7.4, p. 293). Participants reported that adopting this MPA-coping strategy in their instrumental lessons helped them manage MPA and become more familiar with the performance environment. However, I have argued that during the recital preparation period, participants (year four students only) reported that they had only one-to-one tuition, and that even when they contrived the performance situation it was one-to-one, with a teacher or accompanist.

It is possible that in the later stages of undergraduate study, final year students have a certain capacity to manage the causes of their anxiety, such as audience presence, as they are more familiar. As a result, students are concerned with musical technique, which only requires that they seek professional feedback from experts (see Chapter 6, p. 208). Conversely, first year undergraduate students may need the most help learning about MPA issues because of their inexperience in college-level performances. Apart from a teacher's help, assistance with developing MPA management could be acquired from support networks, in working with peers, accompanists, or other assistive tools (i.e. the performance diary), as I have found in my research.

Ford (2013) argued that changing a few selected pedagogical practices might have limited effects, given the argument that the way

performance is conceptualised influences the way it is taught. She presented the example that conservatoire technical exams and recitals adjudicated by critical teaching panels rather than the public encourage students and teachers to view performance as a reproducible event, which serves as a strategy for survival and success. She then suggested that to align assessment with a different concept of performance would require criteria to be rethought or the format of final recitals to change (e.g. final performances to take place in public venues).

Dunkel (1989), who researched the audition process by focusing on anxiety management and its coping strategies, argued that one of the principles of cognitive therapy is that all moods are created by cognition or thoughts.

Cognition refers to the way you look at things; that is, your perceptions, mental attitudes, and beliefs. This includes the way you interpret things, revealed by what you say about something or someone to yourself. You feel the way you do right now because of the thoughts you are thinking at this moment. In my research, the context of the recital was open to public, flexible in content (i.e. students could make a speech at the end of performance and audience members could present flowers), and the panellists were present but not seated in specific seats.

However, even where the format of the final recital was flexible

and similar in form to a public event, the participants still reported that they needed strategies (i.e. contrived performance situation) working with teachers or peers to cope with causes of anxiety and to address performance issues, such as fear of audiences or the presence of critical teaching panels.

It can be assumed that changing the format of a recital may not influence the method of teaching. Instead, teaching methods may respond to the learners' or performers' needs so as to influence their concept of performance. For example, if a student fears the presence of judges or an audience, the teacher can help their student to contrive the performance situation by creating a small audience during their one-to-one instrumental lesson. Gradually, students may come to think the 'performance' itself is a recreation of the situation in instrumental lessons and apply this concept in the 'exam' situation as well. Besides, it might be possible to divide the conceptual change in managing MPA according to educational development rather than age.

One change of concept seen in my research is how evaluation is perceived, which changed from correcting mistakes (year one and two students) to focusing on the performers themselves or their concept of the exam (year three and four students). Some senior student participants viewed the exam as a learning process or an examination of their efforts, which was a positive interpretation of the concept. As a result, the concept of performance may be conceptualised by

performer's thoughts and may be influenced by pedagogical practices, which could support Dunkel's argument. Therefore, it is possible to bridge the gap between the traditional method of training musicians (e.g. one-to-one tuition or solo practice) and engaging in the public performance environment through embedding strategies (e.g. the contrived performance situation) into pedagogical practice, especially into one-to-one instrumental tuition.

As previously mentioned, González (2012) stated that many students entering music academies strive to become professional performers or composers. However, most musicians who follow musical training as performers sooner or later also carry out pedagogical work. Legette (1997) stated that in many instances, students are pushed into student-teaching situations and subsequent 'real life' teaching situations without the requisite training in behavioural management. Although these studies focus on instrumental teaching and musical techniques, some MPA-management strategies may be embedded into one-to-one instrumental tuition as part of instrumental teaching strategies.

The institution in this research provided a teacher-training programme as an optional module. However, it might only contain pedagogy on teaching musical techniques without incorporating MPA-managing strategies. This might also be the case in other institutions. In the current research, some of the participants'

instrumental teachers provided MPA-management strategies without clear explanations or offered personal tips without a theoretical framework. It can be assumed that these teachers did not have training in managing MPA when they were in their teacher-training programme.

González (2012) examined how conservatoire students learn to teach without prior teacher training and found that participants demonstrated that, even without teacher training, they had already acquired convictions and made choices, developing a certain pedagogical identity, their own way of teaching and their preferences, as a result of their first socialisation, their own experience as learners, and their own teaching experience. Moreover, reflection 'on all their experiences as learners' was most important for González's participants in order to teach with the inner conviction that came from their personal experiences of the effectiveness of a certain way of surmounting a technical difficulty or developing a new skill.

Given the previous arguments that a teacher has a crucial role in assisting students' MPA self-management, that teachers without training may use their own learning experience, and that their MPA-coping strategies could be embedded into one-to-one instrumental tuition, it can be assumed that learners' experiences of managing MPA may potentially become one of their teaching strategies inherent in one-to-one instrumental tuition when a learner

becomes a teacher. This would explain why many students were aware of the strategies presented in the PD, but did not necessarily know where they came from or who had introduced them – they had become part of the standard pedagogy of their teachers.

#### **10.4. Suggestions for future research**

Following this current study, it would be interesting to explore the specific MPA-coping strategies on a wider scale, for example those used in preparation for different types of performance and performance environments in relation to a range of factors, such as different time periods for the strategies being used. This could also include postgraduate students and consider the teachers' perspective. Another issue worth exploring is how knowledge of MPA and MPA-coping strategies is transmitted into and through the learning-teaching cycle and incorporated into pedagogy in relation to different teaching styles. Also, the current research found that individuals' MPA-coping strategies, acquired through learning in different ways, may influence students' future teaching (see Chapter 9, p. 363).

Research investigating how educational programmes might support student teachers in incorporating MPA-coping strategies into their pedagogy and evaluating the effects of such a programme, both from a teaching perspective (i.e. college musicians as learners) and a learning perspective (i.e. college musicians as teachers), would be

fruitful. The current research found that it would be helpful if students could become aware of the issue of MPA earlier in their studies (i.e. the first year as an undergraduate student) in order to help the development of the metacognitive skills needed to cope with MPA.

As many musicians begin instrumental learning in early childhood, future research could also consider how to adapt MPA-coping strategies for children and how to support them in managing MPA via the field of early childhood music education, for example, how to foster a stage performer with parental involvement.

#### **10.5. Recommendations for applications**

As a result of this research, there are various applications for practice and recommendations, such as institutions offering support networks or relevant courses, and providing assistance tools to students and teachers learning about MPA from practical guides developed by professionals and researchers. The results of this study could be applied to practice in four categories: college musicians, teachers, institutions, and researchers.

##### *College musicians*

- Long-term practice plan

It is important to set a long-term practice plan in the early stage of the performance preparation period that lasts until after the performance

by incorporating both musical skills and psychological strategies. This is because most of the MPA-coping strategies need to be practised in advance, adopted on a regular basis, and used after performance (i.e. accepting mistakes).

- Peer support

The role of peers is a crucial resource in helping with MPA self-management. For example, adopting physical activities with peers can help musicians persist with their exercises. Sharing life experiences and empathy through 'chatting' and peer-learning from each other, as well as supporting each other through practice sessions by adopting contrived performance situations, may also help them to self-manage MPA. However, it should be noted that the legitimacy of information regarding MPA-coping methods from peer suggestions needs to be considered before adopting any strategies, such as taking beta-blockers without professional advice to manage MPA symptoms.

In order to introduce these recommendations to students it would be possible to develop a short, condensed overview of my research and to highlight these two elements through a seminar or a workshop. It would also be possible to disseminate the performance diary to college musicians as an external resource, with permission from the institutions. Beyond that, the form of the PD could be further developed as a mobile application, e-book, or online resource.

### *Teachers – Strategies used in the curriculum*

- Providing information about MPA

Teachers could engage not only with the technical aspects of instrumental teaching, but also offer other information that included broader aspects of music study and performance, such as issues regarding MPA, rehearsal techniques, diet, exercise, and practice plans, during their one-to-one teaching pedagogy.

It should be noted that it is important to have a clear explanation or introduction to the theory behind the strategies, in terms of how they work, their importance and functions, in order to avoid negative effects if students misunderstand how to implement the strategies or neglect the importance of certain strategies.

- Small group class

Teachers could organise a small group class for students by adopting a contrived performance situation in order to help them manage MPA.

- Discussion of the MPA issue with students

Teachers could help students' development of metacognition while discussing issues of MPA with students during one-to-one tuition, for instance by helping students understand their strengths and weaknesses, as well as the appropriate way to learn and manage MPA during performance preparation.

There are many ways to make teachers aware of MPA as an issue, such as developing a teaching guide through different formats

(possibly the same formats mentioned in the recommendations for college musicians). This could also support students' future teaching. It would also be possible to attend teachers' conferences and give seminars, for example to the Incorporated Society of Musicians (ISM) and other relevant teachers' conferences in Taiwan, which many performance teachers, instrumental and vocal teachers attend.

### *Institutions*

- Offering broader studies in all aspects of music courses

Institution could offer seminars, workshops or courses (e.g. a psychology of music module), which related to the issue of MPA to help students become more aware of MPA, rather than focusing on the technical aspects of instrumental learning.

- Suggesting strategies for one-to-one tuition teachers

Institutions could provide suitable MPA-coping strategy resources for one-to-one tuition teachers to incorporate into regular instrumental tuition, such as *Performance Anxiety: A Practical Guide for Music Teachers* (Daubney & Daubney, 2017).

- Providing resources or assistant tools for students

Institutions could consider providing self-help booklets (e.g. the performance diary used in this research) for students as an assistant tool, or related resources, to help them develop MPA metacognition or as a guide to help them self-manage MPA, as well as bringing their

attention to the issues of MPA, especially for year one students (see Chapter 8, p. 318). This could be linked to other researchers' suggestions that positive cognitive strategies are an important part of MPA intervention programmes (Spahn *et al.*, 2015).

### *Researchers*

- Practical guide

Researchers could not only write academic papers regarding the effects of the strategies, but could also consider providing a practical guide for musicians to refer to and for music educators to use to support their students in various teaching and learning environments.

- MPA management: A wider dimension

Researchers may not only need to consider how to offer studies to help students with MPA management, but also to consider MPA issues in relation to how colleges support their students' preparations for performance in their own teaching methods. This could involve incorporating MPA issues with 'instrumental and vocal teaching' modules or other relevant courses in conservatories. Further research could also investigate the impact of the teaching–learning cycle on such programmes and its implications.

In order to disseminate this information to other researchers, it would be possible to present the research through conference papers, journal articles, membership of professional bodies such as the

International Society for Music Education (ISME) forum on musicians' health and wellness, which is well-attended and provides an opportunity to share the research found in this study, and its recommendations.

## References:

Abel, J. L. & Larkin, K. T. (1990). Anticipation of performance among Musician: Physiological arousal, confidence, and state-anxiety.

*Psychology of Music, 18*(2), 171-182.

Alrahamneh, A. A. & Elbokai, H. T. (2011). The effectiveness of visuo-motor behavior rehearsal (VMBR) to reduce the anxiety and to improve self-concept for athletes with special needs. *International Journal of Psychological Studies, 3*(2), 276-281.

*Journal of Psychological Studies, 3*(2), 276-281.

Appel, S. S. (1974). *Modifying Solo Performance Anxiety in Adult Pianists*. Unpublished Ph.D. diss. Teachers College, Columbia University, United States.

Appel, S. S. (1976). Modifying solo performance anxiety in adult pianists. *Journal of Music Therapy, 13*(1), 2-16.

Atlas, D., Taggart, T. & Goodell, J. (2004). The effect of sensitivity to criticism on motivation and performance in music students. *British Journal of Music Education, 21*(1), 81-87.

Auerbach, S. M. (1986). Assumptions of crisis theory and a temporal model of crisis intervention. In S. M. Auerbach & A. L. Stolberg (eds.), *Crisis Intervention with Children and Families* (pp. 3-37). Washington, DC: Hemisphere.

