The practical application of psychological skills training for musicians: an exploratory multi-method study.

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Abstract

The research in this thesis developed through making connections between the practical and academic worlds of music and sport. As a practitioner already transferring ideas from sport into piano teaching, and as a researcher concerned by the lack of research about performance training for musicians, the author saw a potential in using psychological skills training (PST), largely researched in sport psychology, as an approach to performance preparation.

In the first phase of a two-phase multi-method emergent design, focus group discussions with student instrumental teachers and experienced piano teachers explored the extent to which performance strategies were used by these teachers for themselves and for their pupils. The findings substantiated previous research, which shows that instrumental teachers know little about performance psychology, and added credence to the idea of using PST from sport as an approach to performance training.

A small but growing literature shows that group PST programmes can benefit specialist musicians, but some researchers suggest PST may be more effective tailored to the individual. In phase 2 the practical application of one-to-one PST is demonstrated in two separate studies. Interviews with a Performance Coach and seven of her pianist clients show the impact of specialist coaching in a UK conservatoire, and that teachers can work together with an expert consultant to enhance performance. In addition, a year long action research project, with six piano teachers and their pupils, reveals the potential and challenges of psychological preparation for performance in the piano teacher’s studio, and that through training and reflection piano teachers can directly improve the performance experience for their pupils. These studies add to existing research on the use and benefits of PST for specialist musicians, and provide evidence that this type of training can also benefit musicians learning to play their instrument for recreation.
This thesis is dedicated
to the memory of
Acknowledgements

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I would like to thank to all my piano and tennis pupils past and present for teaching me, and without whom this thesis would not have happened. Particular thanks must go to two of my former piano pupils: Dr. Andrew Knight for encouraging me to return to academia in 2007, and for encouraging me to continue my scholarship, and to Mark Boden, for being my first pupil to try out ideas from sport to help him with piano performance. Special thanks also go to those piano pupils who participated in my research.

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Conference presentations


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Guest teacher to postgraduates at the Royal Birmingham Conservatoire ‘What can sports psychology offer teachers and their pupils?’ (February 2018, February 2019).

Publication

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<td>ABRSM</td>
<td>Associated Board of the Royal Schools of Music</td>
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<td>APA</td>
<td>American Psychological Association</td>
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<tr>
<td>AR</td>
<td>Action Research</td>
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<tr>
<td>BABCP</td>
<td>The British Association of Behavioural and Cognitive Psychotherapies</td>
</tr>
<tr>
<td>BAPAM</td>
<td>British Association of Performing Arts Medicine</td>
</tr>
<tr>
<td>BASES</td>
<td>British Association of Sports and Exercise Science</td>
</tr>
<tr>
<td>BPS</td>
<td>The British Psychological Society</td>
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<tr>
<td>EPTA</td>
<td>European Piano Teachers Association</td>
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<tr>
<td>ISM</td>
<td>Incorporated Society of Musicians</td>
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<tr>
<td>LTA</td>
<td>Lawn Tennis Association</td>
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<td>MPA</td>
<td>Music Performance Anxiety</td>
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<tr>
<td>PCDE</td>
<td>Psychological Characteristics of Development Excellence</td>
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<tr>
<td>PD</td>
<td>Professional Development</td>
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<td>PST</td>
<td>Psychological skills training</td>
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Glossary

**Anxiety** An emotional state characterized by worry, feelings of apprehension and/or bodily tension that tends to occur in the absence of real or obvious danger. (Moran & Toner, 2017, p. 379).

**Arousal** Arousal is a blend of physiological and psychological activation in a person, and it refers to the intensity dimensions of motivation at a particular moment. The intensity of arousal falls along a continuum ranging from not at all aroused (i.e. comatose) to completely aroused (i.e. frenzied). see Gould Greenleaf & Krane, 2002 (Weinberg & Gould, 2015, p. 75).

**Behavioural anxiety** A component of anxiety that is typically evident in such behaviour as tense facial expressions, changes in communication patterns (e.g. unusually rapid speech delivery) and jerky and inefficient body movements. (Moran & Toner, 2017, p. 380).

**Cognitive anxiety** Worry- or having negative expectations about some current or impending task or situation (Moran & Toner, 2017, p. 380).

**Concentration** The ability to focus effectively on the task at hand, or on what is most important in any situation, while ignoring distractions (Moran & Toner, p. 381).

**Goal Setting** The process by which people establish targets or objectives to attain (Moran & Toner, 2017, p. 383).

**Imagery** Mental imagery is the cognitive process, which enables us to represent in our minds experiences of things, which are not physically present (Moran, 2004).

**Music Performance Anxiety**
The experience of persisting, distressful and/or actual impairment of performance skills in a public context, to a degree unwarranted given the individual’s musical aptitude, training and level of preparation (Salmon, 1990, p. 3).
**Music performance anxiety** is the experience of marked and persistent anxious apprehension related to musical performance that has arisen through underlying biological and/or psychological vulnerabilities and/or specific anxiety-conditioning experiences. It is manifested through combinations of affective, cognitive, somatic and behavioral symptoms. It may occur in a range of performance settings, but is usually more severe in settings involving high ego investment and evaluative threat (audience) and fear of failure. It may be focal (i.e. focused only on music performance) or occur comorbidly with other anxiety disorders, in particular social phobia. It affects musicians across the lifespan and is at least partially independent of years of training, practice and level of musical accomplishment. It may or may not impair the quality of the musical performance (Kenny, 2009, p. 433).

**Pre-performance routine** Preferred sequences of preparatory thoughts and actions that athletes use in an effort to concentrate effectively before the execution of a skill (Moran & Toner, 2017, p. 386).

**Relaxation** Relaxation is the desired mental and physical state one wishes to achieve in order to perform optimally. It involves the ability to manage physiological symptoms of arousal (physical tension in the body, or butterflies in the tummy) as well as worrying thoughts and stress-related emotions.

**Self talk** Self talk is ‘what people say to themselves out loud or as a small voice inside their head’ (Theodorakis, et al 2000: 254 cited in Hardy, 2006).

**Somatic Anxiety** An unpleasant state of bodily tension that is usually accompanied by increased heart rate, rapid breathing and “butterflies” in the stomach (Moran & Toner, 2017, p. 388).

**Simulation Training** The theory that athletes can learn to concentrate more effectively in real-life pressure situations of they have practised under simulated versions of these conditions. (Moran & Toner, 2017, p. 388).

**Sport and Exercise Psychology** Sport and Exercise Psychology is the scientific study of people and their behaviours in sport and exercise activities and the practical application of that knowledge (Gill & Williams, 2008, as cited in Weinberg & Gould, 2015, p. 3).
List of transcription symbols

The following symbols are a simplified version of that developed by Gail Jefferson (see Wooffitt, 2001, p. 62) and were used for all focus group interviews (Chapter 4), individual interviews (Chapter 5) and Action Research teacher meetings (Chapters 6-9).

( ) A dot enclosed in a bracket indicates a pause in the talk.

Under Underlined fragments indicate a speakers emphasis.

CAPITALS Indicates a word or section that was louder than others.

? A question mark indicates a rising inflection. It does not necessarily indicate a question.

(() ) A description enclosed in a double bracket indicates a non verbal activity for example (( banging sound)).

( ) A description in a single bracket was used to indicate the way someone spoke, for example (quietly), or for any other information about the way a person spoke.
1 Setting the scene

I have inhabited the worlds of music and sport all my life; as a learner of both piano and tennis, as a student studying for a degree in physical education and music, as a practitioner (piano teacher and tennis coach), as a parent of four children involved in sport and music activities, and most recently as a researcher. The research in this thesis developed from my practical experience, where over fifteen years ago I began to transfer ideas from the tennis court to the piano teachers’ studio in preparing my pupils psychologically for performance, and also through comparing and contrasting the academic worlds of music and sport psychology.

When I returned to academia in 2007 to study psychology for musicians I expected to find a theoretical basis for the psychology of music performance preparation. However, music psychology is both multidisciplinary and interdisciplinary (Hodges, 2003) and there is no established applied music psychology literature equivalent to applied sport psychology, which is all about the performer and improving performance (Pecen, Collins & MacNamara, 2016, p. 3). Also in 2007, there was little research about musicians as performers, and a lack of research that included the performer’s perspective (also noted more recently by Doganatan-Dack, 2013, p. 268). In general there was a lack of connection between research and practice. In a review of the development of music psychology during his long career as a music psychologist, Sloboda laments:

...suppose all the music psychology in the world had never been written, and was expunged from the collective memory of the world, as if it had never existed, how would music and musicians be disadvantaged? [...] would performers cease to perform so well...? (Sloboda, 2005, pp. 395-396).

At the time I began my doctoral studies my answer to this question was no. This lack of research interest in musicians as performers presented an extensive gap in knowledge for me to explore.

At the start of my exploration, for the performers of music and their teachers there was a reliance on ‘tradition and instinct’ (Rink, 2002, xii) rather than research about the best ways to prepare for a performance. Resources for musicians and
teachers about the psychology of performance preparation came in the form of popular self-help literature, (for example, Berman, 2000; Havas, 1973; Ristaad, 1982; Werner, 1996; Westney, 2003), and more specifically for pianists from books of interviews with famous pianists (Benser, 2012; Dubal 1984; Grindea, 2006; Noyle, 1987). The authors of this literature are mainly professional musicians and pedagogues whose advice is offered based on their beliefs and experiences, and by authors, who write more specifically about strategies to overcome performance anxiety (for example, Buswell, 2006; Salmon & Meyer, 1998; Whykes, 2007). One book in particular made the connection between psychological performance preparation in sport and music. The classic self-help text *The Inner Game of Music* (Barry & Galwey, 1986) shows how *Inner Game* concepts can be transferred from tennis (Galwey, 1974) and skiing (Galwey & Kriegler, 1977) to music. Subsequently sport psychology consultants, for example, Greene and Moore have added to this literature by applying their experience in sport psychology to music (Greene, 2001, 2002; Moore, 2011).

I began my research in 2011 when my practical interest in the notion that the performance of musicians could be improved with training through transferring ideas from sport was only just beginning to be recognised in academia (Clark, 2010; Clark & Williamon, 2011). Research in all performance domains is showing that performance under pressure affects the human being in similar ways psychologically (Hays, 2012). However, performing artists interviewed by Hays (2002) appear to need education to understand the difference between a performance training or enhancement approach and the more familiar 'pathology-based approaches' (p. 306). The research presented in this thesis therefore connects two ostensibly differing performance worlds, those of music and sport, by investigating the potential of psychological skills training (PST) (which has largely been researched in sport psychology) for the benefit of performers of music.

Psychological skills training refers to systematic and consistent practise of mental strategies for the purpose of enhancing performance, increasing enjoyment, or achieving greater sport and physical activity self satisfaction. (Weinberg & Gould, 2015, p. 247).
The aim in PST is to teach mental strategies alongside physical and other skills to develop a rounded performer. PST is a cognitive-behavioural method of improving an individual’s behaviour and mindset to improve performance quality, performance experience or both. Learning mental strategies through PST can improve concentration, (Moran, 1996, 2004) confidence, control, and motivation for performance (Weinberg & Gould, 2015).

There has been a small but growing interest in the use of PST programmes for musicians, but the main focus of the research population has been on music students aspiring to become professional musicians. The distinctions in the literature are usually between professional and amateur, or professional and student. These distinctions do not adequately describe the pupils I teach, who may not differ from professionals and music students in their musical ability, but definitely differ in their musical ambition. In this thesis I refer to two types of musician:

**Specialists** are musicians who are already professional, students working towards a career in music, or young people identified on a path to excellence.

**Recreational** are musicians of all ages and standards, who are learning to play their instrument as a leisure activity.

I wanted to include both types of musician in my research and to study one-to-one training as this was my experience in piano teaching. My first research question (RQ) was a general one:

**RQ1 What is the potential of using one-to-one PST, researched mainly in sport psychology, to prepare musicians of all ages and abilities psychologically for performance?**

My research was conducted in two phases. In the first exploratory phase, two focus groups of teachers discussed their performance preparation, their teaching of performance skills, and whether they could see a potential in using sport psychology as a model for performance training. In the second phase, the practical application of one-to-one PST was investigated in two different settings; a UK conservatoire and
the piano teachers studio. Specific aims and research questions developed as the research progressed, and these are presented in the methodology chapter and at the start of the appropriate findings chapters. In this thesis I contribute to current research interest in the implementation of PST from sport to music for specialist music students. I also address a lack of knowledge and understanding about performance training for recreational musicians of all ages.

1.1 Developing research ideas

As both a teacher and researcher my scholarship arose from combining practical and academic knowledge. It is not ‘disinterested’, but a view from the final phase of my career as a piano teacher of over thirty years. My personal narrative is necessary in order to explain the research design, which emerged in an ‘organic, opportunistic, and serendipitous fashion’ in the ‘spirit of multi-method research’ (Hunter & Brewer, 2015, p. 186). In the following, I describe how my research developed in two phases through making connections and comparisons between the worlds of music and sport. I also describe how the meeting of significant people was influential in the evolution of Phase 2. The ideas for this thesis began with observations of, and questions about, my own development as a musician and athlete.

1.1.1 Comparing performance experiences in sport and music

By the time I left school I had represented my county at tennis and also achieved Grade 8 from the Associated Board of the Royal Schools of Music (ABRSM) in piano. As was common piano teaching practice at that time, I took one examination after another over eight years. I also performed piano solos at school, or for family and friends. I did not really enjoy these performance experiences. I performed as a solo tennis player under pressure in regular matches and tournaments, sometimes in front of an audience, but loved it. I wondered:

Why did the same young person, equally able at both disciplines, welcome the tennis yet dread the piano?
Music performance anxiety (MPA) research would suggest that I suffered from performance anxiety, and at the time I probably explained to myself that I was a ‘nervous’ pianist; that is ‘nerves’ were the problem. However, this did not clarify why I could experience the same physiological reactions, general worries and self doubt in both situations, yet perceive them so differently.

I decided to reflect on, and analyse what made my two performance experiences different. I used an autoethnographical approach described by Ellis Adams and Bochner (2011) for this. I began with recollections of my performance experiences in tennis and piano (auto). I then considered these experiences as part of the two worlds of music and sport (ethno). Finally, I analysed my performance experiences and training using various a posteriori themes including informal v formal learning, evaluation and feedback, attitude to mistakes, learning to perform and practise (graphy). This reflection and analysis indicated that I seemed to develop better coping skills for my ‘nerves’ in tennis because of the following:

- More performance frequency and opportunity
- Regular constructive feedback and support from my teacher, coach and family

My ‘nerves’ in piano seemed to be a consequence of a lack of performance training, and not the primary problem. In tennis my ‘nerves’ seemed normal and a type of anticipatory excitement about the performance, but for piano these same physical feelings and emotions filled me with dread. Findings in sport psychology research explain this by showing that it is not performance anxiety per se that is problematic, but how it is perceived and whether the individual feels they are in control of it (Cheng, Hardy, & Markland, 2009). There is also evidence that with experience interpretations of anxiety can become more facilitative (Hanton, Cropley, Neil, Mellalieu, & Miles, 2008). This probably happened in tennis and not piano because I had more performance experience.

I reflected that my negative performance experiences in piano as a teenager had consequences on my future playing and teaching which were:

- To avoid solo performance, preferring to accompany or play duets
- To ensure when I started piano teaching that my pupils had positive performance experiences.
I was driven to find better ways to teach than the way I was taught, and eventually this led me to transfer ideas from tennis coaching to the piano teaching studio, and to examine this teaching through research.

1.1.2. Comparing practitioner worlds in sport and music

A second personal reflection gave insight into why there is no performance psychology for musicians. I asked:

Why had I not thought of psychology for the pianist when I first began teaching, especially as my performing experiences were negative, and I had studied sport psychology?

The answers lay in my lack of training, and also in my being entrenched in a traditional musical culture that has preferred to believe in popular myths rather than systematic performance preparation.

In a comparison of my tennis coach and piano teacher training, I noted that the first was organised and progressive, whereas the second was disorganised and fragmentary. In tennis, I took a series of specific qualifications from level 1 to level 4 (Lawn Tennis Association [LTA] 'Coaching Qualifications Pathway', n.d.). Professional development became compulsory as part of the LTA coach licensing scheme. In addition to basic training, I attended regular courses where I learned about topics from technique and fitness to mental toughness and motivation. In contrast, I have no specialist piano teaching qualification. At the start of my piano teaching career in the 80s, I held a degree in Music, had achieved Grade 8 ABRSM and was a qualified schoolteacher. According to a survey of UK piano teachers this is fairly typical. The majority (58%) have studied music at degree level, and many have a high level qualification in performance. ‘Less than a quarter of respondents had any instrumental teaching qualifications’ (Cathcart, 2013, p. 136). For piano teachers, professional development is voluntary, and this training has always been about better ways to teach music and not to teach performance skills. My interest and involvement as a parent in the Suzuki method (Bigler & Lloyd-Watts, 1979; Suzuki, 1983), which encourages performance from the outset of the learning, and
my involvement in a local competitive Music Festival gave me better insight into performance preparation than my training.

A comparison between piano teaching and tennis coaching resources shows that piano teaching lacks the breadth of resources offered in tennis. Tennis coaching resources are about playing and competing and include the physical, technical, tactical and mental sides of the game. The approach is game-based (Crespo, Reid & Miley, 2004). With the exception of Grindea (2001, 1982), founder of the European Piano Teachers’ Association (EPTA) and International Society for the Study of Tension in Performance (ISSTIP), whose pioneering work was on the effects of physical and mental tension in performance, most books on piano or more general music pedagogy give advice about technique and learning music.

Performance is mentioned in one of the closing chapters of several books on pedagogy (for example, Harris & Crozier, 2000; Macmillan, 2010; Newman, 1984; Taylor, 1981; Williams, 2017), but the advice is about how to practise prior to the performance and how to prevent ‘performance anxiety’ or ‘nerves’. The ABRSM examination board, more recently, has developed guides, which advise pupils and parents about dealing with the pressures of the examination (ABRSM, ‘On The Exam Day’, n. d.). The advice in these resources is sensible, but difficult to implement without practice and some teaching. This advice perpetuates two dominant cultural myths:

• Practice is the best form of performance preparation
• Nerves are inevitable and affect performance adversely

I became aware that these myths are reflected in the two main topics of research relevant to the performer and performance in the late 20th and early 21st century:

• Practice
• Music Performance Anxiety (Gabrielsson, 2003; Nordin-Bates, 2012).

The first myth probably stems from a master-apprentice system of instrumental teaching, where the evidence base has been ‘tradition and personal experience’ (Clark & Williamon, 2009, p.97). In instrurmental teaching the term
'practice' is most commonly used to describe the process of preparing for a performance (Reid, 2002, p. 102). This is not to be confused with the musicology perspective where the word practice refers to historical practice and theories about the ways music should be performed in differing cultures. Ginsborg, Chaffin and Demos (2012) refer to this as ‘performance practice research’ in contrast to ‘music performance research’ which ‘uses theoretical frameworks and empirical methods adapted from psychology’ (p. 202).

The myth about practice, as the process of performance preparation, has contributed to a wide variety of research topics. These range from the practice strategies of individuals (Chaffin & Imreh 2001, 2002; Miklaszewski, 1989) the quantity of practice (Ericsson, Krampe, & Tesch-Romer, 1993), the quality of practice (Williamon & Valentine, 2000), attention processes in relation to the musical structure of a piece when practising (Williamon, Valentine & Valentine (2002), the understanding of the musical structure when memorising a piece (Williamon & Valentine (2002), self-regulated learning and practice (Araujo, 2016; Miksza, 2012; Miksza & Tan, 2015; Nielsen, 2001) to a model of practice which included factors related to the individual and the practising environment that influence practice (Hallam, 1997). The theory that, in order to excel, the musician should complete at least 10,000 hours of deliberate practice by the age of twenty (Ericsson et al., 1993) has reinforced the popular belief in large volumes of practice as the best form of performance preparation.

The belief that practice is the best performance strategy is linked to a belief that it is the best method for coping with ‘nerves’ in performance (Partington, 1995). However, famous artists who have suffered from stagefright, for example, from ‘concert pianist Vladimir Horowitz’ to ‘pop singer Carly Simon’ (Leblanc, Jin, Obert, & Sivola, 1997) and a large research interest in MPA and the debilitating effects it can have on performance would suggest that practice alone does not work for everyone (see Kenny, 2011, for the most recent comprehensive account of MPA).

Research using the model of MPA, which is therapeutic or pathological (Pecen et al., 2016), reflects the belief that ‘nerves’ need to be cured, treated or at least reduced. Much of the research within music psychology has therefore concentrated on finding possible causes and treatments for MPA. Examples of treatments are hypnotherapy and eye movement desensitisation and reprocessing.
(Brooker, 2018), acceptance and commitment therapy (Juncos & Markman, 2016) progressive muscle relaxation, cognitive therapy, and biofeedback (Nagel, Himle & Papsdorf, 1989), as well as a variety of cognitive strategies, and drugs reported in reviews by Brugues (2011), Kenny (2005) and Taborsky (2007). It is probable that researchers, who are musicians themselves, have been brought up with traditional beliefs about practice and anxiety, and have found it difficult to abandon these models. Without an established applied research literature, traditional beliefs have not been widely challenged.

Just as I had not been adequately trained to cope with the pressures of performance as a pianist myself, I reflected that I had not considered teaching psychological skills due to a lack of training and teaching resources. I was part of a culture that advised that practice and treating ‘nerves’ were the best kind of performance preparation. My personal reflections and discoveries gave me even more reason to study performance training for musicians, as there was a need for new knowledge in this area.

1.1.3. Connecting practitioner worlds of sport and music

My piano teaching was transformed, when in 2000, I made a connection between my performance worlds. As part of my compulsory professional development as a tennis coach, I undertook a six month online Sports Psychology Diploma. During this diploma I taught my tennis pupils a variety of strategies to help them develop their psychological skills, which improved their performance experience. It was some time during these studies that I had a ‘light bulb moment’: these skills were applicable to my piano pupils and were probably transferable.

I began with one pupil, both a tennis player and a pianist, who was enthusiastic to try out a sport psychology approach to help him attain distinction, the highest level, at grade 8 ABRSM as a university entry requirement. We used goal-setting strategy (2.2.4) to plan the 18 months of study, which included regular performances of the examination pieces. The development of a performance routine (2.2.5), into which other mental strategies were integrated, became a regular part of his performance preparation. We planned for him to ‘peak for performance’ (see Le Meur, Hausswirth & Mujika, 2012) at the time of his examination. He achieved his
goal and we both felt that the systematic approach to performance was instrumental in this.

Following the success with this pupil I began to adapt what I knew from sport psychology to all my pupils. The more I taught mental strategies and thought about the way I was teaching performance as a skill separate to learning music, the more convinced I was that this was beneficial. This connection between my worlds of sport and music gave me tools and a structure for my teaching to improve the performance experience for my pupils, which became the subject of the action research (AR) project in this thesis (Chapters 6-10).

1.1.4. Comparing psychological skills of elite athletes and professional musicians

The focus group study, which is the first phase of my research (Chapter 4) developed through comparing studies about the psychological skills of professional musicians compared to top athletes. The main interest in the mental skills of musicians has come from sport psychologists, who found that like top athletes, professional musicians also place importance on mental as well as physical skills as a contributing factor to success in performance (Bellon 2006; Talbot-Honeck & Orlick, 1998; Partington, 1995). Furthermore, they found what separates Olympic athletes at the height of physical prowess from one another is the mental skills they develop (Orlick & Partington, 1988), and this seems to be true for professional musicians (Talbot-Honeck & Orlick, 1998).

Although athletes and musicians need to, and do, develop psychological skills to achieve excellence, there is evidence of a significant difference in the way these skills are learned. Unlike elite athletes who prepare systematically and are taught mental strategies developed with the help of their coach or sport psychologist (Orlick & Partington, 1988), the mental preparation of professional musicians is unsystematic and idiosyncratic (Bellon, 2006; Partington, 1995; Talbot-Honeck, 1994). Professional musicians felt that mental preparation was what you did if you had a specific reason ‘for example, because of nervousness problems, feeling totally run down or for an extremely important concert’ (Talbot-Honeck, 1994, p. 67). Musicians interviewed by Partington (1995) put an emphasis on ‘practice’ as the main way to prepare mentally.
Some musicians in these studies acknowledged the influence of a supportive family, colleagues and their own students in their informal learning of mental skills, but gave little or no credit to their instrumental teachers for helping them develop these skills. Teachers were mainly viewed as the one who taught technique and interpretation. Some teachers gave advice on performing, which the musicians had not really considered as mental preparation or deliberate help. It was apparent in these studies that musicians found it difficult to talk about their mental preparation, because they were not used to articulating their mental processes.

Another group of sport psychology researchers have studied the pathway to excellence for athletes and musicians (Kamin, Richards & Collins, 2007; MacNamara, Button & Collins, 2010; MacNamara & Collins, 2009, MacNamara, Holmes & Collins, 2006, 2008). These studies demonstrate the importance of the mental side of performance to achieve excellence in both sport and music. Musicians who succeed in becoming professionals develop certain Psychological Characteristics of Development Excellence (PCDEs) that are lacking in less successful peers (MacNamara, Holmes & Collins, 2006). Successful musicians and athletes can ‘maximise development opportunities and minimise possible disruptions to their development’ (MacNamara, Button & Collins, 2010, p. 88) as they negotiate transitions, for example, from student to professional, along the way to achieving excellence.

The studies of Collins and colleagues confirm the findings from earlier research that there is little evidence to show the involvement of teachers in the development of psychological skills or behaviours. MacNamara and Collins (2009) note that in the early years (prior to entry to full time music education) some teachers create ‘good development environments’ but the role of teachers and parents seems to be more concerned with musical learning and practice rather than the development of psychological skills. Teachers were not mentioned as having a significant influence on the development of PCDEs of classical musicians as they enter full-time music education (MacNamara & Collins (2006), and teachers are notable by their absence in the development of PCDEs of non-classical professional musicians (Kamin et al., 2007).

Evidence from the literature strongly suggests that instrumental teachers do not play an active role in developing the psychological skills of specialist musicians.
My reflection (1.1.2) showed that a lack of systematic instrumental teacher training is the most likely explanation. However, I was not convinced that every teacher had not considered teaching performance skills. I also thought it unlikely that I was the only teacher to have thought about teaching psychological skills from sport to musicians. Surely there were teachers in higher education, who had made the same connection? This thinking led me to go out into the field to organise two focus groups, one of experienced teachers who attended regular professional development, and the other of trainee student teachers.

1.1.5. Significant Meetings

Meeting significant individuals during the organization of the focus groups was the catalyst for phase 2 of my research, which I now discuss.

1.1.5.1. Meeting the Performance Coach

I conducted an Internet search on UK conservatoire websites to assess what the provision was for performance training in specialist higher music education. The search words ‘performance anxiety’ led me to a conservatoire offering the only course on Performance and Pedagogy at that time in the UK, and the only conservatoire to employ a performance coach (PC) as a member of staff. Students taking the MMus course became one of the focus groups in phase 1, and the organiser of the course introduced me to the PC (see 3.2.3 and 4.1).

The PC was working in the same manner as a sport psychology practitioner, using a performance enhancement framework, in one-to-one and group sessions. She provided me with a number of opportunities to develop my understanding of her work. At our first informal meeting, two of her student clients attended to discuss their personal experience of performance coaching. Subsequently, I was invited to a conference organised by a group called Bach2sport (Bach2sport, n. d.) where the PC and a sports psychologist promoted the use of PST to professional musicians, researchers and students. I also attended a workshop organised by the PC for professional musicians (Performing on your mind, 2013).

The PC volunteered to participate in my research and offered to find former clients, who would be willing interviewees. Through our discussions and meetings it was evident that she and I had much in common regarding the practical use of PST
from sport for musicians, although we were working in different settings. I began to develop the idea that through research I could compare her work in higher education to mine.

1.1.5.2. Meeting the organiser of a local piano teacher professional development group

The group organiser of a local EPTA professional development group agreed to organise teachers for focus group 2 as part of a regular meeting. In the second half of this meeting I gave a presentation about PST and how I used it in my teaching. During the workshop there was considerable interest in PST from both the organiser and other teachers. I was therefore able to develop my ideas further. Rather than only study my own teaching of performance skills I realised it would add more depth if I worked with other teachers. I therefore asked interested piano teachers to join me in an AR project where we would teach, analyse and reflect on psychological skills for performance. By undertaking two studies I was able to compare one-to-one PST for both the specialist and recreational pianist.

1.2. Outline of thesis and original contribution

Chapter 2 presents an examination of the extant literature from both music and sport psychology on PST programmes, and the individual strategies that might be used within these programmes. The purpose of this cross-discipline review is twofold. Firstly, it puts my research into context by demonstrating what is known about PST for musicians and where the gaps in knowledge exist. Secondly, it shows the context of existing research on PST for musicians in comparison to the sport psychology literature, which has a longer research history. Steyn (2013) also compares the two literatures but compares research more generally about psychological skills, mindfulness, wellbeing and anxiety. This review of the PST literature in music and sport, which looks for connections and applications, has not been conducted systematically before, and is therefore a contribution to knowledge.