Aufegger, L., Perkins, R., Wasley, D. & Williamon, A. (2017). Musicians' perceptions and experiences of using simulation training to develop performance skills. *Psychology of Music*, 45(3), 417-431.

Ayres, J. & Hopf, T. (1992). Visualisation: reducing speech anxiety and enhancing performance. *Communication Reports*, 5(1), 1-10.

Bandura, A. (1997). *Self-efficacy: The Exercise of Control*. New York: W. H. Freeman and Company.

Bartel, L. R. & Thompson, E. G. (1994). Coping with performance stress: A study of professional orchestral musicians in Canada. *The Quarterly Journal of Music Teaching and Learning*, 5(4), 70-78.

Baumeister, R. F. & Showers, C. J. (1986). A review of paradoxical performance effects: Choking under pressure in sports and mental tests. *European Journal of Social Psychology*, 16(4), 361-383.

Bautista, A., Echeverría, M., Pozo, J. & Brizuela, B. (2009). Piano students' conceptions of musical scores as external representations: A cross sectional study. *Journal of Research in Music Education*, 57(3), 181-202.

Bautista, A., Pérez Echeverría, M. P., Pozo, J. I. & Brizuela, B. M. (2012). Piano students' conceptions of learning, teaching, assessment, and evaluation. *Estudios de Psicología*, 33(1), 79-104.

Bensimon, M., Einat, T. & Gilboa, A. (2015). The impact of relaxing music on prisoners' levels of anxiety and anger. *International Journal of Offender Therapy and Comparative Criminology*, 59(4), 406-423.

Bernhard, C. (2005). Burnout and the college music education major. *Journal of Music Teacher Education*, 15(1), 43-51.

Biasutti, M. & Concina, E. (2014). The role of coping strategy and experience in predicting music performance anxiety. *Musicae Scientiae*, 18(2), 189-202.

Biddle, S. J., Fox, K. & Boutcher, S. H. (2000). *Physical Activity and Psychological Well-Being*. London: Routledge.

Bird, E. I. & Wilson, V. E. (1988). The effects of physical practice upon psychophysiological response during mental rehearsal of novice conductors. *Journal of Mental Imagery*, 12(2), 51–64.

Bissonnette, J., Dubé, F. & Provencher, M. D. (2015). Virtual Reality exposure training for musicians: Its effect on performance anxiety and quality. *Medical Problems of Performing Artists*, 30(3), 169-177.

Bongers, P., Jansen, A., Havermans, R., Roefs, A., Houben, K. & Nederkoorn, C. (2013). Happy eating. The role of positive mood in emotional eating. *Appetite*, 71, 470-490.

Braden, A. M., Osborne, M. S. & Wilson, S. J. (2015). The effects of a psychological intervention on performance anxiety in secondary school music students. *Frontiers in Psychology*, 6, 195.

Brandfonbrener, A. G. (1997). Pathogenesis of medical problems of performing artists: General considerations. *Medical Problems of Performing Artists*, 12, 45-50.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.

Brooks, A. W. (2014). Get excited: Reappraising pre-performance anxiety as excitement. *Journal of Experimental Psychology: General*, 143(3), 1144-1158.

Browne, S., Clarke, D., Henson, P., Hristofski, F., Jeffreys, V., Kovacs, P. & Simpson, D. (2010). *PDHPE Application and Inquiry: HSC Course*. South Melbourne, Victoria: Oxford University Press.

Brugués, A. O. (2011). Music performance anxiety-part 2: A review of treatment options. *Medical Problems of Performing Artists*, 26, 164-171.

Bullis, J. R. & Hofmann, S. G. (2015). Adult anxiety and related disorders. In C. M. Nezu & A. M. Nezu (eds.), *The Oxford Handbook of Cognitive and Behavioral Therapies* (pp. 291-311). Oxford University Press.

Burton, D. & Naylor, S. (1997). Is anxiety really facilitate? Reaction to the myth that cognitive anxiety always impairs sport performance. *Journal of Applied Sport Psychology*, 9(2), 295-302.

Burwell, K. (2006). On musicians and singers: An investigation of different approaches taken by vocal and instrumental teachers in higher education. *Music Education Research*. 9(3), 331-347.

Buswell, D. (2006). *Performance Strategies for Musicians*. MX publishing.

Caroline, J. (2015). *Eat yourself happy with food to improve your mood and mental health*.

Available from:

<http://www.mirror.co.uk/lifestyle/health/eat-yourself-happy-food-improve-6481185> [Accessed 20th September 2015].

Chaffin, R. & Lemieux, A. F. (2004). General perspectives on achieving musical excellence. In A. Williamon (ed.), *Musical Excellence: Strategies and Techniques to Enhance Performance* (pp. 19-39). New York: Oxford University Press.

Chen, H. S. (2004). *Effectiveness of the Special Music Programs in Taiwan for Educating Talented and Gifted Young Musicians*. Unpublished Ph.D. diss. University of Oregon, United States.

Chen, P. H. (2011). Guiding college students to develop academic self-regulatory skills. *Journal of College Teaching & Learning*, 8(9), 29-34.

Cheng, W., Hardy, L. & Markland, D. (2009). Toward a three-dimensional conceptualization of performance anxiety: Rationale and initial measurement development. *Psychology of Sport & Exercise*, 10(2), 271-278.

Chilton, G. & Leavy, P. (2014). Arts-based research practice: Merging social research and the creative arts. In P. Leavy (ed.), *The Oxford Handbook of Qualitative Research* (pp. 403-422). Oxford: Oxford University Press.

Chroni, S., Perkos, S. & Theodorakis, Y. (2007). Function and preferences of motivational and instructional self-talk for adolescent basketball players. *The Online Journal of Sport Psychology*, 9(1), 19-31.

Clark, M. & Hampson, S. E. (2001). Implementing a psychological intervention to improve lifestyle self-management in patients with Type 2 diabetes. *Patient Education and Counseling*, 42(3), 247-256.

Clark, T., Lisboa, T. & Williamon, A. (2014). An investigation into musicians' thoughts and perceptions during performance. *Research Studies in Music Education*, 36(1), 19-37.

Clark, T. & Williamon, A. (2011). Evaluation of a mental skills training program for musicians. *Journal of Applied Sport Psychology*. 23(3), 342-359.

Cockerill, I. & Steinberg, H. (1997). *Cognitive Enhancement in Sport and Exercise Psychology*. Leicester: British Psychological Society, Sport and Exercise Psychology Section.

Cohen, L., Manion, L. & Morrison, K. (2000). *Research Methods in Education (5th ed.)*. London, New York: RoutledgeFalmer.

Connolly, C. & Williamon, A. (2004). Mental skills training. In A. Williamon (ed.), *Musical Excellence: Strategies and Techniques to Enhance Performance* (pp. 221-245). New York: Oxford University Press.

Conway, C., Eros, J., Pellegrino, K. & West, C. (2010). Instrumental music education students' perceptions of tensions experienced during their undergraduate degree. *Journal of Research in Music Education*, 58(3), 260-275.

Cox, W. J. & Kenardy, J. (1993). Performance anxiety, social phobia, and setting effects in instrumental music students. *Journal of Anxiety Disorders*. 7(1), 49-60.

Craske, M. G. & Craig, K. D. (1984). Musical performance anxiety: The three-systems model and self-efficacy theory. *Behavior Research and Therapy*, 22(3), 267-280.

Creech, A., Papageorgi, I., Duffy, C., Morton, F., Haddon, E., Potter, J., Bezenac, C., Whyton, T., Himonides, E. & Welch, G. (2008). From music student to professional: The process of transition. *British Journal of Music Education*, 25(3), 315-331.

Creech, A. (2010). Learning a musical instrument: The case for parental support. *Music Education Research*, 12(1), 13-32.

Daubney, G. & Daubney, A. (2017). *Performance Anxiety: A Practical Guide for Music Teachers*. Incorporated Society of Musicians Trust.

Dennis, R. J. (1987). *Music Performance and Respiratory Function in Wind Instrumentalists: Effects of the Alexander Technique on Musculoskeletal Education*. Unpublished Ed.D. diss. Columbia University Teachers' College, United States.

Dews, C. L. B. & Williams, M. S. (1989). Student musicians' personality styles, stresses, and coping patterns. *Psychology of Music*, 17(1), 37-47.

Dunkel, S. D. (1989). *The Audition Process: Anxiety Management and Coping Strategies*. New York: Pendragon Press.

Edwards, R. & Holland, J. (2013). *What is Qualitative Interviewing?* London: Bloomsbury Academic.

Egan, S. J., Pieka, J. P., Dyck, M. J. & Rees, C. S. (2007). The role of dichotomous thinking and rigidity in perfectionism. *Behaviour Research and Therapy*, 45(8), 1813-1822.

Ekkekakis, P., Hall, E. E., Van Landuyt, L. M. & Petruzzello, S. J. (2000). Walking in (affective) circles: Can short walks enhance affect? *Journal of Behavioral Medicine*, 23(3), 245-275.

Ely, M. C. (1991). Stop performance anxiety. *Music Educators Journal*, 78(2), 35-39.

Ericsson, K. A., Krampe, R. T. & Tesch-Römer, C. (1993). The role of deliberate practice in the acquisition of expert performance. *Psychological Review*. 100(3), 363-406.

Farooq, M. B. (2015). Qualitative telephone interviews: Strategies for success. *18th Annual Waikato Management School Student Research Conference 2015*, 12 June, 2015, Hamilton, New Zealand.

Fehm, L. & Schmidt, K. (2006). Performance anxiety in gifted adolescent musicians. *Journal of Anxiety Disorders*, 20(1), 98-109.

Finlay, L. (2009). Debating phenomenological research methods. *Phenomenology & Practice*, 3(1), 6-25.

Fishbein, M., Middlestadt, S. E., Ottati, V., Strauss, S. & Ellis, A. (1988). Medical problems among ISCOM musicians: Overview of a national survey. *Medical Problems of Performing Artists*. 3(1), 1-8.

Fitzpatrick, K. R. (2014). Mixed methods research in music education. In C. M. Conway (ed.), *The Oxford Handbook of Qualitative Research in American Music Education* (pp. 210-224). New York: Oxford University Press.

Flossmann, S. & Widmer, G. (2011). Toward a model of performance errors: A qualitative review of Magaloff's Chopin. *Proceedings of the International Symposium on Performance Science* (pp. 63-68). Utrecht: European Association of Conservatoires.

Ford, B. (2013). Approaches to performance: A comparison of music and acting students' concepts of preparation, audience and performance. *Music Performance Research*, 6, 152-169.

Gabrielsson, A. (1999). The performance of music. In D. Deutsch (ed.), *The Psychology of Music* (pp.501-602). London: Academic Press.

Gaunt, H. (2011). Understanding the one-to-one relationship in instrumental/vocal tuition in higher education: Comparing student and teacher perceptions. *British Journal of Music Education*, 28(2), 159-179.

Goddaer, J. & Abraham, I. L. (1994). Effects of relaxing music on agitation during meals among nursing home residents with severe cognitive impairment. *Archives of Psychiatric Nursing*, 8(3), 150-158.

González, M. J. (2012). How students learn to teach? A case study of instrumental lessons given by Latvian undergraduate performer students without prior teacher training. *Music Education Research*, 14(2), 227-242.

Goren, L. (2014). *A Meta-analysis of Nonpharmacological Psychotherapies for Music Performance Anxiety*. Unpublished Ph.D. diss. California Institute of Integral Studies, San Francisco, CA.

Gray J. J., Haring M. J. & Banks, N. M. (1984). Mental rehearsal for sport performance: Exploring the relaxation-imagery paradigm. *Journal of Sport Behavior*, 7(2), 68-78.

Gray, S. W. (1990). Effect of visuomotor rehearsal with videotaped modeling on racquetball performance of beginning players. *Perceptual and Motor Skills*, 70(2), 379-385.

Green, B. & Gallwey, W. T. (1986). *The Inner Game of Music*. Garden City, NY: Anchor.

Green, L. (2008). *Music, Informal Learning and the School: A New Classroom Pedagogy*. Aldershot: Ashgate.