The two-phase multi-method design and its pragmatic underpinning are described in Chapter 3. Strengths, weaknesses and the challenges of using a multi-method design are discussed, as well as the challenges of the individual research methods. The reasons for choosing each method, the method itself, and whether the methods meet research objectives are examined. Ethical considerations are also
presented. The choice to use of AR as a method is unusual in multi-method research and makes an original contribution as a method to investigate PST for musicians. AR has been used in music education but with a few exceptions, rarely in the instrumental teachers studio (Cain, 2008).

As stated earlier, Phase 1 of this multi-method research was an exploratory study, where two focus groups of teachers, discussed two main topics: firstly, their involvement and knowledge of psychological preparation for themselves and their own students, and secondly, whether they could see a potential in PST research in sport psychology. The findings are presented in Chapter 4, and confirm those from earlier studies that instrumental teachers do not deliberately teach psychological strategies for performance. To my knowledge no studies have been conducted specifically to discover the practical experience and interest of instrumental teachers in relation to psychological preparation for performance. Differing attitudes to the potential of PST for musicians were apparent between the two groups.

Investigating the delivery of one-to-one PST in ‘real world’ settings is the original contribution in phase 2 of the research. Previous research on PST for musicians has used PST programmes delivered in quasi-experimental settings (2.3). Chapter 5 presents findings from interviews with a PC and seven of her pianist clients, which show how one-to-one PST can work in higher specialist music education. The context of the PC’s work within the conservatoire and the more general aims of coaching are explained. The PC was shown to be an important partner working alongside the teachers to develop well-rounded student performers both musically and psychologically. The study revealed factors for success in performance coaching as well as cultural barriers within the conservatoire towards this type of training. At the time of the study, a PC working in the way of a sports psychology specialist was unique. The study of her work therefore makes an original contribution to performance training in specialist higher music education.

The second study in phase 2 was a year-long AR project with six piano teachers and their pupils to investigate the potential of one-to-one PST in the piano teachers studio. The findings are presented in Chapters 6-10. Chapter 6 introduces the teachers’ and pupils’ relationship with performance prior to the research. The
teachers’ current working practice related to performance is described. This chapter provides a context for the teaching and learning that took place in two action cycles. The performance experience of recreational piano pupils and their teachers, a research population hitherto unexplored is therefore an original contribution.

Chapter 7 describes how the teachers taught imagery, self-talk, relaxation and pre-performance routines, and for what purpose. These are techniques that can be used at the performance (see Glossary for definitions). Chapter 8 examines how the teachers responded to using goal-setting strategy and simulation training; both strategies used prior to the performance. In both chapters the practicality of teaching these strategies is discussed as well as the benefits for the pupils. Chapter 8 concludes by examining the benefits of using PST as a teaching approach.

One of the aims of AR is to make improvements to working practice and influence change (McNiff & Whitehead, 2011). Using evidence from several reflections throughout the project, change and influences on change are documented in Chapter 9. The extent to which change took place, and what the teachers claimed to be most beneficial for them and their pupils is discussed. I also reflect as critical teacher on change in my teaching. As critical researcher I discuss the key areas that will engender change as well as the barriers to using a PST approach. I also examine the strengths and limitations of using AR as the methodology.

One advantage of multi-method study is that it allows triangulation of findings between studies. In Chapter 10 the evidence is brought together to compare the differences in the relevance of PST for specialist and recreational musicians. I also discuss how PST might work and be best delivered. I demonstrate how my research challenges the traditional myths about practice and MPA (1.1.2). Finally I reflect upon my learning, and the pros and cons of using a multi-method emerging design.

1.3. Conclusion

The natural history of my research described in this introduction provides the rationale for the thesis and its design. As mentioned in 1.1, there had been little impact from music psychologists ‘on the understanding or practical activities of those people who do the “musiking” […] listeners, players, composers and teachers’ (Clarke, Dibben & Pitts, 2010, p. 191). Clark at al. (2010) argue that such applied
research should perhaps be the responsibility of ‘educators, composers and teachers themselves’ (p.193). In this thesis I have taken up this challenge as both teacher and researcher. My applied research contributes to the practical application and better theoretical understanding of the psychological preparation for performance of musicians.
2 Psychological skills training in context

I continue to make connections between the worlds of sport and music in this review of research of psychological skills training (PST) programmes and the common techniques within them. This review has two aims. The first is to put my research into context by describing and evaluating the music psychology literature to determine what is known about PST for musicians, and the techniques used to develop psychological skills. My second aim is to put this research literature into context by also reviewing sport psychology literature on the same topics. My review of the sport psychology literature does not cover every aspect of sport psychology as it is beyond the remit of this thesis. Sport psychology is used to compare research frameworks, indicate gaps in knowledge and signpost future research directions.

First, I clarify definitions of PST, techniques that commonly comprise a PST programme in sport, and the psychological skills that can be improved through such programmes. Two main sections follow; the first examines research pertaining to the individual techniques used in PST, and the second evaluates the extant studies of PST programmes for musicians. The review ends by comparing the research frameworks, research methods and ways to measure the benefits of PST between the disciplines of music and sport.

2.1. Definitions

Psychological skills and PST have not yet been clearly defined in music psychology. In sport:

Psychological skills training refers to systematic and consistent practice of mental strategies for the purpose of enhancing performance, increasing enjoyment, or achieving greater sport and physical activity self-satisfaction (Weinberg & Gould, 2015, p. 247).

Even in sport psychology, where there is considerable research about PST and strategies for performance, there is sometimes confusion between a psychological skill as distinct from a technique, strategy or method to improve such a skill. Vealey (1988) distinguishes between psychological ‘skills’, for example improved
confidence, and psychological ‘methods’, for example relaxation, used to achieve the desired outcome. Most commonly the ‘canon’ of psychological skills described by Andersen (2009) are ‘relaxation, self-talk, imagery, goal-setting, and concentration’ (p.11). This ‘canon’ however, is problematic, because concentration as a skill can be distinguished from methods used to improve concentration (Moran, 1996, p.165). The distinction used in this thesis separates mental strategies or techniques that can be learned and practised from the psychological skills they are purported to improve. In order to further clarify the distinction between the skills musicians need to develop for performance and the strategies they might use to develop these skills, I use the term psychological skills training (PST), in preference to mental skills training (MST) which is used interchangeably in both the sport and music literature.

The techniques I discuss individually are imagery, self-talk, relaxation, goal setting, performance routines, and simulation training. These strategies are defined at the start of the section examining research on that strategy (see also Glossary). The psychological skills that PST can improve are concentration, confidence, arousal regulation and motivation (Weinberg & Gould, 2015, p. 248). In my Action Research (AR) project and this review I use an ‘easy to remember’ framework called the Four Cs, Concentration, Confidence, Control and Commitment (Sellars, 1996). I define the Four Cs as follows:

**Concentration** is the ability to focus effectively on the task at hand, or on what is most important in any situation, while ignoring distractions (Moran & Toner, 2017, p. 381).

**Confidence** is a belief in one’s ability to perform a certain skill or to achieve a specific goal regardless of prevailing circumstances (Moran & Toner, 2017, p. 381).

**Control** is about controlling arousal, cognitive, somatic and behavioural anxiety to attain and maintain the optimal performance state (see Glossary).

**Commitment** is the ability to persevere under pressure in performance, but also includes long-term commitment and motivation to training and to perform.
2.2. Strategies to improve psychological skills

In this section, research about the individual strategies that commonly are included in PST programmes, imagery, self-talk, relaxation, goal-setting, performance routines and simulation training, is examined.

2.2.1. Imagery

2.2.1.1. Definitions

Imagery is the only individual mental strategy that has been researched in any depth for musicians. There are a number of terms used to describe imagery in both the music and sport literature; mental practice, mental rehearsal, and visualisation, which are often used interchangeably. Additionally music researchers might refer to ‘inner hearing’ or ‘aural representation’ and ‘finger practice’ (Clark, Williamson, & Aksentijevic, 2012). Musical imagery or how musicians might imagine sound has been defined as ‘our mental capacity for imagining sound in the absence of a directly audible sound source’ (Leman, 2001, p.57). However, images can be created through all the senses (see next section), therefore a more general definition is needed. Moran & Toner, (2017) define imagery as, ‘The cognitive ability to stimulate in the mind information that is not currently being perceived by the sense organs’ (p. 383).

2.2.1.2. Creating images through the senses

Whilst auditory imagery, termed ‘audiation’ by Partington (1995), is undoubtedly of importance to musicians, research has shown that musicians can create images in other sensory modalities such as kinaesthetic (‘feeling the physical movements required to create the sound’), visual (‘a view of the score or an instrument’), as well as multisensory ‘ the emotions a musician wishes to express in performance’ (Clark et al., 2012, p. 351). Two solo performers, interviewed about their use of imagery in their performance preparation, describe a ‘rich tapestry’ of mental images, which were found to be ‘multi layered and interdependent’ (Holmes, 2005, p. 225). The more senses that are used in creating an image the more vivid it is said to be (Moran, 2004). Research on the mental and physical practice of pianists shows individual differences in the ability of pianists to create vivid images and control their images
There is currently no research on vividness and control of images used for music performance.

2.2.1.3. Imagery function

Musicians appear to use images for two different functions; the first is to aid learning and memorisation, and the second to 'pre-experience' the performance. Mental rehearsal as an aid to learning has a long research history. Rubin-Rabson (1941) notes that mental practice combined with physical practice is more effective than physical practice alone, and similar results were found more recently by Coffman (1990), and Ross (1985). Evidence from Clark & Williamon (2011) and Haddon (2007) shows that student musicians as well as professionals use images to pre-experience the performance venue, performing for an audience, as well as hearing and seeing themselves perform. In research on long-term development (1.1.4) young musicians aged 14-18 years were also found to use imagery to mentally rehearse the performance (MacNamara & Collins, 2009).

Interviews with professional musicians (Partington, 1995), who play a variety of instruments, reveal in more detail how images can help improve psychological skills of confidence:

most of the time there is an audience of 3000 people (imaginary) in the practice room with me...this means when I step on stage to play that piece I've already played it that week twenty times for an audience so its no big deal (Tuba player, p. 113).

and to aid concentration and decrease doubts about memory:

Just before I walk on I try to think of 'tempo' and go through the first few lines, and I will try to establish the mood in myself that the piece starts with, so that I walk on stage in that mood [...] This narrow focus takes away from the horror of thinking about not remembering what comes next (Pianist A, p. 131)

Trumpeter B compares athletes and musicians using imagery for control and confidence in performance, and notes how important it is to see oneself succeeding:
The successful guys who get the jobs are the ones that have it in their head. They can control everything mentally, not physically. In sport it’s like seeing yourself go over the bar. You see yourself making the jump, and feel that your body is light. In music it’s the same thing (p. 155).

Imagery functions have been classified in a more formal way in sport psychology. Gregg, Clark & Hall (2008) use one such classification to explore the imagery of musicians through a questionnaire based on the Sports Imagery Questionnaire developed by Hall, Mack, Paivio and Hausenblas (1998) from Paivio (1985). Table 2.1 shows the classifications used by Gregg et al. (2008) and my description of their functions.

**Table 2.1. Classifying imagery functions**

<table>
<thead>
<tr>
<th>Category of image</th>
<th>Function</th>
</tr>
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<tbody>
<tr>
<td>Motivational general -mastery MG-M</td>
<td>Imagery to cope, ‘stay focused, confident, positive and mentally tough’.</td>
</tr>
<tr>
<td>Motivational general -arousal MG-A</td>
<td>Imagery to ‘psych up, maintain composure or relax’.</td>
</tr>
<tr>
<td>Motivation specific MS</td>
<td>Imagery of specific goals and goal oriented behaviour</td>
</tr>
<tr>
<td>Cognitive general CG</td>
<td>Imagery of strategies</td>
</tr>
<tr>
<td>Cognitive specific CS</td>
<td>Imagery of skills</td>
</tr>
</tbody>
</table>

Gregg et al. (2008) found that music students use MG-M imagery most frequently followed by cognitive images and MS. MG-M imagery is used to ‘ready themselves for those experiences unique to performance alone’ (p. 238). For example, recovery from slips, ignoring distractions, ‘maintaining mental toughness and demonstrating confidence’ (p. 238). It was predicted that musicians would use imagery to control arousal and anxiety but the results about this function were not reliable. However, in the sport literature an MG-A imagery intervention with five collegiate level male rugby players shows that imagery can help players develop more facilitative
interpretations of their symptoms of arousal as well as increase their confidence (Mellalieu, Hanton & Thomas, 2009). It follows that MG-A imagery could be effective in these ways for musicians.

According to Slimani, Chamari, Boudhiba, & Cheour (2016) there are a variety of mediator and moderator variables that need to be considered in imagery research in relation to function. For example, confidence is shown to be ‘a mediator of the relationship between imagery ability and cognitive imagery use’ (p.1). In the following I discuss other variables that have been considered in imagery research about musicians and athletes.

2.2.1.4. Other factors in imagery research

2.2.1.4.1. Performance context

Imagery use and function seems to vary according to the type of musician and the context in which they perform. For example, the images of singers and instrumentalists differ with ‘singers using more MS imagery than instrumentalists’ (Gregg et al., 2008, p. 237). More generally, musicians appear to use performance strategies, including imagery, differently depending on the instrument they play and the performance context of their job (Bellon, 2006).

In sport psychology research Hall, Munroe- Chandler, Cumming, Law, Ramsey & Murphy (2009) found athletes used all types of images more in competition than in training except for CS imagery, which was associated more with learning. More exact differences between images used for practise and used in performance for musicians have yet to be investigated.

2.2.1.4.2. Expertise

Skill level is a factor in the frequency and function of imagery use for musicians (Gregg et al., 2008). Out of a sample of 159 classical musicians, performance majors used significantly more imagery than non-performance majors. Performance majors also used MGM images relating to focus and confidence for performance more often. Professionals seem to use more refined kinaesthetic images in mental practice (Lotze, 2013), although Haddon (2007) observes that student musicians pre-experience the performance more than their professors. The authors in both these studies suggest that imagery use and function may be improved through practise. In the first case, more experienced musicians may have more reason and opportunity
to practise imagery than those with less experience. Similarly in the second study, the students were more engaged in performing than the professors, and therefore may have practised their imagery more.

Findings in sport psychology also show that the skill level of the athlete is a factor in imagery use and function (Durand-Bush, Salmela, & Green-Demers, 2001; Gregg & Hall, 2006). Cumming and Hall (2002), who studied the deliberate practice of imagery of athletes of differing standards, found that national standard athletes practise imagery more in a typical week and therefore practised for more hours over their careers than recreational athletes. Whether this is an effect of having more and better training opportunities, or better imagery ability is not clear. Of interest is that recreational athletes do not practise imagery as much, because they do not value the use of imagery as much as professionals.

2.2.1.4.3. Age
To date there has been no specific study of young instrumentalists in imagery research. However, MacNamara and Collins (2009) studying the development of PCDEs of young musicians from the age of 14-18 years showed that these musicians use imagery without specific imagery training for practise and performance. With increasing age these musicians used imagery ‘as a source of confidence’ before performances (p. 387).

Current research on young athletes suggests that whilst they use imagery similarly to adults, there are differences according to age, gender, and stage of development; and that at all ages and stages in training and competition, images are used for both cognitive and motivational purposes (Hall, et al. 2009; Munroe-Chandler, Hall, Fishburne, & Hall, 2007). Results from a pre-post test intervention study for young soccer players aged 7 – 14 years suggest that imagery at the youngest age is linked to skill learning rather than performance, and the post-test data shows more willingness from the younger athletes to use imagery (Munroe-Chandler, Hall, Fishburne, Murphy & Hall, 2012). Similar to the recreational athletes in the study of Cumming and Hall (2002) the older age soccer players lack belief in the benefits of imagery.

2.2.4.1.4 Imagery ability and level of learning
Slimani et al. (2016) suggest that better imagers are more likely to use imagery, and
it is possible that some individuals are better at using one sensory modality rather than another. It is possible that imagery ability may be affected by training and expertise. It also seems that novices use more cognitive imagery in the skill-learning phase of their sport, and as their skills improve motivational images become more important. Imagery research in music has not yet specifically shown these differences.

2.2.1.5. Teaching imagery

Despite the lack of evidence about the benefits of imagery for musicians, Haddon (2007) and Gregg et al. (2008) recommend the deliberate teaching of imagery. Specific exercises to develop the imagery skills of musicians are endorsed by Clark et al., (2012) and Connolly and Williamon (2004). The inclusion of imagery in the training of musicians however is lacking (Ford, 2013). In the first of two studies investigating imagery and memorization techniques for practising, Davidson-Kelly and colleagues found that 37 specialist pianists were aware of mental techniques (Davidson-Kelly, Moran & Overy, 2012) However, they were either not sure how to include them in their practice or they were not convinced that they would work. In the second study, imagery was deliberately taught to pianists. The findings show that using imagery can improve technique, the quality of the music and memory security dependant on the individual’s skill level and motivation (Davidson-Kelly, Schaefer, Moran & Overy, 2015). It seems logical to assume that future research might show that the deliberate teaching of imagery can also improve psychological skills for performance.

2.2.1.6. Models for future imagery research

In addition to the classification of images shown in Table 2.1, two models have been used in sport to further understand imagery. There has been some credence given to the PETTLEP model devised by Holmes and Collins (2001) as a model for mental practice of motor imagery (Wakefield, Smith, Moran & Holmes, 2013). The acronym stands for seven considerations in imagery training, and is thought to have potential as a model for music researchers designing imagery intervention studies (Wright, Wakefield, & Smith, 2014). The Revised Applied Model of Imagery Use (RAMDIU) is another model that may have potential in the study of musicians’ imagery to improve the performance experience. This model consists of seven components that
can be used to explore deliberate rather than spontaneous imagery. The model poses the questions Who, What, When, Why, Where and How, as well as investigating other variables such as personal meaning, imagery ability and outcomes (see Cumming, Weibull & Newell, 2018).

2.2.1.7. Summary

It is evident that musicians can and do use imagery for learning music. There is strong, anecdotal evidence from top athletes (Moran, 2004) and professional musicians (Partington, 1995) to suggest that imagery is also a powerful tool to enhance performance. There are suggestions that specialist musicians use imagery without specific training to pre-experience the performance, leading in some cases to more confidence, better concentration and control. Research in sport psychology indicates future research topics and models that could prove useful to music researchers. There are many gaps in knowledge about the imagery of musicians and how it might be taught. My research examines how an expert consultant can develop imagery with specialist music students, and how piano teachers can develop imagery with recreational pupils.

2.2.2. Self-talk

2.2.2.1. Definition and Types of self-talk

A definition of self-talk from sport psychology is simply, ‘what people say to themselves out loud or as a small voice inside their head’ (Theodorakis, Weinberg, Natsis, Douma, & Kazakas, 2000, p. 254, as cited in Hardy, Jones & Gould, 1996). Self-talk can be positive or negative, covert or overt. Self-talk has not been defined in the music literature, and currently there are no intervention or other types of study that specifically examine the nature, and function of the self-talk of musicians. However, there is some evidence from interview studies that musicians use self-talk (Clark, Lisboa & Williamson, 2014; Partington, 1995).

What little is observed about the self-talk of musicians is focused on the effects of negative self-talk, which is assumed to be detrimental to performance. Negative catastrophising statements were associated with high levels of performance anxiety for 65 orchestral players, who rated themselves using self-statements during performance (Steptoe & Fidler, 1987). In interviews with 29
music students and professors Clark et al., (2014) found that the use of self-talk depended on whether the performance was perceived to be successful or less successful. Negative evaluation was shown to follow less successful performances and when performances were good the self-talk was about the music itself and how well it was communicated. Some musicians reported that negative self-talk before or during the performance could contribute to mistakes and poorer performance, while others reported that it was difficult to control negative self-talk.

Findings in sports psychology would suggest that the distinction between positive and negative self-talk and how it functions is not straightforward. Hardy, Hall & Alexander (2001) found that negative self-talk for some athletes might be motivational. Hardy (2006) in a review of self-talk studies found no clear evidence as to which type of self-talk was most effective, whilst Tod, Hardy and Oliver (2011) reviewed 47 self-talk studies and found that negative self-talk was not necessarily detrimental to performance. Interpretation of the talk was a factor, which was linked to findings about the interpretation of anxiety (see 2.4.1.2) by the individual.

Regarding positive and negative self-talk as polar opposites ignores how self-talk might change through internal or external conversation. Van Raalte, Vincent and Brewer (2016) suggest a dynamic model for future research that includes these discursive processes, and the theory of dual processing, thinking fast and thinking slow (Kahneman, 2011). System 1 thinking is based on intuition and instant gut-reaction, whereas system 2 involves more logical and conscious processing. Van Raalte et al. (2016) suggest these systems can operate in self-talk. Talk might begin catastrophically for example ‘I am the worst player in the world’ as a system 1 immediate reaction to a bad play but could change to a more instructional well thought out system 2 cue, for example, ‘watch the ball and keep your head down’, to help the performer play better in the next moment. The conversations a musician might have with themselves before or during performance have yet to be investigated.

2.2.2.2. Function of self-talk

In sport, functions of self-talk are categorised as instructional or motivational (Hardy, 2006). Examples of both categories of self-talk are found in interviews with professional musicians conducted by Partington (1995)
**Instructional**

What I’m doing in the measure before the solo … the first thing I am thinking consciously is “take enough air; take a big enough breath that I've got enough. Then I’m thinking “good sound on first note” “well in tune” (French Horn Player A, p. 160)

**Motivational**

I remind myself constantly from beginning to end not only about what I have to do, but also say “stay relaxed; keep loose; don’t get worked up”. (Violinist A, p. 158)

In sport, motivational self-talk seems to be associated with improved confidence but Hardy (2006) discusses that self-determination is a factor, that is, whether the talk is ‘assigned’ or ‘freely chosen’ (p. 87). It is thought that with practise self-talk assigned by a coach may be perceived as self-determined. 'Self-talk freely determined by the athlete might be the greatest motivational influence’ (p. 87).

2.2.2.3. **Teaching self-talk to musicians**

The taught techniques for self-talk include ‘thought stopping’ through to the use of single cue words or triggers. Several music performance studies have shown that basic and expressive performance cues can be useful for learning and memorization for a pianist (Chaffin & Imreh, 2002) for a singer (Ginsborg & Chaffin, 2011) as well as achieving a higher level of performance for opera singers (Skull (2013). Trigger words deliberately chosen to help singers adopt a positive mindset in their pre-performance routine seemed to improve expressive performance for non-expert adult singers (Broomhead, Skidmore, Eggett, & Mills, 2010) and for junior-age high school singers (Broomhead, Skidmore, Eggett & Mills, 2012). The spontaneous use of cue words and the benefits of teaching cue words/triggers to musicians to improve the performance experience have yet to be examined.

There is research showing the effect of ‘significant others’ (parents, teachers, siblings and peers) and the influence of their positive and negative statements on the ‘talk’ of children (Burnett, 1996) which has implications for teachers. The results of this study suggested that children who perceive that ‘significant others’ talk positively to them have higher positive self-talk, and those children who perceive this talk negatively have higher negative self-talk. There were interesting gender differences in that boys were more influenced by parents’ talk and girls more by
their teachers. Negative self-talk of siblings and peers was also a predictor of negative self-talk in children.

Lee (2011) investigated the self-talk of 7-8 year old children. The findings show how it is normal for young children to talk to themselves ‘in their head’, and how it plays a role in ‘children’s creative problem-solving’, as well as ‘in managing their emotions, exercising self-control in relating to others, comforting themselves, self-rewarding and self-reprimanding’ (p. 854). Although the self-talk of young musicians has yet to be investigated this research suggests that instrumental teachers should consider the effect of their language on the self-talk strategies of their students, and that they might be able to capitalise on naturally occurring self-talk to help young children improve their performance experience.

2.2.2.4. Self-talk and imagery

Nordin and Cumming (2005) in a study of the imagery of professional dancers found that self-talk among other sensations could trigger imagery spontaneously. Hardy (2006) suggests that it is possible that self-talk combined with imagery might have an added effect in instructional imagery (p. 95). Such links have yet to be specifically examined in both sport and music.

2.2.2.5. Summary

There is no research that has specifically studied the self-talk of musicians to enhance the performance experience or performance quality. Musicians do use self-talk, but what little evidence exists focuses on the negative aspects of musicians’ thinking and associates this with anxiety. The sport literature suggests that self-talk might be used to boost confidence, aid concentration and assist control. Findings in sport also suggest that it may be too simplistic to assume that negative talk is connected both with high anxiety and poor performance. My research extends knowledge of self-talk by examining how a PC can develop positive talk with specialist music students, and how piano teachers can develop this with recreational pupils.

2.2.3. Relaxation techniques

‘The ability to relax is recognised at a practical level as an important aspect of achieving optimal performance in sport’ (Hardy, Jones & Gould, 1996, p. 19). This
has also been recognised in music performance. Relaxation techniques are recommended to improve music performance (Connolly & Williamon, 2004; Valentine, 2002) although there is little evidence to show the benefits of these techniques for musicians in performance. Relaxation techniques have largely been researched in sport to help the athlete control differing types of anxiety and arousal (Moran & Toner, 2017, p. 132; Thomas, Mellalieu & Hanton, 2009) Relaxation techniques in the sport literature have been divided into two types, physical and mental, which are hypothesized to help control arousal and cognitive anxiety respectively. Relaxation techniques for musicians have not been categorised in the literature in the same way, and what few studies exist share a common aim, which is to reduce anxiety.

2.2.3.1. Physical Relaxation studies

Progressive Muscular Relaxation (PMR) and simple breath control training form the basis of many physical relaxation programmes applied in sport (Moran & Toner, 2017, p. 132; Weinberg & Gould, 2015). Research on these techniques for musicians is limited. Simple breath control training was tested in a study for a sample of 59 musicians from grade 3 – 6 in Taiwan to see if it helped reduce performance anxiety at four different stages before an examination; two months, one month, 30 minutes and 5 minutes before (Su, Luh, Chen, Lin, Liao & Chen, 2010). Anxiety experienced 5 minutes before the examination was reduced compared to 30 minutes before, but there was no long-term effect from the training. The training however was easy to learn, and the students could practise it themselves. PMR, a more complex technique, learned over six weeks, was found to be effective for 41 musicians in reducing cognitive anxiety (Grishman, 1989). More recently, Wells, Outhred, Heather, Quintana and Kemp (2012) examined the use of slow breathing with and without Heart Rate Variability Biofeedback (HRVBF) for a group of trained musicians compared to a control. It seemed that even a single session of slow breathing without HRVBF could help trained musicians with high levels of anxiety to control their anxiety in anticipation of the performance.

2.2.3.2. Mental relaxation studies

Yoga, mindfulness and meditation have been shown to be beneficial to various groups of musicians in reducing anxiety, and in some cases producing increased
physical strength. Yoga was shown to benefit musicians in three studies using different groups of specialist musician; young professional adult musicians, who also used meditation (Khalsa, Shorter, Cope, Wyshak, & Sklar, 2009) conservatory students (Stern, Khalsa & Hofmann, 2012) and advanced adolescent music students (Khalsa, Butzer, Shorter, Reinhardt & Cope, 2013). In all three studies, experimental groups learned and practised yoga over a period of 6-9 weeks and were found to benefit from the training compared with control groups.

Mindfulness, defined as 'paying attention in a particular way: On purpose, in the present moment, and non judgmentally' (Kabat-Zinn, 1990), is increasingly being studied in both music and sport. As far back as 1985 training in mindfulness has been applied to sport, in this case rowers (Kabat-Zinn, Beall, & Rippe, 1985), and was shown to enhance performance. There are an increasing number of studies that investigate a variety of mindfulness approaches for musicians. Using a ‘blind control trial’ a mindfulness course was administered to eight university voice majors students over a period of eight weeks (Czaikowksi & Greasley, 2015). Whilst the study was primarily about benefits to learning music and not performing music, the authors felt that there may be a value in this technique to control nerves and other aspects of psychological wellbeing for professional musicians. It was also found that the course positively affected the pupil-teacher relationship as well as focus in lessons and practice.

In a review on the subject of mindfulness and music, Lecuona and Rodriguez-Carvajal (2014) note that mindfulness helps performers to act with more self-awareness, which is associated with lower anxiety, which in turn is hypothesized to improve performance quality. Three approaches considered to be effective in reducing MPA, Acceptance and Commitment Therapy (ACT), Mindfulness Acceptance and Commitment (MAC), and PST are discussed by Juncos & de Paiva e Pona (2018). Whilst these approaches are similar, the authors advocate the use of ACT as a treatment because it gives musicians control over their anxiety which improves performance quality (see also, Juncos & Markman, 2015; Juncos, Heinrichs, Towle, Duffy et al., 2017).