Grolnick, W. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development*, 65(1), 237-252.

Grolnick, W. (1997). Predictors of parent involvement in children's schooling. *Journal of Educational Psychology*, 89(3), 538-548.

Guba, E. G. & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (eds.), *Handbook of Qualitative Research* (pp. 105-117). Thousand Oaks; London: Sage.

Hallam, S. (1997). Approaches to practice of expert and novice musicians: Implications for education. In H. Jørgensen & A. C.

Lehmann (eds.), *Does Practice Make Perfect? Current Theory and Research on Instrumental Music Practice* (pp. 89-108). Oslo: Norges musikkhøgskole.

Hallam, S. (1998). *Instrumental Teaching: A Practical Guide to Better Teaching and Learning*. Oxford: Heinemann.

Hallam, S. (2001a). The development of metacognition in musicians: Implications for education. *British Journal of Music Education*, 18(1), 27-39.

Hallam, S. (2001b). The development of expertise in young musicians: Strategy use, knowledge acquisition and individual diversity. *Music Education Research*, 3(1), 7-23.

Hallam, S. (2006). *Music Psychology in Education*. London: Institute of Education, University of London.

Hallam, S. & Bautista, A. (2012). Processes of instrumental learning: The development of musical expertise. In G. McPherson & G. Welch (eds.), *The Oxford Handbook of Music Education (Volume 1)*. Oxford University Press.

Hallam, S., Cross, I. & Thaut, M. (2016). Motivation to learn. In S. Hallam, I. Cross & M. Thaut (eds.), *The Oxford Handbook of Music Psychology* (pp. 479-492). Oxford University Press.

Hallam, S. Rinta, T., Varvarigou, M., Creech, A., Papageorgi, I, Gomes, T. & Lanipekun, J. (2012). The development of practicing strategies in young people. *Psychology of Music*, 40(5), 652-680.

Hamann, D. L. (1982). An assessment of anxiety in instrumental and vocal performances. *Journal of Research in Music Education*, 30(2), 77-90.

Hamann, D. L. & Banister, S. (1991). Factors contributing to high school band students' ratings at solo and ensemble festival. *Contributions to Music Education*, 18, 57-65.

Hamann, D. L. & Sobaje, M. (1983). Anxiety and the college musician: A study of performance conditions and subject variables. *Psychology of Music*. 11(1), 37-50.

Hamilton, L. H. (1997). Performance psychology: Focusing the spotlight on winning, perfection, and creativity. Symposium conducted at the *Annual Convention of the American Psychological Association*, Chicago.

Hamilton, L. H., Kella, J. J. & Hamilton, W. G. (1995). Personality and occupational stress in elite performers. *Medical Problems of Performing Artists*, 10, 86-89.

Hamilton, R. A., Scott, D. & MacDougall, M. P. (2007). Assessing the effectiveness of self-talk interventions on endurance performance. *Journal of Applied Sport Psychology*, 19(2), 226-239.

Hanken, I. M. (2016). Peer learning in specialist higher music education. *Arts and Humanities in Higher Education*, 15(3-4), 364-375.

Hardy, J. (2006). Speaking clearly: A critical review of the self-talk literature. *Psychology of Sport and Exercise*, 7(1), 81-97.

Harvey, D., Van Raalte, J. & Brewer, B. (2002). Relationship between self-talk and golf performance. *International Sports Journal*, 6(1), 84-91.

Hatzigeorgiadis, A. (2006). Instructional and motivational self-talk: An investigation on perceived self-talk functions. *Hellenic Journal of Psychology*, 3(2), 164-175.

Hatzigeorgiadis, A., Galanis, E., Zourbanos, N. & Theodorakis, Y. (2013). Self-talk and competitive sport performance. *Journal of Applied Sport Psychology*, 26(1), 82-95.

Hays, K. F. (2002). The enhancement of performance excellence among performing artists. *Journal of Applied Sport Psychology*, 14(4), 299-312.

Hays, K. F. (2012). The psychology of performance in sport and other domains. In S. M. Murphy (ed.), *The Oxford Handbook of Sport and Performance Psychology* (pp. 24-42). Oxford: Oxford University Press.

Hench, J. (2011). *The Use of Age Appropriate Mental Skills Activities for Performance Enhancement in Six-to-Twelve-year-old Pianists*. Unpublished Ph. D. diss. University of Oklahoma, United States.

Ho, W. & Law, W. (2002). Music education in Taiwan: The dynamics and dilemmas of globalization, localization and sinophilia. *The Curriculum Journal*, 13(3), 339-360.

Ho, W. & Law, W. (2006). Challenges to globalization, localization and Sinophilia in music education: A comparative study of Hong Kong, Shanghai and Taipei. *British Journal of Music Education*, 23(2), 217-237.

Hogan, C. (2013). Chronic stress: An approach to management in general practice. *Australian Family Physician*, 42(8), 542-545.

Hourigan, R. M. & Edgar, S. N. (2014). Phenomenological Research in Music Education. In C. M. Conway (ed.), *The Oxford Handbook of Qualitative Research in American Music Education* (pp. 148-162). New York: Oxford University Press.

Huang, W. L. (2014). An investigation into college musicians' musical performance anxiety through selected performance strategies (cognitive strategies, behavioural strategies, and cognitive behavioural strategies) by self-management. *Children's Musical Worlds. Society for Education, Music and Psychology Research*. 25 October 2014, University of Reading, Reading.

Hunnicut, H. & Winter, A. (2011). Musical performance anxiety: Adapting multiple cognitive behavioural therapy techniques to the voice studio, Part 3. *Journal of Singing*, 68(1), 67-73.

International Musician. (2013). To your health: Sport psychologists aid musicians too. *International Musician*, 111(7), 11.

James, I. (1997). *Federation International des Musiciens 1997 Survey of 56 Orchestras Worldwide*. London: British Association for Performing Arts Medicine.

Jones, G. & Cale, A. (1997). Goal difficulty, anxiety and performance. *Ergonomics*, 40(3), 319-333.

James, I. & Savage, B. (1984). Beneficial effects of nadolol on anxiety-induced disturbances of performance in musicians: A comparison with diazepam and placebo. *American Heart Journal*, 108(4), 1150-1155.

Jones, F. P. (1972). Voice production as a function of head balance in singers. *Journal of Psychology*, 82(2), 209-215.

Jones, G., Swain A. & Cale, A. (1990). Antecedents of multidimensional competitive state anxiety and self-confidence in elite intercollegiate middle-distance runners. *The Sport Psychologist*, 4(2), 107-118.

Jørgensen, H. (2004). Strategies for individual practice. In A. Williamon (ed.), *Musical Excellence: Strategies and Techniques to Enhance Performance* (pp. 85-104). New York: Oxford University Press.

Keller, P. (2012). Mental imagery in music performance: Underlying mechanisms and potential benefits. *Annals of the New York Academy of Sciences*, 12521(1), 206-213.

Kemp, A. (1996). *The Musical temperament: Psychology and Personality of Musicians*. Oxford: Oxford University Press.

Kendrick, M. J., Craig, K. D., Lawson, D. M. & Davidson, P. O. (1982). Cognitive and behavioral therapy for musical-performance anxiety. *Journal of Consulting and Clinical Psychology*, 50(3), 353-362.

Kenny, D. (2005). A systematic review of treatments for music performance anxiety. *Anxiety, Stress & Coping*, 18(3), 183-208.

Kenny, D. (2007). Stress management. In S. Ayers, A. Baum, C. McManus, S. Newman, K. Wallston, J. Weinman, & R. West (eds.), *Cambridge Handbook of Psychology, Health and Medicine* (pp. 403-407). Cambridge: Cambridge University Press.

Kenny, D. (2011). *The Psychology of Music Performance Anxiety*. Oxford: Oxford University Press.

Kenny, D., Davis, P. & Oates, J. (2004). Music performance anxiety and occupational stress amongst opera chorus artists and their relationship with state and trait anxiety and perfectionism. *Journal of Anxiety Disorders*. 18(6), 757-777.

Kent, M. (2006). Hull's drive theory. In M. Kent (ed.), *The Oxford Dictionary of Sports Science & Medicine*. Oxford University Press.

Khalsa, S., Butzer, B., Shorter, S., Reinhardt, K. & Cope, S. (2013). Yoga reduces performance anxiety in adolescent musicians. *Alternative Therapies in Health and Medicine*, 19(2), 34-45.

Kokotsaki, D. & Davidson, W. (2003). Investigating musical performance anxiety among music college singing students: A quantitative analysis. *Music Education Research*. 5(1), 45-59.

Kou, M. L. (2001). Development of music education in Taiwan (1895–1995). *Journal of Historical Research in Music Education*, 22(2), 177-191.

Kruse-Weber, S. & Parncutt, R. (2014). Error management for musicians: An interdisciplinary conceptual framework. *Frontiers in Psychology*, 5, 777.

Lang, P. J., Miller, G. A. & Levin, D. (1988). Anxiety and fear. In R. Davidson, G. E. Schwartz, & D. Shapiro (eds.), *Consciousness and Self-regulation: Advances in Research and Theory*, Vol. 3 (pp.123-151). London: Plenum.

Lave, J. & Wenger, E. (1991). *Situated Learning – Legitimate Peripheral Participation*. Cambridge: Cambridge University Press.

Lawrence, D. (2015). Alexander Technique may help reduce performance anxiety in musicians. *Focus on Alternative and Complementary Therapies*. 20(1), 50-51.

Lazarus, R. S. & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer.

LeBlanc, A. (1994). A theory of music performance anxiety. *The Quarterly Journal of Music Teaching and Learning*, 5(4), 60-68.

LeBlanc, A., Jin, Y. C., Obert, M. & Siivola, C. (1997). Effects of audience on music performance anxiety. *Journal of Research in Music Education*, 45(3), 480-496.

Lebler, D., Burt-Perkins, R. & Carey, G. (2009). What students bring: Examining the attributes of commencing conservatoire students. *International Journal of Music Education*, 27(3), 232-249.

Legette, R. M. (1997). Enhancing the music student-teaching experience: A research review. *Update: Applications of Research in Music Education*, 16(1), 25-28.

Lehmann, A. C., Sloboda, J. A. & Woody, R. H. (2007). *Psychology for Musicians: Understanding and Acquiring the Skills*. Oxford: Oxford University Press.

Lippman, N. (2012). *Effects of Mental Practice and Physical Practice on Physical Performance with Drummers*. Unpublished Ph. D. diss. Hofstra University, United States.

Liu, P. C. (2016). *Music Performance Anxiety among College Piano Majors in Taiwan*. Unpublished Ph. D. diss. Boston University, United States.

Malhotra, S., Chakrabarti, S., Gupta, A., Mehta, A., Shah, R., Kumar, V. & Sharma, M. (2013). A self-guided relaxation module for telepsychiatric services: Development, usefulness, and feasibility. *The International Journal of Psychiatry in Medicine*, 46(4), 325-337.

Mann, S. L. & Contrada, R. J. (2015). Cognitive-behavioral approaches to stress management. In C. M. Nezu & A. M. Nezu (eds.), *The Oxford Handbook of Cognitive and Behavioral Therapies* (pp. 264-288). New York: Oxford University Press.

Martens, R., Burton, D., Vealey, R., Bump, L. & Smith, D. (1990). *Competitive Anxiety in Sport*. Champaign, IL: Human Kinetics.

Martin, A. J. (2008). Motivation and engagement in music and sport: Testing a multidimensional framework in diverse performance settings. *Journal of Personality*, 76(1), 135-170.

Martin, A. J. (2012). Part II Commentary: Motivation and engagement: Conceptual, operational, and empirical clarity. In S. Christenson, A. Reschly & C. Wylie (eds.), *Handbook of Research on Student Engagement* (pp. 303-311). Dordrecht: Springer.

Martin, A. J. & Liem, G. A. (2010). Academic personal bests (PBs), engagement, and achievement: A cross-lagged panel analysis. *Learning and Individual Differences*, 20(3), 265-270.

Martin, J., Antille, N., Rezzi, S. & Kochhar, S. (2012). Everyday eating experiences of chocolate and non-chocolate snacks impact postprandial anxiety, energy and emotional states. *Nutrients*, 4(6), 554-567.

Mason, J. (2002). *Qualitative Researching (2nd ed.)*. London: Sage.

Matsunobu, K. & Bresler, L. (2014). Qualitative research in Music education: Concepts, goals and characteristics. In C. M. Conway (ed.), *The Oxford Handbook of Qualitative Research in American Music Education* (pp. 21-39). New York: Oxford University Press.

McGinnis, A. M. & Milling, L. S. (2005). Psychological treatment of musical performance anxiety: Current status and future directions. *Psychotherapy: Theory, Research, Practice, Training*. 42(3), 357–373.

McNamara, S. (2001). *Stress Management Programme for Secondary School Students*. London: RoutledgeFalmer.

McPherson, G. & Renwick, J. (2001). A longitudinal study of self-regulation in children's musical practice. *Music Education Research*, 3(2), 169-186.

Meichenbaum, D. (1985). *Stress Inoculation Training*. Oxford: Pergamon Press.

Mesagno, C. & Mullane-Grant, T. (2010). A comparison of different pre-performance routines as possible choking interventions. *Journal of Applied Sport Psychology*, 22(3), 343-360.

Mills, J. (2002). Conservatoire students' perceptions of the characteristics of effective instrumental and vocal tuition. *Bulletin of the Council for Research in Music Education*, 153(4), 78-82.

Mills, J. (2004). Working in music: Becoming a performer-teacher. *Music Education Research*, 6(3), 245-61.

Ming, S. & Martin, G. L. (1996). Single-subject evaluation of a self-talk package for improving figure skating performance. *The Sport Psychologist*. 10(3), 227-238.

Mistry, R. (2016). A near-peer talk to allay Year 1 student anxieties and misconceptions over assessments. *Medical Education*, 50(11), 1154-1155.

Montello, L., Coons, E. E. & Kantor, J. (1990). The use of group music therapy as a treatment for musical performance stress. *Medical Problems of Performing Artists*, 5(1), 49-57.

Moran, A. P. (1996). *The Psychology of Concentration in Sport Performers*. East Sussex: Psychology Press.

Mulligan, K. & Newman, S. (2007). Self-management interventions. In S. Ayers, A. Baum, C. McManus, S. Newman, K. Wallston, J. Weinman & R. West (eds.), *Cambridge Handbook of Psychology, Health and Medicine* (pp. 393-397). Cambridge: Cambridge University Press.

Murphy, S. M. (1994). Imagery interventions in sport. *Medicine and Science in Sports and Exercise*, 26(4), 486-494.

Mutrie, N. (2000). The relationship between physical activity and clinically defined depression. In S. J. Biddle, K. Fox & S. H. Boutcher (eds.), *Physical Activity and Psychological Well-Being* (pp.46-65). London: Routledge.

Nagel, J., Himle, D. & Papstorf, J. (1989). Cognitive-behavioural treatment of musical performance anxiety. *Psychology of Music*, 17(1), 12-21.

Nazam, F. & Husain, A. (2014). Enhancing sports and exercise performance through cognitive interventions. *Indian Journal of Positive Psychology*, 5(1), 28-32.

Nesti, M. S. & Sewell, D. (1997). Anxiety control and performance in figure skating. In I. Cockerill & H. Steinberg (eds.), *Cognitive Enhancement in Sport and Exercise Psychology*. Leicester: British Psychological Society, Sport and Exercise Psychology Section.

Newman, C. F. (2015). Cognitive restructuring/cognitive therapy. In C. M. Nezu & A. M. Nezu (eds.), *The Oxford Handbook of Cognitive and Behavioral Therapies* (pp. 118-141). Oxford University Press.

Nezu, C.M. & Nezu, A. M. (2015). Introduction. In C. M. Nezu & A. M. Nezu (eds.), *The Oxford Handbook of Cognitive and Behavioral Therapies* (pp. 1-3). Oxford University Press.

Nielsen, S. G. (2001). Self-regulating learning strategies in instrumental music practice. *Music Education Research*, 3(2), 155-167.

Niemann, B. K., Pratt, R. R. & Maughan, M. L. (1993). Biofeedback training, selected coping strategies and music relaxation interventions to reduce debilitating musical performance anxiety. *International Journal of Arts Medicine*, 2(2), 7-15.

Nixon, W. (2013). Performance: Musical performance anxiety – helping singers manage music performance anxiety. *Choral Director*, 10(2), 10-13.

O'Connor, J. (2001). *NLP & Sports*. London: Thorsons.

O'Kearney, R., Kang, K., Christensen, H. & Griffiths, K. (2009). A controlled trial of a school-based internet program for reducing depressive symptoms in adolescent girls. *Depression and Anxiety*, 26(1), 65-72.

Osborne, M. S. & J. Franklin, J. (2002). Cognitive processes in music performance anxiety. *Australian Journal of Psychology*, 54(2), 86-93.

Osborne, M. S., Greene, D. J. & Immel, D. T. (2014). Managing performance anxiety and improving mental skills in conservatoire students through performance psychology training: A pilot study. *Psychology of Well-Being*, 4, 18.

Osborne, M. S. & Kenny, D. T. (2008). The role of sensitizing experiences in music performance anxiety in adolescent musicians. *Psychology of Music, 36*(4), 447-462.

Oshio, A. (2012). The relationship between dichotomous thinking and music preferences among Japanese undergraduates. *Social Behavior and Personality, 40*(4), 567-574.

Ostrovsky, N. W., Swencionis, C., Wylie-Rosett, J. & Isasi C. R. (2013). Social anxiety and disordered overeating: An association among overweight and obese individuals. *Eating Behaviors, 14*(2), 145-148.

Panella, L. (2014). Addressing anxiety in music performance using visualization. *School Band & Orchestra, 17*(8), 12-13, 15.

Papageorgi, L. & Hallam, S. & Welch, G. (2007). A conceptual framework for understanding musical performance anxiety. *Research Studies in Music Education, 28*(1), 83-107.

Papageorgi, L., Creech, A. & Welch, G. (2013). Perceived performance anxiety in advanced musicians specializing in different musical genres. *Psychology of Music, 41*(1), 18-41.

Parncutt, R. & McPherson, G. (2002). *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning*. Oxford: Oxford University Press.

Patston, T. (2014). Teaching stage fright? Implications for music educators. *British Journal of Music Education*, 31(1), 85-98.

Patton, M. (2002). *Qualitative Research and Evaluation Methods (3rd ed.)*. London: Sage.

Petitpas, A. & France, T. (2010). Identity foreclosure in sport. In S. J. Hanrahan & M. B. Andersen (eds.), *Routledge Handbook of Applied Sport Psychology* (pp. 282-291). New York: Routledge.

Proudfoot, J., Goldberg, D., Mann, A., Everitt, B., Marks, I. & Gray, J. (2003). Computerized, interactive, multimedia cognitive-behavioural program for anxiety and depression in general practice. *Psychological Medicine*, 33(2), 217-227.

Radocy, R. E. & Boyle, J. D. (1997). *Psychological Foundations of Musical Behavior*. Springfield, Il: Charles C. Thomas.

Rae, G. & McCambridge, K. (2004). Correlates of performance anxiety in practical music exams. *Psychology of Music*, 32(4), 432-439.

Rankin, S. K., Large, E. W. & Fink, P. W. (2009). Fractal tempo fluctuation and pulse prediction. *Music Percept*, 26(5), 401-413.

Reid, A. & Duke, M. (2015). Student for student: Peer learning in music higher education. *International Journal of Music Education*, 33(2), 222-232.

Reise, H., Samara, A. & Lillejord, S. (2012). Peer relations in peer learning. *International Journal of Qualitative Studies in Education*, 25(5), 601-624.

Repp, B. H. (2002). The embodiment of musical structure: Effects of musical context on sensorimotor synchronization with complex timing patterns. In W. Prinz & B. Hommel (eds.), *Common Mechanisms in Perception and Action: Attention and Performance XIX* (pp. 245-265). Oxford: Oxford University Press.

Rishi, J. (2015). A critical evaluation of unified model of psychotherapy and cognitive behavioural therapy. *International Journal of Multidisciplinary Research and Development*, 2(12), 438-441.

Roacha, S. F., Marocolo, M., Corrêa, E. N., Morato, G. S. & de Mota, G. R. (2014). Physical activity helps to control music performance anxiety. *Medical Problems of Performing Artists*, 29(2), 111-112.

Roberts, J. C. (2016). 'Wanna race?': Primary student preference for competitive or non-competitive singing games. *British Journal of music education*, 33(2), 159-174.

Robson, C. & McCartan, K. (2016). *Real World Research: A Resource for Users of Social Research Methods in Applied Settings*. United Kingdom: John Wiley & Sons Ltd.

Roland, D. (1994). How professional performers manage performance anxiety. *Research Studies in Music Education*, 2(1), 25-35.

Roulston, K. (2014). Conducting and analyzing individual interviews. In C. M. Conway (ed.), *The Oxford Handbook of Qualitative Research in American Music Education* (pp. 250-270). New York: Oxford University Press.

Rubin-Rabson, G. (1941). Studies in the psychology of memorizing piano music. VI: A comparison of two forms of mental rehearsal and keyboard overlearning. *Journal of Educational Psychology*, 32(8), 593-602.

Ruskin, R., Proctor, K, & Neeves, D. (2007). *Outcomes 2 HSC Course: Personal Development, Health & Physical Education*. Milton, Qld: John Wiley & Sons Australia.

Sadler, M. E. & Miller, C. J. (2010). Performance anxiety: A longitudinal study of the roles of personality and experience in musicians. *Social Psychological and Personality Science*, 1(3), 280-287.

Salmon, P., Schrodtt, R. & Wright, J. (1989). A temporal gradient of anxiety in a stressful performance context. *Medical Problems of Performing Artists*, 4(2), 77-80.

Salmon, P. G. & Meyer, R. G. (1992). *Notes from the Green Room: Coping with Stress and Anxiety in Musical Performance*. New York: Lexington Books.

Sârbescu, P. & Dorgo, M. (2014). Frightened by the stage or public? Exploring the multidimensionality of musical performance anxiety. *Psychology of Music, 42*(4), 568-579.

Sawaoka, T., Barnes, R. D., Blomquist, K. K., Masheb, R. M. & Grilo, C. M. (2012). Social anxiety and self-consciousness in binge eating disorder: Associations with eating disorder psychopathology. *Comprehensive Psychiatry, 53*(6), 740-745.

Scheib, J. W. (2014). *Paradigms and Theories: Framing Qualitative Research in Music Education*. In C. M. Conway (ed.), *The Oxford Handbook of Qualitative Research in American Music Education* (pp. 76-93). New York: Oxford University Press.

Scott, N., Hanstock, T. & Patterson-Kane, L. (2013). Using narrative therapy to treat eating disorder not otherwise specified. *Clinical Case Studies, 12*(4), 307-321.

Sethi, S., Campbell, A. J. & Ellis, L. A. (2010). The use of computerized self-help packages to treat adolescent depression and anxiety. *Journal of Technology in Human Services*, 28(3), 144-160.

Sheldon, D. A., Reese, S. & Grashel, J. (1998). The feasibility of digital accompaniment systems in school music programs. Paper presented at the meeting of the *Illinois Music Educators Association*, Peoria, IL.

Sheldon, D. A., Reese, S. & Grashel, J. (1999). The effects of live accompaniment, intelligent digital accompaniment, and no accompaniment on musicians' performance quality. *Journal of Research in Music Education*, 47(3), 251-265.

Silverman, D. (2010). *Doing Qualitative Research*. London: Sage.

Skinner, B. F. (1974). *About Behaviourism*. New York: Alfred Knopf.

Spahn, C., Walther, J. & Nusseck, M. (2016). The effectiveness of a multimodal concept of audition training for music students in coping with music performance anxiety. *Psychology of Music*, 44(4), 893-909.

Spencer, R. L. (1969). A study of the relationship of situational anxiety to vocal solo performances of college freshmen voice students.