Recent research in sport psychology is beginning to note the increase in interest in the use of mindfulness-based interventions either in addition to PST or as an alternative (Birrer, Rothlin & Morgan, 2012). In the first study of the impact of
PST together with a mindfulness approach for musicians, in this case MAC, Steyn (2013) found significant changes on 12 subscales following the training, which indicated a moderate positive effect on psychological wellbeing. These scales included anxiety management and psychological skills such as concentration and confidence. It was not possible to say whether the effect was specifically from the MAC or the PST.

As early as 2003, Chang, Midlarksy & Lin reported positive effects of meditation in reducing MPA for 19 music students. Most recently Diaz (2018) investigated the relationship between the use of meditation practices for 255 music students to treat MPA, whilst taking into account trait perfectionism and trait mindfulness. They found that given equal mindfulness and perfectionist traits those who meditated most frequently had lower reported MPA, and that high perfectionism scores predicted high MPA scores. Almost half of the sample had engaged in meditative practices in the six months prior to the study and almost a quarter engaged once a week. The implications for educators of advanced musicians is that there is already an interest in this type of practice, which should give the practitioner confidence to recommend such strategies to reduce anxiety particularly for students exhibiting high perfectionist tendencies.

2.2.3.3. Discussion and Summary
The research about the effects of relaxation techniques for musicians shows where sport and music psychology most obviously differ, which is in the overall framework of PST. The purpose of PST in sport is to enhance performance, through improving psychological skills (2.1). In research on relaxation techniques some of the studies aim to enhance performance by improving performance quality but the main preoccupation is to reduce anxiety. The underlying assumption is that reducing anxiety will improve performance quality. However, no research has clearly demonstrated that reducing anxiety per se improves music performance quality. A reduction in anxiety may only produce better performance, if the individual is already highly anxious.

All the studies about relaxation techniques thus far have been quasi-experimental designs comparing musicians in experimental and control groups. By judging whether there is a reduction in anxiety of groups of musicians suggests that anxiety must be the same for everyone. There are important questions that have not
been asked. What does anxiety mean for each musician? Does it help or hinder their performance? (Moran & Toner, 2017, p. 93). In order to choose techniques to relax the musician, it first needs to be shown that the individual would benefit from calming down or relaxing for the performance.

Current research on relaxation techniques is restricted by a narrow focus on reducing performance anxiety without distinguishing whether a reduction for the individual is necessary or desirable. There has been no research specifically examining how relaxation techniques might improve the other psychological skills of concentration and confidence, or how other techniques such as imagery might be used as a relaxation technique. In my research I was able to consider the application and benefits of relaxation techniques for both the specialist and recreational musician. In addition, I was able to explore how other techniques might help musicians achieve the optimal performance state.

2.2.4. Goal setting

2.2.4.1. Definitions

Goal setting defined simply is:

The process, by which people establish targets, or objectives to attain (Moran & Toner, 2017, p. 382).

Goal setting came from research in the business domain and was widely applied to sport and other settings (Locke & Latham, 2002). Goal setting is one of the most widely used performance enhancement techniques and the most widely researched in sport (Moran, 2004). Goal setting is a specific type of planning designed to ‘influence behaviour indirectly by causing changes in important psychological factors such as self-confidence, anxiety and satisfaction’ (Weinberg & Gould, 2015, p. 368). Goal setting research in sport has shown that athletes can change and improve performance and behaviour and that it seems to motivate individuals to persist in both training and performance, as well as to try out new learning strategies.

Designing an effective goal-setting programme is complex. It depends on the individual performers’ desires and beliefs as well as that of the coach or instructor. To be effective goal setting should obey certain principles. Goals can be long-,
medium- and short-term, and using a combination of short- and medium-term goals leading to a long-term goal appears to be successful in enhancing performance. The type of goal set is also important and has been identified in the applied literature:

Outcome goals
focus on an outcome, such as winning a competition,

Performance goals
focus on a particular performance where the goal does not depend on other performers eg to run a specific time in a race

Process goals
focus on process during the performance such as maintaining a good follow through on all backhands in a tennis match.

(Hardy et al., 1996, p. 24).

Specific goals seem to work better than more vague ‘do your best’ goals. Practitioners advise using SMART, SMARTS or SMARTER principles to help in setting realistic goals. For example:

Specific Measurable Accepted Realistic Time-phased Exciting Recorded
(BrianMac Sports Coach, 2018)

It is important that the performer and coach/psychologist work together to create the goal-setting programme. The performer’s input into setting the goals is crucial to their commitment to the scheme. The input from the coach helps the performer to set realistic goals because left to one’s own devices goals are often too vague or simply unrealistic. Regular feedback and evaluation of goals is an important part of the process.

The term goal setting is used frequently in music psychology research particularly in relation to the topic of practice. However, the term is not used in the same context as described in sport and business. Whilst it may be true that the setting of goals is perhaps the ‘foremost factor influencing the productivity of practice’ (Lehmann, 1997), practice goals such as ‘goals for technical performance quality and goals for expressive performance quality’ (Jorgensen, 2004, p. 89) are not part of an overall framework of structured goal setting to specifically improve
the performance experience. Structured practice however has been found to lead to improvements in technical and expressive performance quality compared to those involved in free practice (Barry, 1992; Sloboda, Davidson, Howe & Moore, 1996).

The goals for musicians do not seem to be specifically expressed as part of an on-going goal-setting strategy where the musician works with their teacher to achieve specific short-, medium- and long-term targets. This is confirmed in a recent study on the effect of self-regulated learning on the practice of specialist musicians (Araujo, 2016). The author shows that with experience, musicians set goals for themselves, ‘self-regulation through Personal Resources’ rather than through ‘External Resources’ such as teachers, peers and others. There is no mention of feedback and evaluation or using SMART principles.

Despite the success of goal setting in business, meta-analyses (Burton & Weiss, 2008; Kyllo & Landers, 1995) have reported that goal setting used to improve sport performance does not appear quite as successful as it has been in business. This is thought to be due in part to ‘design weaknesses and problems’ (Hardy et al., 1996, p. 27). One problem in goal-setting research is that athletes in control groups were found to be spontaneously setting goals. Moran (2004) also notes that elite athletes are intrinsically motivated to work hard at their sport, when the aim of goal setting is to motivate individuals to persist in training and performance. This is a cautionary note that may also apply to goal-setting research for musicians.

2.2.4.2. Summary
At present, no studies exist to show how goal-setting strategy as described in business and sport can enhance performance for musicians. Goal-setting research for musicians has shown that practice is more effective if musicians set goals, and structure their practice through self-regulated learning strategy. This emphasis on improving practice reinforces the belief that practice in itself is the best preparation for performance. This research has missed a crucial element of goal-setting strategy which is that to be effective goals should be set together with a teacher/coach so performance can be constructively evaluated and appropriate goals can be set for the future. My research suggests that goal-setting strategy is applicable to both specialist and some recreational pianists (Chapters 5 and 8), and that a
teacher/coach can work together with a musician using goal-setting strategy to improve confidence and commitment.

2.2.5. Performance routines

2.2.5.1. Definitions

Routines of musicians have not yet been clearly defined, but in sport psychology three different types of routine are distinguished. A pre-performance routine (PPR) performed prior to a self-paced activity such as a free throw at basketball, or a goal kick at rugby is defined as, ‘a sequence of task relevant thoughts and actions which an athlete engages in systematically prior to his or her performance of a specific sports skill’ (Moran, 1996, p. 177). This type of PPR is one that is practised simultaneously with the motor skill and eventually becomes an integral part of the act. Self-paced acts are, ‘…actions that are carried out largely at one’s own speed and without interference from other people’ (Moran, 2011, p. 330). Systematic routines taught before self-paced acts seem to help those who use them, compared to those who do not (Cohn, 1990).

Two other types of routines to which Moran (2011) refers are:

**Pre-event routines** – ‘preferred sequences of actions in the run up to competitive events [...] what to do on the night before, and on the morning of, the performance’ (p. 330).

**Post-mistake routines** – ‘action sequences that may help performers to leave their errors in the past so they can refocus on the task at hand’ (p. 330).

There are no studies specifically investigating PPRs of musicians although there is evidence that professional musicians do use pre-event routines (Bellon, 2006; Clark, Williamon & Lisboa, 2007; Skull, 2011; Talbot -Honeck & Orlick, 1998). Partington (1995, p. 36) found that professional musicians employed ‘a variety of clearly constructed pre-performance routines,’ some of which were general preparation on the day, and others which were preparation within the hour and minutes before a performance. One of the few examples of musicians using systematic behaviour
consistently prior to the performance is the PPR of Jeremy Kelshaw and the band Cloud Control:

Prior to performance, the band finds a physical space in which they can sit, collecting their thoughts, singing together and listening to a motivational speech delivered by JK (Geeves & McIlwain, 2009, p. 419).

2.2.5.2. Content of routines

Most pre-event routines described in the studies, previously referenced, include similar strategies to those described below:

might include a warm up on the instrument, the use of positive self-talk, a focus on performance goals, the use of a relaxation strategy, controlling the type and amount of interaction with others, a nap earlier in the day and monitoring food and fluid intake (Wilson & Roland, 2002. p. 57).

In interviews with Benser (2012), several famous pianists, for example Andsnes, Biss, and Dinnerstein confirm that professionals consider diet, nutrition and rest of importance in performance preparation. The exact content of musicians’ pre-event routines seem to be ‘highly individualised’ (Partington, 1995), and they appear to be more specific in their content nearer to the time of the performance. They also depend on the demands of the instrument and their job or performing situation (Bellon, 2006). Berman (2000) a pianist and pedagogue, suggests that performance routines should be developed by the individual to suit them, because of the unpredictability of live performance.

2.2.5.3. Function of routines

Incidental findings in interviews with professional musicians suggest that routines are created for their own desired function. For example, the function of a pianist’s backstage practice prior to going on stage was ‘just to get me in the musical frame of mind’ (Partington, 1995, p. 131). In addition ‘many performers give a central role to mental and physical strategies that enable them to feel confident and ready to perform’ (p. 117). PPRs seem to help musicians maintain focus, which allows the performer to express the music (Bellon, 2006). Opera singers think that routines are important in maintaining a high standard of performance (Skull, 2011). Geeves &
McIlwain (2009) suggest that the PPR for the band Cloud Control ensured that they were on the same wavelength before the performance:

For JK, performance is never a haphazardly random occurrence into which the performer is thrown but is rather a planned experience over which the performer can exercise control (p. 419).

Unpublished data from my MA studies (Hawkes, 2009) also showed individuals developing their routines for their own perceived function. Ten teenage pianists developed PPRs with me over several weeks prior to a Music Festival. The pupils learned and practised the PPR in lessons, and at home and then used it at the performance. The reasons for the PPRs are shown below, with the number of pupils who stated the reason shown in brackets:

- to relax and not feel nervous (3)
- to give me more confidence (2)
- to get comfortable and relieve stress (1)
- to help me keep in time (1)
- concentrate on the routine and not my insecurities about playing (1)
- stop me getting panicky about what I have to do next because I will have practised it loads. (1)

The theories and findings from sport about the functions of such routines could inform future research, as there has been much research interest in PPRs in sport. Empirical evidence from a study of golfers suggests that the main function of PPRs might be control of attentional focus (Cotterill, Sanders & Collins, 2010). It is also thought that PPRs can aid motor behaviour because the routine helps to eliminate unwanted thoughts. It seems to act as a rhythmical guide to the sequence of movements to follow (MacPherson, Collins, & Obhi, 2009) or the training might improve the focus of attention on what they are about to perform (Singer, Lidor, & Cauragh 1993). However, in a study of two professional cricketers Cotterill (2011) found that factors affecting the development of the routine were the task itself, existing behaviour, preferred mindset, and the desired outcome for the performer, for example, if the player desired to control arousal, or improve concentration.
Moran and Toner (2017) give three theoretical reasons why PPRs improve concentration. The first is that the PPR helps the athlete to ‘focus on task-relevant information’ p222; the second that the PPR helps to focus in ‘the present moment rather than on past events or possible future outcomes’ and thirdly that ‘the PPR stops the athlete from paying too much attention to the mechanics of their well-learned skills’ which may ‘unravel automaticity’.

2.2.5.4. Other factors in the development and use of routines
Experience was noted as a factor in student musicians’ perceptions and experiences when performing (Clark, 2010). In their pre-event routines the more experienced postgraduates and professors planned practice and rest and included proper nutrition as part of their preparation. On the day of performance they focused on ‘keeping the mind and body active yet still conserving energy’ (p. 94). The less experienced undergraduates concentrated on distracting themselves from worry.

In my study of teenage pianists, the two best performers, as judged by the Festival adjudicator, were the most experienced. These pupils said their routine helped them feel relaxed and confident. The worst performers, who had only been learning for a few years, said they did not practise the routine and they did not believe in it. Although the adjudicator judged the quality of the performance it was not possible to say to what extent if any the PPR contributed to the quality of the performance, only to the performance experience.

Belief is also a factor in professional musicians’ attitudes to using routines. Not all musicians understand that they use routine behaviour, and some musicians deliberately avoid developing routines. Pianist Tomes (2010) disagrees with the idea of routine behaviour:

It never seemed appropriate to consider the choreography of getting to the piano, and I am not convinced the audience considers it all that important either.
Musicians, who are ‘too good’ at it, almost inspire disbelief (p. 19).

Bellon (2006) found that the jobbing pianist she interviewed preferred not to have a routine in case he could not complete it in every circumstance, because failing to complete a routine would make him feel worse than not having a routine at all.
2.2.5.5. Teaching routines

There is little evidence to support the deliberate teaching of routines or other strategies for performance in either sport or music literature. Lidor & Singer (2000) proposed that routines should be learned early and if practised will become effective in the long term. They suggest that young athletes are capable of being taught psychological skills if they are taught in a systematic way so as not to ‘overload’ them. There are no specific studies examining these claims.

2.2.5.6. Summary

Musicians use performance routines but do not to refer to their behaviour as such. Evidence from sport suggests that the exact function of a routine may be what the individual perceives that function to be. Belief in routines also seems to be a factor in individuals using routine behaviour. Unlike imagery and self-talk which also function as an aid to learning as well as performance, evidence about the routines of musicians, thus far, suggests that routines may be used primarily to improve the performance experience. I have used self-paced PPRs in my piano teaching, which is integral to the performance. There is little evidence to show that musicians use this type of routine. My research extends knowledge through an exploration of the use and development of PPRs for the benefit of specialist and recreational pianists.

2.2.6. Simulation Training

2.2.6.1. Definitions

Simulation training is not a mental strategy used at the performance but is about a way of enhancing performance through deliberate performance practice. In sport, simulation training or simulated practice is based on ‘the theory that athletes can learn to concentrate more effectively in real life pressure situations if they have practised under simulated versions of these conditions’ (Moran, 2004, p. 287). Simulation training is thought to work by having transfer effects from practise to the performance itself. There is some theoretical justification to be found in cognitive psychology (Hardy et al., 1996, p. 191) to show that:

recall of information is facilitated by conditions that resemble those in which the original encoding occurred… adversity training may counteract the tendency for
novel or unexpected stimuli to distract performers in competition ie reducing their attention grabbing qualities (Moran, 2009, p. 209).

It is difficult to find the term ‘simulation training’ in literature on music pedagogy. Ford (2013) observed that performance simulation in general was absent from training for conservatoire musicians. Comparing actors’ training with that of musicians she noted that actors always practise with the audience in mind, while musicians most often practise alone without an audience.

The word ‘practice’ is used to cover all types of practice including simulated practice or practising the performance. In various studies, for example, Lisboa, Chaffin, Schiaroli & Barrera (2004), Partington (1995) and Skull (2011), professional musicians indicate that a different kind of practice is adopted leading up to the performance, which involves ‘running through’ the programme, and is idiosyncratic. In music pedagogy, practising the performance seems to be valued more as a test of the learning and memorisation to achieve excellence in performance rather than as an opportunity to recreate the pressures of the performance. The term ‘dress rehearsal’ is more commonly used, and usually describes a ‘one-off’ opportunity for simulated practice.

Unlike the discussion in sport psychology about the performer using simulated practice to help handle the various pressures and distractions surrounding performance, pedagogues give vague reasons for simulated practice connected to ‘nerves’. For example, dress rehearsals give the chance to:

- seek opportunities to simulate stage conditions by playing for audiences in their own homes and those of their friends and teachers until they become accustomed to the variety of performance jitters, which is an occupational hazard of the musician (Novik, 1977, p. 405).

Similarly the examination board ABRSM give ‘top tips’ in their webpage ‘On the exam day’ (n.d.). In the section on ‘coping with nerves’ it is suggested that the candidate organises a dress rehearsal in front of family or friends for the examination so that it can make you ‘feel on edge’. Practice performances allow the music to ‘fully mature’, and practising in different environments will help ‘so that the
next performance is not to be made a big deal’ (Berman, 2000). The myths about practice, and reduction in anxiety being important for performance are apparent in these resources (see also, 1.1.2.).

2.2.6.2. Virtual training in simulated environments

The value of simulation training in artificially created training environments specifically developed for purpose has been shown to be useful in the training of airline pilots (Lee, 2005), and surgeons (Sutherland, Middleton, Anthony, Hamdorf, Cregan, Scott & Maddern, 2006) to help them learn the necessary skills and to learn how to handle pressure in reality. Music researchers have also recognised this potential.

A specially developed virtual training environment has been developed at the Royal College of Music in London, which can simulate backstage as well as onstage conditions and a life-sized audience. The capability of this performance environment is tested in two studies. In the first, the performances of 11 violinists are compared in both recital and audition conditions using virtual audiences (Williamon, Aufegger, & Eiholzer, 2014). Seven of the participants, are also tested during both a simulated and a real audition with real judges. In the second study the perceptions and experiences of nine conservatoire students are explored performing in both a recital and an audition with the aim to ‘enhance performance, reduce performance-related anxiety or both’ (Aufegger, Perkins, Wasley & Williamon, 2017, p. 420).

Both studies reveal wide ranging benefits of simulation training in virtual and real environments. The musicians in study one report that the training showed up performance strengths and weaknesses in both learning and performance. In study two the main benefit is that performance can be enhanced through the provision of a safe environment where participants can experiment with and develop their performing skills. The students were able to suggest various improvements regarding the ‘reality’ of the environment, for example they asked for coughing from the audience to be available so that they could practise coping strategies for distractions. Of interest is that the musicians showed individual differences in not only their skill level, their performance experience but also in ‘... very personal experiences of performance anxiety symptoms’ (Williamon et al., 2014, p. 8).
2.2.6.3. Graded exposure

‘Graded exposure’, a particular way of practising the performance, has been studied in virtual and real environments to discover if it can reduce anxiety for musicians. Graded exposure is based on exposure therapy, described by McGinnis and Milling (2005):

the psychotherapist helps the musician to generate a graded list of anxiety-provoking situations. Then in imagination, role-play or real life, the musician is asked to fully engage in the feared situation until the anxiety diminishes. Exposure begins with the least anxiety-provoking situation (e.g. Performing alone in a practice room) and later progresses to increasingly feared situations (e.g. performing in front of a large audience) (p. 370).

There are two studies in which the aims are to desensitise participants or to show changes in anxiety, and to improve performance quality. Three student saxophonists performed in two sessions in four settings of increased pressure from the audience; the first was an empty room and the last an audition panel (Orman, 2004). In another study nine music students participated in six one-hour sessions over a period of three weeks where the audience was similarly graded but environmental distractions were also added such as applause, coughing and talking (Bissonnette, Dubé, Provencher, & Sala, 2016). The results of study one show an increase in both somatic and cognitive anxiety, implying that the exposure was simulating the performance situation. However, it was interesting that the reactions of all the participants were not the same in all environments suggesting that the perception of the threat of different types of audience was not the same for everyone. Comments from the participants in the study by Bissonnette et al. (2016) suggest that the training helped them perceive performance as more commonplace and gave them strategies to reduce or restructure their cognitive anxiety.

Using ‘real’ rather than ‘virtual’ training, Kenny and Halls (2018) randomly assigned 68 community musicians, to two experimental groups, who underwent a ‘hierarchy of [four] performance situations’ ranging from performing to one supportive family member or friend to performing in an examination. A cognitive behavioural therapy (CBT) intervention and an anxiety sensitivity reduction
intervention were administered between performances two and three. Both interventions included psycho-education to help participants develop facilitative responses to their own arousal, and an additional pedagogical presentation was given. The results showed reductions in anxiety and improvements in performance quality. It was difficult to say whether the interventions, graded exposure or a noticeable increase in participants’ practise that took place during the study was most effective.

Whilst physical and mental simulation of performance also seem to be of value to top athletes, Moran (2004) cautions that simulations differ to the real situation in one significant respect. This is that the arousal/anxiety experienced at the performance is difficult to replicate in training. Orman (2004) reported that anxiety increased during the graded exposure suggesting that the graded exposure was replicating performance conditions. However, without knowing the norms for each individual it is impossible to know whether the anxiety in the simulated condition is the same as the anxiety experienced before or during ‘real’ performance. This limitation was not acknowledged in any of the studies.

2.2.6.4. Summary
Simulation training is not a term used in music, and performance simulators are rare. However, existing studies suggest that virtual training gives the musicians valuable performance practice in a ‘safe’ environment, where they are able to develop their performance skills in a personal way. The main benefits of graded exposure were from psycho-education, which helped in the restructuring of performance anxiety, as well as from increased performance practice in a ‘real’ setting. Responses to the different types of exposure in these studies were individual, showing that this type of training might be better delivered one-to-one. In my research I explored the benefits and functions of simulated performance practice and graded exposure for both the specialist and recreational musician.

2.2.7. General summary of research on individual mental strategies
At present the evidence about the use of imagery, self-talk and routines comes from self-reported statements that musicians use these techniques, not from studies specifically investigating the use of these strategies for performance. In some studies, authors generalise that because some strategies appear to be beneficial for
practice and preparation they might also be beneficial for performance. Evidence about the use of performance routines for musicians makes links to benefits for the performance experience. The strategies musicians chose to use in their routines appear to fulfil the musicians’ own desired function, which seems to be the case in sport psychology research on routines. Research that specifically examines these claims is needed before any firm conclusions can be drawn.

The term goal setting has been used in a different way in music research to goal-setting strategy from sport and business. Some aspects of goal-setting strategy have been followed but have been used to investigate improvements to practice rather than performance. Research about relaxation techniques reveals the limitations of research that focuses only on reductions in anxiety and the measurement of performance quality. Research studies of virtual training and graded exposure show more approaches to the management of anxiety, but have not acknowledged the limitations of attempting to recreate arousal and anxiety that occurs at a performance in a practice/experimental conditions.

2.3. Psychological skills training programmes for musicians

In this section I discuss a small but growing literature about the use and benefits of PST programmes for musicians. At first, music researchers interested in cognitive behavioural techniques for musicians used a therapeutic model. The aim was to use ideas from CBT to treat or cure MPA (Kendrick, Craig, Lawson, & Davidson, 1982; Roland, 1994). Although there is little evidence to justify claims that CBT cures MPA, these studies claim that MPA was reduced. Some of the strategies included in these programmes are very similar to those used in PST programmes in sport but were not recognised or described as such. For example, Roland (1994) included the normalising of performance anxiety, training in positive self-talk, setting performance goals, mental rehearsal, and developing a pre-performance routine. Kendrick et al. (1982) included positive thinking, thought restructuring, and attention focussing, as well as practising the performance in front of favourable audiences (called behaviour rehearsal). Although the aim was to treat anxiety there is some indication that pre-performance preparation of musicians could also be improved through these methods.
When I began my research in 2011 only one study existed that deliberately tested a PST programme for musicians designed with the help of a sport psychologist (Clark & Williamon, 2011). In sport psychology the literature is extensive enough to allow researchers to conduct meta-analyses. These reviews show that for the majority of athletes there are beneficial effects of PST to improve performance (Barker, Mellalieu, McCarthy, Jones & Moran, 2013; Gardner & Moore, 2012; Greenspan & Feltz, 1989; Martin, Thompson & Regehr, 2004). For musicians, PST programmes have been designed and tested in only six studies for adult musicians, and three for adolescent musicians to date (see Appendix 1 for tables summarising these studies). In the following I compare the studies, their designs and findings.

2.3.1. The samples

The samples are small with the numbers of participants varying from 6 to 36. The majority are specialist musicians, with the exception of community musicians studied by Kenny and Halls (2018). Adult participants were all in specialist higher music education, with the exception of participants in the Hoffman and Hanrahan (2012) study, which also included amateurs as well as professionals. The adolescent participants attended specialist music schools. All samples included musicians who played a variety of instruments.

2.3.2. Research Aims

The aims of the studies are various. Clark and Williamon (2011) and Hatfield (2016) are interested in the effect of their training on both practice as well as performance. Some have dual aims to reduce or manage anxiety as well as to improve performance quality, or to reduce anxiety and promote resilience. Only Steyn, Steyn, Maree, and Panebianco-Warrens (2015) aim specifically to improve psychological wellbeing, and therefore the performance experience through their training programme. Additionally, the student participants working with Osborne, Greene and Immel (2014) are able to make aims of their own by choosing to improve two of their weakest areas, in practice or mental skills, shown on their personal psychological skills inventory.
2.3.3. Programme Content

None of the PST programmes have the same content. Besides the inclusion of the imagery, self-talk, and goal-setting, several programmes include strategies recognised in cognitive-behavioural therapy (CBT). A technique called ‘centering’ is the basis of the programme used by Osborne et al. (2014) and also features in the study of Hatfield (2016). Some ‘psycho education’ topics are included in most studies; for example, cognitive restructuring (Kenny & Halls, 2018), dealing with adversity and recovery from mistakes (Osborne et al., 2014), self-awareness about negative thoughts (Hoffman & Hanrahan, 2012), acceptance training (Hatfield, 2016) and the identification of strengths and weaknesses (Braden, Osborne & Wilson, 2015).

2.3.4. Delivery of PST programmes

The delivery of these programmes varies from three hours of group training over three weeks (Hoffmann & Hanrahan, 2012) to 15 weeks of group and individual training (Hatfield, 2016). Sport psychologists were consulted in all but one study where a clinical psychologist gave advice (Hoffman and Hanrahan, 2012). Although experts are consulted about the content of the programmes, the researchers themselves deliver the programmes. The online psychological skills inventory used together with a workbook by Osborne et al., (2014) is designed for self-study and was a promising adjunct to the curriculum, as it did not put a ‘burden on teaching or administrative staff’ (p. 13).

2.3.5. Research Methods

Quantitative methods are most evident. These include, measuring heart rate (Hoffmann & Hanrahan, 2012; Osborne, Kenny & Cooksey, 2007), state and trait anxiety scales to assess reductions in anxiety, (Braden et al., 2015; Clark & Williamson, 2011; Hoffmann & Hanrahan, 2012; Osborne, 2013) as well as various other scales or questionnaires to measure imagery, self efficacy, goal-setting, worry, self control, motivation and engagement (Clark & Williamson 2011; Hatfield, 2016; Osborne, 2013).
Qualitative data is also collected in some studies. Clark and Williamon (2011) interviewed participants about self-regulated learning strategies and also received feedback forms from the students following the PST programme. Hatfield (2016) collected a variety of qualitative data through interviews, the keeping of research logs, and practice journals on iPad. Both Osborne et al. (2014) and Hatfield (2016) use performance profiling (a technique commonly used in sport) as a way to assess participants before and after the intervention. It was noticeable that qualitative data were more revealing about the musicians' individual performance experiences. It was qualitative data from Clark and Williamon (2011) that influenced Hatfield (2016) to develop a more individual approach in his PST programme.

2.3.6. Programme outcomes

Particular benefits for the adult musicians were either related to improved practice strategies, reductions in MPA, or to improved experience of performance. Goal setting is thought to improve the amount and effectiveness of practice for the students leading to improved self-efficacy (Clark & Williamon, 2011). In addition Hatfield (2016) found that goal setting improved motivation, concentration and self-regulation in both practice and performance. Steyn et al. (2014) found that their programme of PST and mindfulness helped reduce both cognitive and somatic anxiety. The benefits for adolescent musicians were that a reduction in anxiety is associated with less performance avoidance as well as improved performance quality (Braden et al., 2015) and more generally Osborne, (2013) noted the training improved 'resilience to setbacks, stress and performance pressure’. (p. 309).