*Dissertation Abstracts International*, 1970(31), 238A (University Microfilms No. 70-9158).

Stallard, P. (2005). *A Clinician's Guide to Think Good-Feel Good: Using CBT with Children and Young People*. Chichester: John Wiley and Sons.

State of mind: Music and mental health. (2017). *Music Matters*. BBC Radio 3. 6th Feb. 2017. Radio.

Stauffer, S. (2014). Narrative inquiry and the uses of narrative in music education research. In C. M. Conway (ed.) *The Oxford Handbook of Qualitative Research in American Music Education*. New York: Oxford University Press.

Step toe, A. (1989). Stress, coping and stage fright in professional musicians. *Psychology of Music*, 17(1), 3-11.

Step toe, A. (2001). Negative emotions in music making: The problem of performance anxiety. In P. N. Juslin & J. A. Sloboda (eds.), *Music and Emotion: Theory and Research* (pp. 291-307). Oxford: Oxford University Press.

Step toe, A. & Fidler, H. (1987). Stage fright in orchestral musicians: A study of cognitive and behavioral strategies in performance anxiety. *British Journal of Psychology*, 78(2), 241-249.

Suinn, R. M. (1976). Visual motor behavior rehearsal for adaptive behaviour. In J. Krumboltz & C. Thoresen (eds.), *Counselling Methods*. New York: Holt, Rinehart & Winston.

Sweeney, G. A. & Horan, J. J. (1982). Separate and combined effects of cue-controlled relaxation and cognitive restructuring in the treatment of musical performance anxiety, *Journal of Counseling Psychology*, 29(5), 486-497.

Taborsky, C. (2007). Musical performance anxiety: a review of literature. *Update Applications of Research in Music Education*, 26(1), 15-25.

Taylor, A. H. (2000). Physical activity, stress and anxiety: A review. In S. J. Biddle, K. Fox & S. H. Boutcher (eds.), *Physical Activity and Psychological Well-being* (pp. 10-45). London: Routledge.

Taylor, A. H. & Wasley, D. (2004). Physical fitness. In A. Williamon (ed.), *Musical Excellence: Strategies and Techniques to Enhance Performance* (pp. 163-178). New York: Oxford University Press.

Terry-Short, L. A., Owens, R. G., Slade, P. D. & Dewey, M. E. (1995). Positive and negative perfectionism. *Personality and Individual Differences*, 18(5), 663-668.

Theodorakis, Y., Weinberg, R., Natsis, P., Douma, E. & Kazakas, P. (2000). The effects of motivational versus instructional self-talk on improving motor performance. *The Sport Psychologist*, 14(3), 253-272.

Thomas, A. (2014). Mental Preparation for the Performer. In G. Welch, D. Howard & J. Nix (eds.), *The Oxford Handbook of Singing*. Oxford University Press.

Trusheim, W. H. (1987). *Mental Imagery and Musical Performance: An Inquiry into Imagery Use by Eminent Orchestral Brass Players in the United States*. Unpublished Ph.D. diss. The State University of New Jersey, United States.

Uys, L. & Middleton, L. (2004). *Mental Health Nursing: A South African Perspective*. Cape Town: Juta & Company.

Van Strien, T., Cebolla, A., Etchemendy, E., Gutiérrez-Maldonado, J., Ferrer-García, M., Botella, C. & Baños, R. (2013). Emotional eating and food intake after sadness and joy. *Appetite*, 66(1), 20-25.

Varela, W., Abrami, P., & Upitis, R. (2016). Self-regulation and music learning: A systematic review. *Psychology of Music*, 44(1), 55-74.

Weinberg, R., Seabourne, T., & Jackson, A. (1981). Effects of vi-quo-motor behavior rehearsal, relaxation, and imagery on karate performance. *Journal of Sport Psychology*, 3(3), 228-238.

Wells, R., Outhred, T., Heathers, J. A. J., Quintana, D. S., & Kemp, A. H. (2012). Matter over mind: A randomised-controlled trial of single-session biofeedback training on performance anxiety and heart rate variability in musicians (slow breathing and music performance anxiety). *PLOS ONE*, 7(10), 1-11.

Wesner, R. B., Noyes, R., & Davis, T. L. (1990). The occurrence of performance anxiety among musicians. *Journal of the International Society for the Study of Tensions in Performance*, 18(3), 177-185.

Westney, W. (2003). *The Perfect Wrong Note. Learning to Trust your Musical Self*. Pompton Plains, NJ: Amadeus Press.

Wheeler, B. (2016). Music therapy research: An overview. In J. Edwards (ed.), *The Oxford Handbook of Music Therapy* (pp. 720-747). Oxford: Oxford University Press.

Williamon, A., Aufegger, L., & Eiholzer, H. (2014). Simulating and stimulating performance: Introducing distributed simulation to enhance musical learning and performance. *Frontiers in Psychology*, 5, 25.

Williams C. (2009). *Overcoming Depression and Low Mood: A Five Areas Approach* (3<sup>rd</sup> ed.). London: Hodder Arnold.

Wilson, G. D. (2002). *Psychology for Performing Artists*. London: Whurr.

Wilson, G. D., & Roland, D. (2002). Performance anxiety. In R. Pamcutt & G. E. McPherson (eds.), *The Science and Psychology of Music Performance: Creative Strategies for Teaching and Learning* (pp. 47-61). Oxford: Oxford University Press.

Wilson, M. R. (2012). Anxiety: Attention, the brain, the body, and performance. In S. Murphy (ed.), *The Oxford Handbook of Sport and Performance Psychology* (pp. 173-190). Oxford University Press.

Wolfe, M. L. (1989). Correlates of adaptive and maladaptive musical performance anxiety. *Medical Problems of Performing Artists*, 4(1), 49-56.

Wolpe, J., Brady, J. P., Serber, M., Agras, W. S., Liberman, R. P. (1973). The current status of systematic desensitization. *The American Journal of Psychiatry*, 130(9), 961-965.

Wolton, J. (2016). Mental health awareness week (anxiety, mental health, tips on how to de-stress during exam stress), *Swansea University Weblog*. Available from:  
<https://studentblogs.swan.ac.uk/mental-health-awareness-week-anxiety-mental-health-tips-on-how-to-de-stress-during-exam-stress/>[Accessed 10<sup>th</sup> August 2017].

Wolverton, D. T., & Salmon, P. (1991). Attention allocation and motivation in music performance anxiety. In G. D. Wilson (ed.), *Psychology and Performing Arts* (pp. 231-237). Amsterdam: Swets & Zeitlinger.

Wristen, B. G. (2013). Depression and anxiety in university music students. *Update: Applications of Research in Music Education*, 31(2), 20-27.

Yondem, Z. D. (2007). Performance anxiety, dysfunctional attitudes and gender in university music students. *Social Behavior and Personality*, 35(10), 1415-1426.

Yoshie, M., Kanazawa, E., Kudo, K., Nakazawa K., & Ohtsuki, T. (2011). Music performance anxiety and occupational stress among classical musicians. In J. Langan-Fox & C. Cooper (eds.), *Handbook of Stress in the Occupations*. Cheltenham: Edward Elgar Publishing.

Yoshie, M., Shigemasu, K., Kudo, K., & Ohtsuki, T. (2009). Effects of state anxiety on music performance: Relationship between the revised competitive state anxiety inventory-2 subscales and piano performance. *Musicae Scientiae*, 13(1), 55-84.

Zakaria, J. (2010). *Comparison Study on the Symptoms and Factors of Performance Anxiety Between Diploma and Degree Students: A Case Study in UiTM*. Unpublished project paper for degree program, Universiti Teknologi MARA, Malaysia.

Zakaria, J., Musib, H., & Shariff, S. (2013). Overcoming performance anxiety among music undergraduates. *Social and Behavioral Sciences*, 90, 226-234.

Zimmerman, B. J. (2000). Attaining self-regulation: A social cognitive perspective. In M. Boekaerts, P. R. Pintrich & M. Zeidner (eds.), *Handbook of Self-Regulation* (pp. 13–39). New York: Academic Press..

Zimmerman, B. J. (2011). Motivational sources and outcomes of self-regulated learning and performance. In B. J. Zimmerman & D. H. Schunk (eds.), *Handbook for Self-Regulation of Learning and Performance* (pp. 49-64). New York: Routledge.

Zinsser, N., Bunker, L. K, & Williams, J. M. (2001). Cognitive techniques for improving performance and building confidence. In J. M. Williams (ed.), *Applied Sport Psychology: Personal Growth to Peak Performance* (pp. 284-311). Mountain View, CA: Mayfield.

***Taiwanese literature (in Chinese):***

陳曉霽(2004) 音樂術科入學考試鋼琴曲目探究, *美育*, 137, 84-89.

Chen, H. F. (2004). A study of the piano repertoire selection in music entrance exams, *Journal of Aesthetic Education*, 137, 84-89. [In Chinese]

徐麗紗(1998) 師範教育體系對臺灣早期西式音樂發展之貢獻, *臺中師院學報*, 12, 575-597.

Hsu, L. S. (1998). The contribution of normal education to the development of Western music in early Taiwan, *Journal of National Taichung Teachers College*, 12, 575-597. [In Chinese]

徐麗紗(2011) 西化、本土與全球性：台灣音樂教育百年, *美育*, 180, 16-27.

Hsu, L. S. (2011). A century of music education in Taiwan. *Journal of Aesthetic Education*, 180, 16-27. [In Chinese]

黃久玲(1999) 音樂系學生表演焦慮現況調查, *教師之友*, 40(5), 20-23.

Huang, G. L. (1999). An investigation into Taiwanese college musicians' musical performance anxiety. *Journal of Professional Teachers*, 40(5), 20-23. [In Chinese]

黃淑珺(2005) 音樂系學生之演奏焦慮, 南大學報, 39(1), 107-134.

Huang, S. J. (2005). Performance anxiety among the university music students, *Journal of National University of Tainan*, 39(1), 107-134. [In Chinese]

林裕川(2008) 台灣教育處境對台灣基督長老教會主日學課程之影響, 未出版碩士論文, 台灣神學院.

Lin, Y. C. (2008). *The Influence of Taiwanese Educational Situation on the Sunday Course of Christ Presbyterian Church*. Unpublished M.A. diss. Taiwan Theological College & Seminary, Taiwan. [In Chinese]

汪榮才(2001) 音樂資優學生表演焦慮之研究( I ): 表演焦慮反應類型、出現率, 及相關因素之分析, 國民教育研究集刊, 12(7), 1-67.

Wang, L. Z. (2001). Performance anxiety in musical talented students: components, prevalence and correlates, *Bulletin of Research on Elementary Education*, 12(7), 1-67. [In Chinese]

閻亭如(2006) 台灣音樂學習者演出焦慮之現況與管理概念之調查, 未出版碩士論文, 國立交通大學.

Yen, T. J. (2006). *A Survey of Music Performance Anxiety and its Management in Taiwan*. Unpublished M.A. diss. National Chiao Tung University, Taiwan. [In Chinese]

Database of Government. (2017). *List of Teacher Education in Universities* (師資培育之大學一覽表). Available from:  
<https://data.gov.tw/dataset/27195> [Accessed 20<sup>th</sup> August 2017].

National Pingtung University. (n.d.). *Career map*. Available from:  
<http://www.music.nptu.edu.tw/files/11-1104-13.php?Lang=zh-tw>  
[Accessed 19<sup>th</sup> August 2017].

Laws and regulations database of the Republic of China. (2017).  
*Teacher Education Act*. Available from:  
<http://law.moj.gov.tw/LawClass/LawAll.aspx?PCode=H0050001>  
[Accessed 20<sup>th</sup> August 2017].

National Chiayi Univeristy. (2013). *A survey of career development of alumni* (畢業生表現與整體自我改善機制). Available from:  
[http://www.ncyu.edu.tw/music/content.aspx?site\\_content\\_sn=41967](http://www.ncyu.edu.tw/music/content.aspx?site_content_sn=41967)  
[Accessed 19<sup>th</sup> August 2017].



## 你知道什麼是音樂表演焦慮嗎？

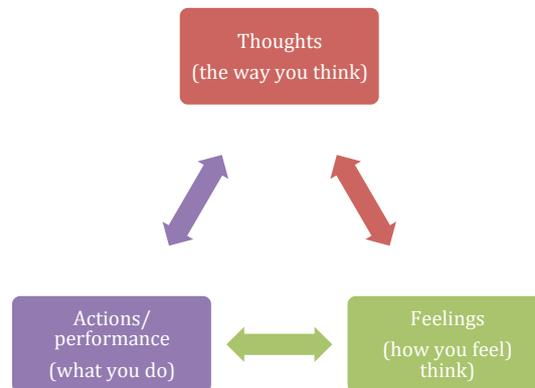
音樂表演焦慮 (Musical performance anxiety, MPA) 也可稱為舞臺恐懼症 (stage fright)，常為音樂家和從事音樂相關表演活動者帶來困擾。適度的焦慮能夠為音樂表演者帶來一定益處、提高演出水準，但過度的焦慮則有可能影響其日常生活，甚至導致不願繼續從事相關行業。音樂表演焦慮不僅發生在上台演出時，也會發生在平常練習樂器時或是課堂教學活動中。

## 名人音樂表演焦慮經驗分享？

知名男聲樂家安德烈波伽利 (Andrea Bocelli)，在接受紐約雜誌的訪問中提到雖然表演經驗豐富且不是個內向的人，但卻長期飽受音樂表演焦慮之苦 (Nov. 26, 2011)。英國鋼琴家、指揮家 Benjamin Britten 與小提琴家 Yehudi Menuhin 常常在音樂會前出現生理不適的問題而備受煎熬。美國知名鋼琴家 Vladimir Horowitz 因為過於焦慮，時常需要別人把他推上舞台。英國皇家音樂學院教授 Aaron Williamon 曾做過一個實驗，他發現一位年輕的大提琴手在整個獨奏演出中出現每分鐘 170 次的心跳。他說這個速率是相當於參加一個中長跑比賽的運動員，但是運動員中長跑只有短暫幾分鐘，大提琴手是持續了一個小時！

## 克服表演焦慮？什麼是認知行為治療法？

認知行為治療法 (Cognitive Behavioral therapy, CBT) 常用於幫助停止因焦慮所產生的負面想法，進而衍生正面思考、正向行為和感覺。你可知道『想法』、『行為』、『感覺』三者之間交互影響密不可分的關係嗎？(如圖一所示)。圖一：

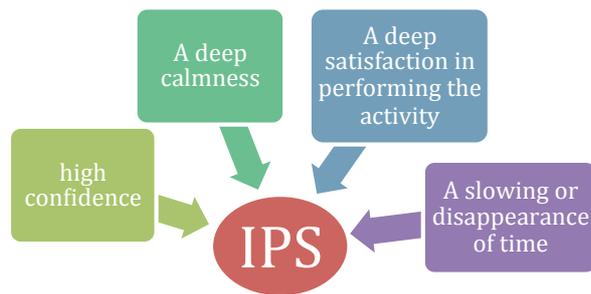


## 什麼是最佳理想表演狀態？

### Ideal Performing State (IPS)

音樂心理學家 O' Connor 說當一個人感覺到有高度的自信心、沈著冷靜、並認為自己已具有足夠的能力與勇氣面對眼前的挑戰，則表示此時已達到最佳理想表演狀態。

O' Connor 理論圖例：



## 如何達到最佳理想表演狀態（簡稱 IPS）？

達到最佳理想表演狀態有三個條件需要考量，分別是音樂技巧（Musical skills）、認知技巧（Cognitive strategies）、行為技巧（Behavioral strategies）。本手冊所提供的 **1~6 為認知技巧**，**7~12 為行為技巧**（請見 p.4）。而音樂技巧方面，指的是個人主修樂器熟練度。

最佳理想表演狀態“三條件”圖例：



## 關於克服音樂表演焦慮的 12 種方法

在接下來的幾週準備考試（表演）感到焦慮時，可以試著使用以下方舒緩不安的情緒。不需要照以下順序進行，但每種技巧都多少試一次看看吧！

1. 最佳理想表演狀態自我評量 (Ideal performing state, IPS)
2. 自我對話 (Self-talk)
3. 心智複演法 (Mental rehearsal)
4. 視覺動作行為複演法 (Visual rehearsal)
5. 預設錯誤補救法 (Accepting mistakes)
6. 認知重建技巧 (Cognitive restructuring)
7. 呼吸放鬆法 (Breathing)
8. 肌肉放鬆法 (Muscle relaxation)
9. 注意力分散法 (Physical & absorbing activities)
10. 表演情境模擬 (Contrived performance situation)
11. 表現前例行動作 (Following pre-performance routine)
12. 精簡練琴法 (Tapering off practice)

**The more you use the strategies,  
the more it will help!**

## 自我對話

Self-talk

不只音樂家上台會緊張，運動員要準備上場比賽時也會很焦慮喔！你知道教練們都怎麼訓練短跑選手嗎？最基本的方法就是自我對話訓練。自我對話可分為兩種：一、指導性自我對話。指導性自我對話會告訴自己該注意哪些上台要領，例如在第一個音開始前先調整呼吸。線索字可寫下「呼吸」來提醒自己。二、動機性自我對話。動機性自我對話會採用激勵性的字詞來鼓勵自己，例如「我可以做得到就跟往常一樣表現」。使用字詞因人而異，只要當下能做出好的提醒功能，那便是成功的自我對話喔。

### 指導性自我對話

我上台表演時應注意什麼？請照順序一步一步寫下來，提醒自己不要因緊張，一片空白而忘記該做什麼！

1	
2	
3	
4	
5	
6	

### 動機性自我對話

1	
2	
3	
4	
5	
6	

**Think good, feel good!**

## 心智複演法 + 視覺動作行為複演法

### Mental Rehearsal + Visual rehearsal

這兩種技巧可以幫助你背譜或是更熟悉曲子。樂器不在身邊的時候使用（例如在火車上或宿舍），也可以使用喔！它可以讓練習更加有效率！別忘記適度的練習可以幫助演奏技巧提升，但過度的練習有可能造成生理傷害，像是肌肉痠痛等。

只要照著以下 **6** 個步驟的順序即可完成

1. 闔上眼，想像自己即將表演的場地環境，以及參與的觀眾與評審。
2. 請用“鼻子”緩緩地深呼一口氣，憋住並在心中默數 3 秒，在緩緩地用“鼻子”呼出~~~
3. 想像自己拿著樂器正在後台暖身/手。
4. 接著，請想像自己拿著樂器慢慢走上台。此時，請試著在心中敘述看見什麼東西？聽見什麼聲音？聞到什麼氣味？有什麼感覺？
5. 請再重複一次步驟 2！然後想像自己開始表演曲子（也可以哼唱代替），並也同時觀察和在心中敘述自己看見了什麼？聽見什麼？有什麼感覺？。
6. 表演結束，請想像自己表現得非常好，觀眾和評審表情都很滿意。

◇ 不妨試著在真正考試/表演的當下，最緊張的時候，  
重複步驟 4~6？

The more you do it,  
the more it will become easier.

## 預設錯誤補救法

Accepting mistakes

### ❖ 表演開始前

- a 選一首你本此考試/音樂會覺得最難的曲子，反覆練習直到發生錯誤…
- b 請在出錯時，分別寫下你的感覺、想法、補救方法？
- c 接著寫下一句正面鼓勵自己的話來面對錯誤。例如：誰不會犯錯？這小錯誤在我人生中不算什麼！

### ❖ 正式演出中

1. 如果出錯時，請直接忽略錯誤，並專注當下你正在彈的音符，慢慢的將視覺焦點移回到你演奏的樂器身上，仔細聆聽自己的音樂，並隨著自己的音樂律動（body movement）。
2. 在一切回到正常後，請在心中把表演開始前步驟 C 的那句話重複一遍。

### ❖ 表演結束後

1. 可以檢討自己的表演，但切記不要用太高太嚴苛的標準來審核自己以及告訴自己『音樂上的犯錯只是一種行為，並不代表你個人』（Making mistake is just about behavior not your identity!）。

**Don't over-react to minor flaws,  
what you do is not who you are.**

## 認知重建技巧

### Cognitive restructuring

認知重建技巧可幫助你將負面的思考轉為正面的想法喔！請照著以下 3 步驟試看看吧。

#### ♥ 找出焦慮的原因

- a 請試著寫下你造成你焦慮的東西，例如：分數、觀眾的眼光、為達到自己理想的標準等。
- b 如果找不出原因，可以試著想看看，在考試/表演中，什麼東西如果可以被移除/拿掉，你就會很自在並享受在台上表演的感覺。

#### ♥ 在以下表格填入造成你焦慮的原因、負面想法、正面想法。

認知重建		
焦慮原因	負面想法	正面想法
例：成績	我可能會失常導致分數很低。	終究是會通過的，就跟上次考試一樣。

#### ♥ 請將上表的正面想法抄到以下表格，並在感到失落、焦慮時隨時拿出來看，給自己正面的力量。

1	終究是會通過的，就跟上次考試一樣。
2	
3	
4	
5	
6	

## 呼吸放鬆法+肌肉放鬆法

Breathing+ Muscle relaxation

### ♥ 呼吸放鬆法 4 步驟

1. 闔上眼，想像自己在一個身心非常放鬆的地方（例如：希臘某渡假小島的沙灘上、倫敦海德公園、家裡的沙發）。如果你還是想不到，可以上網找張圖片，想像自己在那張圖片中。
2. 用深呼一口氣。
3. 憋住 5 秒鐘，並在心中數 1---2---3---4---5---
4. 慢慢地吐氣。

**p.s. 重複此呼吸放鬆法數遍，可以幫助你從焦慮不安的情緒中，重新回到平靜的身心喔～**

### ♥ 肌肉放鬆法小撇步

1. 找個舒服的位子坐下，闔上眼，想像自己在一個很放鬆的環境中。
2. 慢慢放鬆肩膀，使自己感到肩膀越來越重，沈重到手舉不起來。
3. 接著，感覺到身體也開始越來越沈重，全身的力量都已靠在椅子上。
4. 請用鼻子慢慢深呼吸，在用鼻子慢慢吐氣，在吐氣時，請再次想像自己在一個很放鬆的環境中。

The more you practice,  
the more it will help!

## 注意力分散法

Physical & Absorbing activities

你平常都做什麼活動抒壓呢？運動？看電影？閱讀？逛街？吃美食？與其花時間在窮緊張，不如多花些時間找些別的事情做吧？！

♥ 請寫下你平常抒壓的活動？並加上活動的日期。

\* 考試/演出前 1~3 週 \*

抒壓活動項目	執行日期	活動後的感覺

**Rather than listening to your negative thoughts  
and focusing on anxious feeling,  
why not find something else to think about and do it!**

## 表演情境模擬

Contrived performance situation

♥ 你是否曾經試過在考試/音樂會前，在至少一個觀眾面前練習呢？根據阿貝爾等音樂心理學家於 1990 年的研究指出，平常練習多在朋友或是家人們面前表演，可有效幫助音樂家克服音樂表演焦慮喔 (Abel et al., 1990) ！

♥ 請寫下你模擬情境彩排的細節。

<b>When?</b> 日期？每次彩排多長時間？ 在考試 or 音樂會前彩排過幾次？	
<b>Where?</b> 地點？學校圓廳？家裡客廳？大琴房？	
<b>Who?</b> 有多少觀眾？ 觀眾是誰？朋友/家人/老師？	
<b>What?</b> 你彩排了什麼？全曲走過？ 穿正式的服裝？ 彩排是從走上台到鞠躬？ 還是只有彩排樂曲而已？	
<b>How?</b> 彩排後有什麼感想？ 你聽到別人什麼評價？ 有什麼需要改進的嗎？	

## 表現前例行動作

### Following pre-performance routine

- ♥ 找出自己每次準備考試的步調，從中改掉錯誤的習慣，並維持其良好的方法，就可以從先前經驗獲得信心而且還可以投入準備過程而非只在意結果喔。此方法也是奧運百米賽跑選手最常用的之一呢！
- ♥ 寫下你上次考試/表演前當天的情況
- ❖ 範例

時間	你做了什麼？	想法？感受？
08-10	吃早餐+上課	偶爾會想到晚上考試的場景有些緊張
10-12	讀譜+練指法	想到自己在台上驚慌失措的樣子
12-14	吃中餐+去琴房練琴	有點小緊張，但覺得還可以。
14-16	把晚上考試的曲子都走過一遍	什麼都沒想，只專注在練琴上面。
16-18	提早到考場，與伴奏一起全曲走過一次	感到非常焦慮，覺得自己沒有如預期表現得好，晚上考試完蛋！
18:00~	換衣服+再次暖手	感到全身冰冷，害怕觀眾、評審、出錯、忘譜、音不準...