Education about anxiety responses as well as the development of more positive interpretations of anxiety were thought to increase confidence (Clark & Williamon, 2011; Hatfield, 2016). Steyn et al., (2014) also noted an increase in confidence as a result of ‘acceptance training’. Braden et al. (2015) also made an important finding for those educating young musicians about their own anxiety, which was that the raters of anxiety behaviour during performance could not detect signs of MPA. The authors suggest this gives students an 'important psycho-educational message'. Whilst performers may feel anxious inside it is not necessarily discernible to audience, even when the audience are specifically asked to look for these behaviours.
It is difficult in programmes, which include a range of strategies, to identify clearly whether a particular strategy led to a particular improvement, or whether the benefits come from general exposure to these programmes. There was one exception, in that the ‘centering’ technique in the Osborne et al. (2014) study led directly to participants being able to regulate performance energy to appropriate levels. No study clearly shows direct improvements in performance quality from the programmes either because the study did not measure this or because measures were unreliable. Some authors noted that participants increased their practice during the intervention and noted that this in itself could have a beneficial effect on performance. At this early stage of research into PST programmes for musicians it can therefore only be assumed that the main benefits of such programmes are that participants are receiving some training, which is better than no training.

2.3.7. Summary of research on psychological skills training programmes

At present researchers seem to be heading in different directions regarding the aims, the most effective content, and ways to measure the beneficial effects of PST programmes. It is difficult to directly compare one study with another, or consider how new knowledge is gained from one study to the next. Only Hatfield (2016) took note of the findings from another study. Similar problems exist in sport psychology. Martin, Vause and Schwartzman (2005) noted, it is hard to generalise about the benefits of PST from studies which have differing designs and measures. In future, it might be more informative, particularly for practitioners, if researchers in both sport and music adopted and studied the same PST programmes, which would allow comparison of findings both within and across domains.

2.4. General Discussion

One aim of this review was to put current research about PST for musicians into context by comparing it with research in sport psychology. What is most apparent in the two disciplines is the difference in the research framework, and the measures used to establish the benefits of PST. In sport the aim is to improve performance quality through developing psychological skills. In music the aim is sometimes to improve performance quality, but the main preoccupation is to reduce, manage or treat anxiety. In the following I compare the approaches in the music and sport
literature to reveal important differences and ways in which PST research could develop in future.

2.4.1. Comparing the literatures

2.4.1.1. Anxiety as a construct

Nordin-Bates (2012, p. 99) argues that the music literature on anxiety is ‘behind that of sport’ in several regards, one of which is that MPA lacks clarity and consistency as a construct. In sport there is more clarity and consistency about this, however, Uphill (2016) likens the topic of anxiety to a web of knots that are still being untangled particularly with reference to agreement about definitions. What seems to be agreed is that arousal and anxiety are separate but related constructs and that anxiety is an emotional response. Moran and Toner (2017) have defined anxiety as:

An emotional state characterised by worry, feelings of apprehension and/or bodily tension that tends to occur in the absence of real or obvious danger (p. 379).

Moran & Toner (2017, pp. 379-388) also further define specific types of anxiety, cognitive, somatic, and behavioural (see Glossary). Arousal is ‘a diffuse pattern of alertness and physiological activation that prepares the body for action’. Thomas, Mellalieu & Hanton, (2009) use the term stress, and define competitive anxiety as ‘a specific negative emotional response to competitive stressors’. These stressors are ‘the environmental demands (i.e. stimuli) associated primarily and directly with competitive performance’ (p. 125). They also separate arousal and anxiety but refer to arousal as ‘activation’, which includes cognitive as well as physiological activity.

MPA research does not make clear distinctions between arousal and anxiety, and there is no agreed definition (Kenny, 2011, p. 50). The definition that is often written is that of Salmon (1990), that MPA is:

The experience of persisting, distressful and/or actual impairment of performance skills in a public context, to a degree unwarranted given the individual’s musical aptitude, training and level of preparation (p. 3).
As Kenny (2011) notes, this definition only seems to refer only to well-trained musicians. Research shows that musicians of all ages and ability can experience MPA (Boucher & Ryan, 2010; Fehm & Schmidt, 2006; Kenny & Osborne, 2006). Further confusion arises because the terms stagefright, MPA, arousal and performance anxiety are all used interchangeably in MPA papers. Some authors think that stagefright is more severe than MPA (Brodsky, 1996) or vice versa (Fehm & Schmidt, 2005). It is not always made clear whether MPA always affects the performance or not. Kenny (2011), who has made a considerable contribution to MPA research, offers a definition, which suggests MPA is a condition that has similarities with other types of anxiety disorder, and may ‘occur comorbidly with other anxiety disorders’ (p. 433). The full definition is given in the Glossary, and begins:

Music performance anxiety is the experience of marked and persistent anxious apprehension related to musical performance that has arisen through underlying biological and/or psychological vulnerabilities and/or specific anxiety-conditioning experiences (p.433).

Kenny’s definition suggests that MPA is a serious disorder and has little to do with what in common parlance might be termed ‘nerves’, which seem to impact everyone, but not usually their life in general. Whilst Kenny (2009) suggests that MPA can affect ‘musicians across the lifespan’ importantly she notes that ‘it may or may not impair the quality of the musical performance (p. 433). Many authors writing about MPA solve the problem of definitions by not providing one. Clearly there are many more knots to untangle on this topic in music than in sport.

One of these ‘knots’ is the relationship between anxiety and performance. Anxiety reduction was the main aim of many studies reviewed in this chapter with a second aim to improve performance quality. The assumption is that high anxiety impairs performance quality and therefore reducing anxiety increases performance quality. The sport literature suggests that the relationship between arousal, anxiety and performance is more complex:
First, anxiety and arousal are multi-dimensional constructs, which do not have simple linear relationships with performance. Second, increases in physiological arousal and cognitive state anxiety do not inevitably lead to a deterioration in athletic performance [...] Third, the interaction between arousal and cognitive anxiety seems to be more important in determining performance than is the absolute value of either variable on its own. (Moran & Toner, 2017, p. 120)

These complexities should also be discussed theoretically in MPA research, which may lead to researchers asking important questions that are lacking currently (see 2.2.3.3 and 2.2.6.3).

2.4.1.2. Measuring and managing anxiety

The focus on anxiety reduction in MPA research has led researchers to neglect measuring other dimensions of anxiety. There has been a consistent finding in sport psychology that the effect of positive and negative interpretations of anxiety responses and whether the individual feels in control of their anxiety also affects performance (Fletcher & Hanton, 2001; Hanton & Jones, 1999a 1999b; Hanton, Thomas & Maynard, 2004). Whilst some authors (for example, Clark & Williamon, 2011) acknowledge the research in sport is about direction and control, there have been no specific studies to measure these dimensions in MPA research. Cheng, Hardy & Markland, (2009) produced an inventory that measures three dimensions of anxiety, that is, intensity, direction and control. This instrument has had more recent validation (Cheng & Hardy, 2016), and may be valid to use to assess anxiety for musicians.

Due to a lack of conceptual agreement about MPA as a construct, measuring anxiety reduction as an indicator of the success of PST is somewhat flawed. The tools used to measure anxiety may not be measuring what they claim to measure (see Nordin-Bates, 2012). Sport psychologists also question other measurements of anxiety such as heart rate, which were used in some of the PST studies reviewed. Moran and Toner (2017) give several reasons why physiological measures of anxiety in general are ‘rare’. Firstly there is ‘no universally agreed physiological index of anxiety’, and secondly, these measures ‘are of limited value’ due to the differing individual interpretations of anxiety. A third reason highlights that heart rate and other physiological indices measure ‘arousal and not anxiety’. This is not
usually clarified in MPA research. Moran & Toner (2017) also note that the ‘physiological indices of arousal are not highly intercorrelated, a fact which suggests that they are not all measuring the same construct’ (p.105). These issues should be discussed in music psychology research.

Practically, two approaches have been used in helping athletes cope with the pressure of performance. Anxiety reduction is one and the other is anxiety-restructuring (Thomas, Mellalieu & Hanton, 2009). The first approach has been dominant in MPA research, although there are signs in the studies reviewed in 2.2 and studies applying PST programmes discussed in 2.3, that the second approach is being recognised and may also be useful to musicians.

MPA research could gain much from an assessment of anxiety research in sport, where anxiety exists but is not the main preoccupation. In sport, the other psychological skills, concentration, confidence and commitment have also been examined in relation to performance. Theories of attention rather than anxiety may better explain performance and how individuals cope with performance pressure, an idea I investigated in my MA dissertation (Hawkes, 2009).

2.4.1.3. Measuring performance quality as an indicator of the beneficial effect of PST

The debate about measurement of performance quality as a measure of the success of PST for musicians is another research issue that requires consideration. In sport, the judgment of the success of psychological interventions through measuring improvements in performance quality is not usually in question. In most sports there are easily recognizable accepted parameters to measure. In music this has been shown to be more difficult, due to the subjective nature of judging a music performance (McPherson & Thompson, 1998; Wesolowksi, 2012). Problems have been highlighted in research due to lack of reliability between the assessors of the performance (Bergee, 2003; Thompson & Williamon, 2003) and disagreement about assessment criteria (Mills, 1991). In several studies in this review the measurements of performance quality were discounted because they were unreliable. The purpose of PST in sport is to enhance performance by improving performance quality but also to increase enjoyment and self-satisfaction (2.1), that is, the performance experience. If the performance experience is individual as is being suggested in some of the research reviewed here, it may be that an understanding of the
performance experience for the individual musician and what improvement means to the individual is more important than objectively measuring performance quality.

2.4.1.4. Research methods to assess the benefits of PST

Quantitative quasi-experimental designs have been favoured over qualitative methods to study the beneficial effects of PST in sport and music. In the PST programme studies Clark and Williamon (2011) noted individual differences in the responses to the PST, and both Hatfield (2016) and Osborne et al., (2014) catered for individual differences by including individual sessions within the group training. Williamon et al., (2014) commented on the very personal and individual anxiety responses of participants performing in a virtual training environment.

• The qualitative data in these studies revealed more practical information about PST than the quantitative approach. In a review of PST research from 1997-2012, Barker, Mellalieu, McCarthy, Jones & Moran, (2013) found that evidence of the success of PST to enhance performance comes from the personal experiences of coaches and their athletes. More qualitative investigations like the one of Clark et al. (2014), who asked musicians themselves about their more and less successful performance experiences may be informative in future.

2.4.2. Exposing gaps in the literature

The other aim of this review was to expose gaps in knowledge about PST for musicians, which I explore in my research. Some of these gaps have been discussed during the review. In the following I discuss these further.

2.4.2.1. Best delivery of PST

• The PST programmes for musicians took place in contrived conditions rather than as part of the students regular training delivered by familiar members of staff. Although the training of Osborne et al., (2014), following the lectures and masterclasses given by a sport psychologist, took place as part of the curriculum, the students were then left to work independently. There was no discussion in any of these studies about how such PST programmes might be implemented into the curriculum permanently. If PST is to become more commonplace in the training of musicians then who delivers the programme is crucial. There is currently no evidence to suggest whether PST works best delivered as group or individual
training. The evidence that the performance experience is individual suggests that one-to-one training may be the ideal. In my research I investigate delivery of PST one-to-one by practitioners in a UK conservatoire and in the piano teachers' studio.

2.4.2.2. Neglected research populations

- Thus far research on PST supports the inclusion of this kind of training in undergraduate music programmes to sustain future wellbeing of professional musicians, and future wellbeing of specialist adolescent musicians with high performance anxiety. In both music and sport, research about PST has focused on specialist student populations rather than elite performers in their working/competitive environment (see Martin et al., 2005). The research literature offers little empirical insight into the learning experiences of recreational musicians, and to date, nothing is known about their performance experiences. There is some evidence in sport that PST might be applicable for recreational learners.

- For teachers, like me, who teach recreational pupils of all ages, the majority is young people under the age of 18 years, another research population that is neglected. This population is also ‘conspicuous by its absence’ in sport (Foster, Maynard, Butt & Hays, 2016, p. 75). What little research exists about young musicians and their performance experiences focuses on the topics of practice and performance anxiety, once again reflecting popular myths. The book 'The Child as Musician: A Handbook of Musical Development' the most comprehensive compilation of research pertaining to young musicians, has only one chapter written directly about performance (Osborne, 2016), where the main focus and sources of information are about performance anxiety and ways to control it. My research addresses several gaps by exploring PST as part of performance training, (not as a cure for anxiety) and explores PST for recreational learners young and old.

2.5. Conclusion

This review of PST in both music and sport shows similarities and fundamental differences between the two cultures. Whilst anxiety exists it is not the main research preoccupation in sport. Anxiety is the main preoccupation in music because this it the main concern of musicians themselves (Pecen et al., 2016). In this fascination about anxiety and performance, researchers and practitioners are
perpetuating popular myth. Having the longest research history, applied sport psychology has led the way within the emerging discipline of performance psychology, which includes other Performing Arts, business and high-risk professions, as well as music and sport (Hays, 2012). Sport psychology, described as ‘in its adolescence’ by Hays (2002, p. 299), does not have all the answers to performance enhancement and performance training, but it holds a larger body of knowledge than other performance disciplines like music psychology, which by corollary, is in its ‘infancy’. Just as I had instinctively started to understand as a practitioner that there was much that could be learned from the application of sport psychology to musicians (1.1.3), I have shown in this review that there is much to be learned academically by studying the sport psychology literature relating to PST for musicians.
3 Design and methods

Chapters 1 and 2 show how the development of the research design came from connecting, comparing and contrasting both practical experience and academic research in music and in sport. My initial reading and the development of the phases was a kind of groping for ideas and meaning based on my thinking as a practitioner:

...research questions are often formalised versions of puzzles that practitioners have been struggling with for some time and even acting on in terms of problem solving (Herr & Anderson, 2005, p. 72).

In my work as a piano teacher I had already made a connection between my worlds of sport and music and had begun to use PST strategies researched largely in sport psychology to help my piano pupils have positive performance experiences (1.1.3). The review in Chapter 2 shows that this connection is gradually being made in academia. The meeting of significant people during the development phase of my research provided an opportunity to study working practice (1.1.5) and the lack of research about musicians as performers showed a need to create new academic knowledge on the potential of PST for all levels of musician.

This chapter describes the research design, its strengths and weaknesses, and why conventional paradigms were rejected in favour of pragmatism. The research methods chosen differed for each study are discussed separately in the context of the research questions. The choices, challenges and validity of each method are examined separately. Finally, ethical considerations are discussed, and conclusions about the success of the research design are drawn.

3.1 Multi-method Research Design

The two-phase design is shown in Figure 3.1. Phase 1 was exploratory. I wanted to discover to what extent teachers already taught performance skills, and whether they could see, or had already seen, a potential in using ideas from sport for themselves or their students. In Phase 2, practitioners delivered individual PST to both specialist musicians in a UK conservatoire and to recreational piano pupils in the piano teacher’s studio. The inquiry was qualitatively driven. However, there was
a mix of methods in the action research (AR) project, which included the use of a questionnaire survey.