- ❖ 我的一天（請回想上次的表演當天是如何度過的？）

時間	我做了什麼？	想法？感受

- ♥ 請再找一張紙，寫下這次考試/音樂會『我的一天』規劃。記得把覺得錯誤的行為或想法換掉，換成你自己覺得正確應該做的事情喔！

## 精簡練琴法

### Tapering off practice

許多研究指出過度的練習會導致生理傷害。若已感到身體不適、肌肉痠痛，練琴應以每次 25 分鐘，然後休息 5 分鐘來調整喔 (Kenny, 2011 & Roland 1994 & Chaffin et al. 2004)

#### ♥ 我的考前一個月練琴計劃

建議填上練習種類代號 (請見表格左下方) + 練習時數。

日期/週	考前四週	考前三週	考前二週	考前一週
週一	例：S-10min. (音階十分鐘)			
週二				
週三				
週四				
週五				
週六				
週日				

S：音階

E：自選取

A：指定曲

M：心智複演法

V：視覺動作行為複演

手冊將在實驗結束後回收

使用期間，請妥善保存

手冊填寫內容將會嚴格保密，不公開

填寫完畢後，請放入信封袋，並將信封袋密封，繳回

此手冊未經同意，不得抄襲翻印，否則法律追究

## Appendix 2: Consent form (in Chinese)

### 同意書

您好，非常感謝您願意參與台灣大專院校音樂系學生自我管理音樂表演焦慮之研究，這份同意書主要是向您充分的說明有關本研究的相關資訊，以便於您決定是否要參加本研究。若您在閱讀本同意書或參與本研究的過程中，對於本研究仍有任何的疑問，歡迎您隨時提出來，我將為您做詳細的說明和回答。如果您決定參與本研究，請在這一份同意書上簽名，代表您同意參與本研究。此外，若是您在這份同意書上簽名同意參與研究後，想法有所改變，仍然可以隨時退出本研究而不需要任何的理由。

有關如何參與本研究，在此向您(您)簡要說明如下：

1. 您將會接受 2~3 次的一對一，約半小時左右電話/面對面訪談，訪談內容為有關個人學習音樂的歷程以及對於音樂表演焦慮的經驗、看法和克服方法。
2. 於第一次訪談結束後，將會給您《音樂表演焦慮自助手冊》，手冊內容為有關音樂表演焦慮克服方法的介紹。手冊可協助您於準備考試期間，做好自我管理音樂表演焦慮。期末術科考試結束後，手冊將會回收。若覺得手冊內容不妥，會影響您準備考試，可不使用，一切自由意願。
3. 第二次以後的訪談為一對一，約半小時左右的電話/面對面訪談，訪談內容將著重在《自助手冊》使用心得與個人對於克服音樂表演焦慮的經驗及看法。
4. 為了感謝您參與本研究計畫，於最後一次訪談結束後（手冊回收後）將提供您價值 200 元的 7-11 禮券。（感謝您決定參與本計畫，但礙於經費，您的參與將不獲支付任何費用或補助。）
5. 本研究預計招募受試者 60 位 ██████████ 研究執行時間於 104 年 3 月 23 日至 104 年 7 月 31 日止。
6. 本研究將依法把任何可辨識您身分之紀錄與您個人隱私資料視為機密來處理，不會公開，也不會向與本研究無關的人員透露。所有研究的原始資料在經由統計或分析之後，除非另外再徵得您的同意，否則將被審慎保管並在研究結束、研究成果撰寫成結案報告，以及撰寫成論文在學術研討會或學術期刊上發表後，加以銷毀，原則上為研究結束後三年，若因結案報告或論文尚未撰寫完成，或其他法規或命令的要求，而有延長的必要時，最長也不會超過十年。
7. 若在參與研究過程中所討論的某些問題可能會使您在心理上感到不舒服或困擾，您可以隨時提出，並當場拒絕回答問題、隨時退出當次的討論或退出整個研究。您的退出不會因此引起任何不愉快、產生任何不良後果，或影響到您任何其他方面的權益（例如：學校成績等）。

我已詳細瞭解上述研究方法及其所可能產生的危險與利益，有關本研究計畫的疑問。本人同意接受為此研究計畫的自願研究參與者。

研究參與者中文正楷姓名：

簽名：

簽署日期：西元 年 月 日

研究者聯絡電話：0952122866

Email 信箱：weilin.huang.14@ucl.ac.uk

姓名：黃瑋琳 英國倫敦大學 (University College London) 音樂教育博士候選人

-----  
(研究者存聯，請沿虛線撕下交回)

我已詳細瞭解上述研究方法及其所可能產生的危險與利益，有關本研究計畫的疑問。本人同意接受為此研究計畫的自願研究參與者。

研究參與者中文正楷姓名：

簽名：

簽署日期：西元 年 月 日

**您的聯絡方式**

◇ 姓名 \_\_\_\_\_ 班級 \_\_\_\_\_ 主修樂器 \_\_\_\_\_

◇ 手機號碼：

◇ Email：

◇ 是否參加班級音樂會 (請圈選)? 是 否

◇ 您接受第一次訪談的時間 (請於 3/24 日~4/3 日, 9am-10pm 之間, 選五天):

<b>例: 2/28</b>	3/24	3/25	3/26	3/27	3/28
<b>9am-1pm</b>					
3/29	3/30	3/31	4/1	4/2	4/3

### **Appendix 3: Interview schedule**

#### **Interview schedule of first interview:**

1. 你覺得自己是個什麼樣個性的人？  
What do you think yourself? E.g. personality.
2. 你覺得自己在台上是個什麼樣的音樂表演者？對音樂的抱負 or 想法  
What do you think yourself as a musician? E.g. your thought about musical life and future plan?
3. 對於上台表演這件事情，你有什麼感覺？（如果不緊張，跳過問題 5 和 7）。  
What do you feel when you perform on the stage? (If not anxious, ignore question 5 & 7).
4. 你記得你上一次表演獨奏是什麼時候嗎？表演前你都在做什麼？  
Could you describe your last solo performance preparation experience? What did you do?  
(i.e. weeks before performance? during the week before performance? on the day of performance? Backstage? on the stage? after performance?)
5. 若是上台感到緊張，你都怎麼處理？  
How do you manage your anxious feeling at that time?
6. 你的生活有因準備音樂表演而改變嗎？請詳述飲食、睡眠、運動、心理情緒等方面。  
Does your life style change before actual performance (e.g. eating, sleeping, exercising, and emotion)?
7. 你常在做別的事情時，也會有這種緊張的感覺嗎？有的話請舉個例子。  
Did you receive the same anxious feeling (performing on stage) when you are doing other things? If so, please provide an example. What is it? How you feel? When it happened? How did you manage it?
8. 你怎麼定義音樂表演焦慮？覺得對你的表演有什麼影響？如果有沒有負面影響跳過問題 10。  
How do you define MPA? Do you think MPA is good or bad or both to you? Why? (If there is no negative effect, ignore question

- 10).
9. 老師或是其他人有給過你克服緊張的方法嗎？如果有，請分享？  
Did your teacher or any other people provide/suggest you any managing MPA strategies? If so, please tell me about it in detail.
10. 會因為音樂表演焦慮而放棄成為演奏家嗎？  
Will you give up to be a stage performer or study further (e.g. postgraduate) due to suffering from MPA? Why?
11. 與受訪者約定下次訪談時間，並簡單解說手冊內容。  
Discuss the next interview schedule and briefly introduce the performance diary.

### **Interview schedule of second and third interview:**

1. 請分享這次音樂會的內容  
Please share the content about this performance.
- 此次曲目有什麼？對於這次表演有什麼心得嗎？  
Can you tell me about your programme? How did you feel about your performance?
  - 你覺得曲子困難嗎？是誰選的？  
Do you think the selected repertoire difficult to you? Who choose the pieces?
  - 此次選曲有造成你本次表演的壓力嗎？例如技巧挑戰很高。。  
Are the selected pieces become one of the factors that make you feel pressure?
  - 本次表演場地怎麼樣？音效？場地利弊影響表演品質？  
How was the performance setting? E.g. sound effect, location...
  - 觀眾是誰？（評審／音樂專家／家人／朋友／不認識的）大概有多少人？  
Who were the audiences? How many?
  - 本次音樂會的目的是什麼？有什麼樣的期許？  
What is your main purpose/ goal about this performance? Do you have any expectations?
  - 你對自己本次演出的滿意度和評價？  
Do you satisfy with your performance? Can you make a feedback for yourself about the performance?
2. 這次表演有什麼感覺？

What did you feel when you perform on the stage?

- 表演前你都在做什麼？幾週前？幾天前？前一天？當天？後台準備時？在台上？表演結束後？

What did you do during this performance preparation? (i.e. weeks before performance? during the week before performance? on the day of performance? Backstage? on the stage? after performance?)

- 若是上台感到緊張，你都怎麼處理？

How did you manage your anxious feeling this time?

- 這次表演老師或是其他人有給過你克服緊張的方法嗎？如果有，請分享？

Did your teacher or anyone provide/suggest you any managing MPA strategies when preparing performance this time? If so, please tell me about it in detail.

3. 請分享小冊子使用心得

Please share your feedback about PD. Did you read it?

- 本冊子所提供之克服焦慮方法，有幫助你提高表演的品質及水準嗎？

Did the selected strategies help your overall performance?

- 若有，如何幫助？

If so, how did performance diary work?

- 本冊子所提供之克服焦慮方法，有改變你練琴的方式／生活節奏／對表演的態度嗎？若有，請細述如何改變？

Did the selected strategies change your practice routine/life/attitude toward the performance?

- 在閱讀小冊子時，有沒有遇到什麼困難？若有，請舉例

Did you feel any difficulties when you read the PD? If so, please describe them in detail

- 你覺得本書給予你什麼幫助最大？

What do you have acquired from the PD?

- 本冊子所提供之克服焦慮方法，那一個 or 那幾個最有效？

Which selected strategy(s) is/are the most helpful for you?

- 本冊子所提供之克服焦慮方法，那一個 or 那幾個最無效

Which selected strategy(s) is/are the less helpful for you?

4. 你是否曾經聽過手冊上的任何克服音樂表演焦慮之方法？哪裡聽過？請提供例子參考。

**Which were any selected strategies you already heard or do?**

**Where you have heard?**

5. 與受訪者約定下次訪談時間，並提醒手冊繼續保留，直到最後一次表演完才收回。

**Discuss the next interview schedule and remind them to keep the PD and return it when they completed all the research interviews.**

6. 你在準備音樂會跟準備考試上面有使用不一樣的克服焦慮技巧嗎？

**Did you use different strategies between concert and exam preparation?**

7. 未來有可能當音樂教師的話，如果你的學生有焦慮問題，你會怎麼幫助他們？

**How will you help your students to overcome musical performance anxiety in you future teaching?**

Appendix 4: Overview of strategies used

Year group	Type of performance	With whom?				Time periods							Mental prerequisites				Others												
		Peer support	Teacher support	Parent support	Programme support	Early stage	During the week before performance	On the day of performance	Backstage	On stage	After performance	Only back to specific time	Attentional focus	Motiv. problem	Relaxation	Replay the CD	Engaging	Self score	Without instrument	With instrument	Not helpful	Part of routine							
Self-talk: Motivational self-talk (MST)	1	Pre-rehearsal					5	2	1	2	0	1												2					
		Concert					3	0	0	4	0	1												1					
	2	Pre-rehearsal					5	1	1	3	3	2												5					
		Concert					1	0	0	1	0	0												1					
	3	Pre-rehearsal					1	0	1	3	1	0												1					
		Concert					4	2	1	3	0	0												1					
	Self-talk: Instructional self-talk (IST)	1	Pre-rehearsal					0	0	0	3	7	0												1				
			Concert					0	0	0	0	1	0												1				
		2	Pre-rehearsal					0	0	0	2	0	0												1				
			Concert					0	0	0	2	0	0												1				
		3	Pre-rehearsal					0	0	0	1	0	0												1				
			Concert					0	0	0	0	2	0												1				
Mental rehearsal		1	Pre-rehearsal	1				10	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0				
			Concert					7	2				7	5	7	3	3	Yes											
		2	Pre-rehearsal	2				6	0				6	5	6	2	3	Yes						1					
			Concert					4	1		1		5	1	0	1	1	Yes						1					
		3	Pre-rehearsal	2				4	1				2	4	3	1	1	Yes						1					
			Concert					1	2				1	2	1	1	1	Yes						1					
	Visual rehearsal	1	Pre-rehearsal	2				10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
			Concert					3	0				3	0	1	1	Yes							1					
		2	Pre-rehearsal	1				2	2				4	0	1	0	0	0	0	0	0	0	0	0	0				
			Concert					4	0				4	0	1	0	0	0	0	0	0	0	0	0	0				
		Accepting mistakes	1	Pre-rehearsal	1				1					1	1	1									2				
				Concert					4	0				5	2	4									2				
Breathing			1	Pre-rehearsal	1				1					1	0	0	0	0	0	0	0	0	0	0	0				
				Concert					3	1	1	0	0	6	0	0	0	0	0	0	0	0	0	0	0				
			Muscle relaxation	1	Pre-rehearsal	1				1					1	0	0	0	0	0	0	0	0	0	0	0			
					Concert					3	0				3	0	0	0	0	0	0	0	0	0	0	0			
				Following a pre-performance routine	1	Pre-rehearsal					0					0	0	0	0	0	0	0	0	0	0	0	0		
						Concert					0					0	0	0	0	0	0	0	0	0	0	0	0		
	Physical activities				1	Pre-rehearsal	1	2			9	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	
						Concert					3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
					Absorbing activities	1	Pre-rehearsal	14	1			6	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					1	1	1	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0
		Contrived performance situation				1	Pre-rehearsal	0	4			2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					5	4	2	4	10	0	0	0	0	0	0	0	0	0	0	0	0	0
Tapering off practice						1	Pre-rehearsal	2	1			1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
			Cognitive restructuring			1	Pre-rehearsal					0					0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					0					0	0	0	0	0	0	0	0	0	0	0	0	0
				Other strategies		1	Pre-rehearsal					0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Dietary					1	Pre-rehearsal	2				2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
					Beta-blocker	1	Pre-rehearsal					0					0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					0					0	0	0	0	0	0	0	0	0	0	0	0	0
		More performance experience				1	Pre-rehearsal					0					0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					0					0	0	0	0	0	0	0	0	0	0	0	0	0
Increase practice hour						1	Pre-rehearsal					0					0	0	0	0	0	0	0	0	0	0	0	0	0
							Concert					0					0	0	0	0	0	0	0	0	0	0	0	0	0

0 = no participant use it but could be found in other similar categories/strategies.  
 Unknown = no data  
 None = no one use it and could not be found in other similar categories/strategies either.

Appendix 4: Overview of strategies used

	Year group	Types of performance	With whom ?					Time periods							Musical preparedness					Others					
			Peer support	Teacher support	Parent support	accompanist support	Solitary	Early stage	During the week before performance	On the day of performance	Backstage	On stage	After performance	daily basis/no specific time	Memorizing music	Musical analysis	Familiarity	listen to the CD	fingering	read score	Without instrument	with instrument	not helpful	part of course	
Self-talk: Motivational self-talk(MST)	1	Pre-research						5	3	1	2	0		1										2	
		Concert						3	0	0	4	0		1										1	
		Exam						5	1	1	3	3		2										1	
	2	Pre-research						5	2	2	2	0		3											
		Concert						1	0	0	1	0		0										1	
		Exam						1	0	1	3	1		0											
	3	Pre-research						4	2	1	3	0		0											
		Concert						6	0	0	6	0		0										1	
		Exam						5	3	2	5	6		0											
	4	Pre-research						0	0	0	1	0		0											
		Recital						6	0	0	0	1		6											
	Self-talk: Instructional self-talk (IST)	1	Pre-research						0	0	0	3	7		0										
Concert								0	0	0	0	5		0										1	
Exam								0	0	0	2	0		0										1	
2		Pre-research						0	0	0	2	2		0										1	
		Concert						0	0	0	0	2		0										2	
		Exam						0	0	0	1	0		0											
3		Pre-research						0	0	0	1	2		0										1	
		Concert						0	0	0	0	2		0										1	
		Exam						0	0	0	1	0		0											
4		Pre-research						0	0	0	1	1		0											
		Recital						2	0	0	2	1		2											
Mental rehearsal		1	Pre-research		1				10						9	8		7	3		3	Yes			
	Concert							7	1					7	5		7	3		3	Yes				
	Exam							9						9	7		9	7		7	Yes				
	2	Pre-research		2				6						5	5		6	2		3	Yes				
		Concert						4			1			1			3	1		1	Yes		1		
		Exam						2						1	1		1	1		1	Yes				
	3	Pre-research		2				4	1					2	4		3	1		1	Yes				
		Concert						1						2			1				Yes				
		Exam						1						2			1				Yes				
	4	Pre-research		1				8	0	0	1	0		7	6		7	3	3	4	Yes				
		Recital						6	0	0	0	0		6	3		5	4	4	2	Yes			1	









Appendix 4: Overview of strategies used

	Year group	Types of performance	With whom ?					Time periods							Musical preparedness					Others				
			Peer support	Teacher support	Parent support	accompanist support	Solitary	Early stage	During the week before performance	On the day of performance	Backstage	On stage	After performance	daily basis/no specific time	Memorizing music	Musical analysis	Familiarity	listen to the CD	fingering	read score	Without instrument	with instrument	not helpful	part of course
More performance experience	1	Pre-research												0										
		Concert													1									
		Exam													1									
	2	Pre-research													1									
		Concert													0									
		Exam													0									
	3	Pre-research													0									
		Concert													0									
		Exam													0									
	4	Pre-research													0									
		Recital													0									
	Increase practice hour	1	Pre-research													5								
Concert															2									
Exam															4	2								
2		Pre-research													5									
		Concert													1									
		Exam													2									
3		Pre-research													4									
		Concert													0									
		Exam													2									
4		Pre-research													5									
		Recital													0									

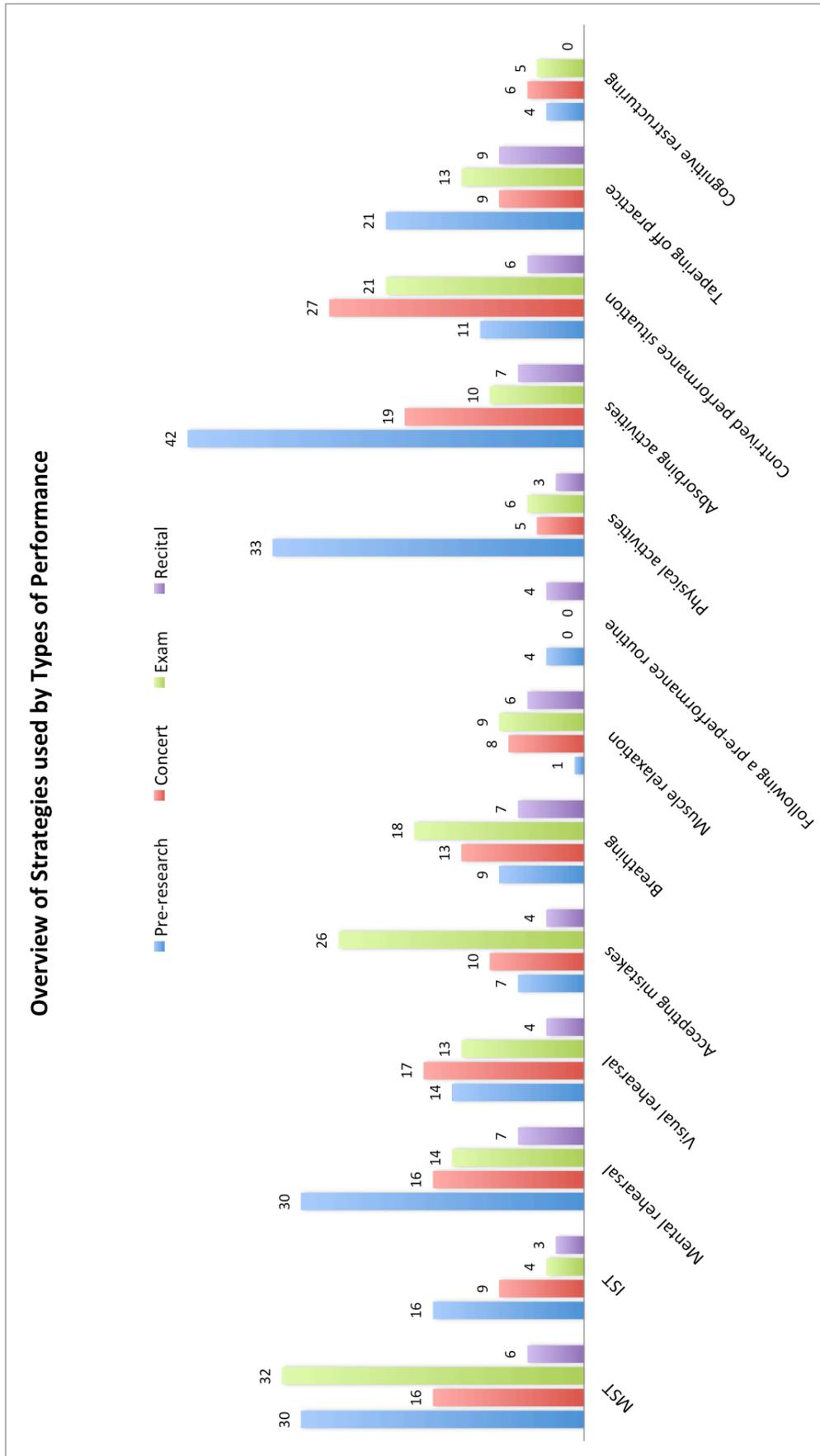
0 = no participant use it but could be found in other similar categories/strategies.

Unknow= no data

None= no one use it and could not be found in other similar categories /strategies either.

## **Appendix 4: Overview of strategies used**

## Appendix 5: Overview of strategies used by types of performance



## Appendix 6: Overview of Strategies used by Types of Performance in relation to Year Group

	MST	IST	Mental rehearsal	Visual rehearsal	Accepting mistakes	Breathing	Muscle relaxation	Following a pre-performance routine	Physical activities	Absorbing activities	Contrived performance situation	Tapering off practice	Cognitive restructuring
P1	12	7	12	5	1	3	1	0	10	12	1	4	0
P2	8	4	6	2	0	2	0	0	6	10	4	5	1
P3	9	3	4	4	1	1	0	0	9	11	4	3	3
P4	1	2	8	3	5	3	0	4	8	9	2	9	0
C1	8	5	9	9	6	6	3	0	4	6	7	2	2
C2	2	2	5	4	2	4	2	0	0	6	10	2	2
C3	6	2	2	4	2	3	3	0	1	7	10	5	2
E1	15	2	10	10	9	8	4	0	2	4	11	3	3
E2	6	1	2	1	9	6	0	0	1	1	5	3	1
E3	11	1	2	2	8	4	5	0	3	5	5	7	1
Recital	6	3	7	4	4	7	6	4	3	7	6	9	0