Figure 3.1. Multi-method Research Design

3.1.1. Debating definitions

Multi-method design according to Morse (2010):

consists of two or more studies using different methods, which address the same research question or different parts of the same research question [...] As each project in a multiple method design is self-contained, complete and publishable, as a stand-alone article, there are no methodological conundrums for researchers who are conducting a multiple method design (p. 340).

This multi-method research had one overall question, which was:
RQ1 What is the potential of using one-to-one PST, researched mainly in sport psychology, to prepare musicians of all ages and abilities psychologically for performance?

Each study asked its own questions that were part of this question. The preliminary phase of the design, which comprised one study, was followed by two independent studies in the second phase.

Whilst each study is complete in itself the findings in Phase 1 had some influences in Phase 2. Evidence that teachers knew little about PST in the focus group study influenced how I thought about the design of the AR project. Findings in Phase 1 did not directly influence the interview study but alerted me to challenges the performance coach might face in using PST in the conservatoire, which I considered in my analysis.

Although Morse (2010) suggests that there are no ‘methodological conundrums’ in multi-method design the use of AR itself debated as either a form of mixed-method research or as another methodology does provide a conundrum in the debate on definitions. Mixed-method is defined:

In general, mixed methods research represents research that involves collecting, analysing and interpreting quantitative and qualitative data in a single study or in a series of studies that investigate the same underlying phenomenon (Leech & Onwuegbuzie, 2009, p. 265).

Whilst my AR used a mix of methods this definition is not a perfect fit due to the purpose of AR, which distinguishes it from other types of research. In the following I discuss the particular debates about AR and how it is distinguishable from other types of research.

The term ‘action research’ is itself generic and, depending on the research discipline, it is known by slightly differing, often interchangeable, titles. For example:

- Participatory action research (PAR)
- Practitioner research
• Action science
• Collaborative action research (Herr & Anderson, 2005, p. 3).

There is agreement amongst most academics that what distinguishes AR as a method is its dual purpose inherent in the two words ‘action’ and ‘research’:

**Action**: taking action to improve practice, and...

**Research**: finding things out and coming to new understandings, that is, creating new knowledge. In action research the knowledge is about how and why the improvement happened. (McNiff and Whitehead, 2011, p.10).

Another point of agreement is that some kind of social transformation or improvement is essential. Norton (2009) states that, ‘Action Research has the avowed intention of making things better than they were before’. (p. 55). AR also usually involves some kind of intervention that is implemented in a cycle of steps. This concept has developed from simply ‘Plan-Act-Reflect’ through to more complex models discussed by McAteer, (2013, p. 28) where the outcome of each cycle informs the next cycle ‘in an iterative process’. Kemmis, McTaggart and Nixon (2016) describe this process as a ‘spiral of self-reflective action cycles’ (pp. 18-19) which is not ‘neat’ as the plan appears. ‘The stages overlap, and initial plans quickly become obsolete in the light of learning from experience. In reality the process is likely to be more fluid, open and responsive’ (p.18).

Despite AR having a clear purpose and a common structure there is no one simple way to define it. Reason and Bradbury (2008) refer to a ‘family of practices of living enquiry’, further described as, ‘...not so much a methodology as an orientation to inquiry...’ (p. 1). Huang (2010) agrees that ‘the label itself is, in fact an umbrella term that represents a “family” of practices. Like all families ... action researchers argue and fall in and out with one another’ (p. 94). Within educational AR, which is where my research is positioned, McNiff & Whitehead (2011) note two diverging groups. The first ‘believe that the proper way to do research is for an external researcher to watch and report on what other practitioners are doing’ referred to as ‘interpretative action research’. The second group ‘believe that a practitioner is able to offer their own explanations for what they are doing’ and ‘is referred to variously
as self-study action research, first-person research, living-theory action research or just plain action research’ (p. 11-12).

In my research I have only described one study as AR where I, as practitioner, offer explanations for my own work and influences of that work on other practitioners. I considered whether the interview study could also be described as a type of ‘interpretative’ AR as this was also the study of a practitioner and her clients (McNiff & Whitehead, 2011, p. 11). However, as an external observer I was not there to influence that practice, although the findings of this study have been disseminated in a special issue journal on the Reflective Conservatoire (Hawkes, 2016), which was compiled to influence future practice in conservatoires.

No matter what the paradigm or method, researchers need to present an ‘honest’ account and giving this thesis design a label is possibly less important than showing integrity. As Willig (2008) indicates, using terminology can raise ‘as many questions as it answers...’ and:

As a result it is important that we do not get too hung up about the use of the correct labels; rather what matters is that we identify, clearly and correctly, what type of knowledge we aim to produce and that we select a research methodology that is designed to generate that type of knowledge (p. 13).

Validity often referred to as ‘trustworthiness’ in ‘real world’ settings (Robson, 2002), is what is sought to demonstrate the integrity of the research. ‘Validity can be defined as the extent to which our research describes, measures or explains what it aims to describe, measure or explain’ (Willig, 2008, p. 16). The criteria cannot be the same for each method because of their differing purposes. Validity is therefore discussed separately for each study.

3.1.2. Strengths, weaknesses and challenges of a multi-method design

There are several advantages to using a multi-method approach. It allows flexibility to choose methods appropriate to each phase and stage of thinking. It also gives more than one perspective on a topic. Most importantly multi-method design allows triangulation, which ‘involves the use of multiple sources to enhance the rigour of the research (Robson, 2002, p. 174). Various types of triangulation are possible,
such as triangulation between the results of different data sets within the same study, or triangulation between the findings of different studies on the same topic. Ritchie (2003) cautions against the idea of triangulation in multi-method inquiry to validate findings because differing methods are not likely to produce ‘perfectly concordant evidence’ (p. 44). The author notes:

...several authors now argue that the value of triangulation lies in extending understanding [...] In other words, the ‘security’ that triangulation provides is through giving a fuller picture of phenomena, not necessarily a more certain one (p. 44).

In the final analysis I was able to show similar findings both within and between studies, which added strength to those findings. By using a multi-method design in two ‘real world’ settings it was possible to present an extended picture of the potential of PST, not possible in single studies.

The main weakness of using more than one method is the ‘time and resources needed to use each of the methods to a professional standard’ (Robson, 2002, p. 373). However, these difficulties are outweighed by the strengths of the various perspectives given in several studies that add depth to the findings.

There are disagreements about whether multi-method designs should use qualitative and quantitative methods within the same study, or just use the same paradigm. Traditionally:

...qualitative research is typically associated with ‘interpretative’ or ‘constructivist’ paradigms, quantitative research is generally associated with "scientific’ or ‘positivist' paradigms (Yardley & Bishop, 2013, p. 353).

Since the advent of mixed-method and multi-method approaches different ways of knowing have been debated. Taking a pragmatic stance overcomes the epistemological and ontological difficulties of combining these approaches. I now discuss this in more detail.
3.1.3. Taking a pragmatic approach

Pragmatism as a philosophy has several branches, so it is not easy to define (Hammond, 2013, p. 605). It started as a movement with various but related theories in America:

founded by C. S. Peirce and William James and marked by the doctrines that the meaning of conceptions is to be sought in their practical bearings, that the function of thought is to guide action, and that truth is preeminently to be tested by the practical consequences of belief (Merriam-Webster.com).

Pragmatism rejects the polar opposites of qualitative and quantitative research and their metaphysical underpinning. Rather than taking a particular philosophical stance to drive the research, the research problem itself suggests the choice of methods, as suggested in this description of mixed-method research.

No matter how the research questions are generated scholars writing about mixed methods researcher uniformly agree that the questions of interest play a central role in the process of designing any mixed methods study (Cresswell & Plano Clark, 2011, p. 60).

This was the essence at every stage of the emergent process of this multi-method research design.

A combination of the best of both traditional research paradigms to answer a research question fully, and offer practical solutions, is the basis of the pragmatic approach. The researcher chooses to do ‘what works’ (Robson, 2002, p. 43) using an orientation to sorting practical problems in the ‘real world’. It has been suggested that researchers view research methods as a kind of ‘toolkit’ that encompasses both qualitative and quantitative techniques.

The tools thus available to the researcher can be used as appropriate in different research contexts and to address different research questions (Snape & Spencer, 2003, p. 17).
However, the ‘what would work’ justification for using pragmatism is thought by some authors to be weak (Hall, 2013, Morgan, 2014). Several authors agree that understanding and following the philosophy of Dewey, a pragmatic educational thinker, is a better approach (Feilzer, 2010; Hall, 2013; Hammond, 2013; Morgan, 2014). Dewey’s concept is that ‘inquiry’ through ‘intelligent action’ is the basis for research rather than research driven by the different ontological and epistemological bases of the traditional paradigms. The process of inquiry is not linear but a continuous process of ‘reflecting on actions to choose beliefs’ and ‘reflecting on beliefs to choose actions’. Each inquiry will be ‘situated within a given context’ in which the researcher makes their choices about topic and method (Morgan, 2014, pp. 1047-1048). In my research I took this approach by using a cycle of critical reflection at all stages to create new knowledge about the potential of PST for musicians, which influenced change during the research process.

Three main ‘dualisms’ stemming from traditional paradigms need to be considered (Morgan, 2007), which are:

- Induction v deduction
- Subjectivity v Objectivity
- Specific, context dependant knowledge v universal or generalised knowledge

The way to deal with these extremes pragmatically is to combine them. The first combination, Abduction, is:

... reasoning that moves back and forth between induction and deduction – first converting observations into theories and then assessing those theories through action (Morgan, 2007, p. 71)

This was a process used throughout but most clearly demonstrated in the AR project where both qualitative and quantitative findings from the AR in Cycle 1 influenced the thinking and action in Cycle 2.

Traditionally objectivity is aligned with quantitative research and subjectivity with qualitative. In my research it was important to show objectivity about subjective experience. It is particularly vital in AR where you have to be objective about your own subjectivity. In my research I was not only reflecting on
and analysing my own work but the work of others. Morgan (2007) uses the term ‘intersubjectivity’ for the way the researcher might ‘work back and forth between various frames of reference’ and notes the importance of ‘processes of communication and shared meaning that are central to any pragmatic approach’ (p. 71). In my research as Morgan (2007) suggests there was a ‘single real world’ of musical education, which includes unique individuals who have their own interpretations of that world. Intersubjectivity was used in critical reflection throughout to understand shared beliefs, the origins of those beliefs, as well as areas of disagreement.

Morgan (2007) uses the term ‘transferability’ to ‘transcend’ the two types of knowledge linked to traditional paradigms. Rather than argue about whether the value of research is dependant on the context or is generalisable to other contexts, the author believes it is better to ask to what extent ‘we can take the things that we learn with one type of method in one specific setting and make the most appropriate use of that knowledge in another circumstance’ (p. 72). An aim of my research was to judge the extent to which practical knowledge could be used in piano teaching and other instrumental teaching to further applied practice, as well as how academic knowledge might contribute to performance psychology in music and in general.

3.1.4. Pragmatic approach and researcher values

Pragmatism as a paradigm:

Insists on treating research as human experience that is based on beliefs and actions of actual researchers (Morgan, 2014, p. 1051).

The researcher must therefore be clear in stating their beliefs and actions that led to their topic, and also clear about their choices of one method over another one. In 1.1 I presented the evolution of my research and my teaching values to show that this research is not ‘disinterested’. I understood that my beliefs and values as a teacher, and how I came to develop my teaching to include PST, are integral to this research.

The creation of practitioner knowledge in this thesis is not about finding the absolute truth about the reality of teaching PST but about creating knowledge, which can help improve the performance experience for pianists. Teacher
knowledge changes during the teaching process and also that of the student being taught. The teacher therefore has to be adaptable in order to understand how their knowledge has changed, and is changing. The student is also changing as they absorb the teaching, and the teacher may need to change with them. Becoming a better teacher is a process that does not lead to the ‘ultimate’ way of knowing. It is about being open to change, being able to reflect on one’s actions and then allowing oneself to be flexible enough to bring about change.

3.2. Phase 1: Exploratory focus group study

3.2.1. Aim and research questions

The thinking and research behind the organisation of a focus group study is described in 1.1.4. If PST was going to be delivered to musicians in ‘real world’ situations then instrumental teachers, as the main contact for learners, would have to be involved. In this exploratory study I firstly wanted to understand what involvement teachers already had in psychological preparation for performance. I decided to go out into the field to confirm whether other teachers, like me, might be using ideas from sport or other performance disciplines. If they were not using these ideas, I wanted to know if they could see a potential in using PST from sport. This study therefore explored three research questions:

RQ2 Do instrumental teachers use mental strategies themselves to prepare psychologically for performance, and what role did their teacher play in helping them develop these strategies?

RQ3 Do instrumental teachers teach mental strategies to their pupils to prepare them psychologically for performance?

RQ4 Can instrumental teachers see a potential in using sports psychology in their teaching?

3.2.2. Choosing the method

Finding teachers who deliberately taught performance skills seemed unlikely due to lack of regulated instrumental teacher training (1.1.2.), and an absence of research
about the teaching of performance skills. The world of the instrumental teachers studio is largely private, although there has been some research about teacher-pupil relationships and its effectiveness in the conservatoire (Burwell, 2015, 2012; Daniel & Parkes, 2015; Gaunt, 2011, 2010, 2008; Presland, 2005; Purser, 2005). I considered that the best method to explore unknown territory was focus group discussion, where I would be able to hear teachers talking and sharing their performance experiences as well as their experience of teaching performance skills.

Focus group discussion, is a method commonly used in an exploratory phase of a mixed- or multi-methods project (Barbour, 2007, p. 16). Interaction between group members as ‘a distinguishing feature of focus groups’ (Harding, 2013, p. 159) was intended to provide insights and interpretations not possible in one to one interviews where the researcher is sole interpreter.

3.2.3. Choosing and recruiting the participants

Two groups were recruited and were purposively (Robson, 2002, p. 265). I judged these two groups as the most likely to know about sport psychology, who would therefore bring informed perspectives to the exploratory phase of the research. Group one (Grp1) were music students taking an MMus in Performance and Pedagogy, which at that time was the only course of its kind in a UK conservatoire. Group two (Grp2) were a highly educated teacher group who were members of one of the most active European Piano Teachers Association (EPTA) professional development groups at that time in the UK. An advantage of the groups was that the group members would know each other. I therefore anticipated that the discussions would be relaxed and open.

Both groups were approached via email (Appendix 2A). The student group were approached through the coordinator of the MMus course. The five students who volunteered were at the start of their course. The teachers were approached via a local EPTA organiser. She recruited the group from participants at an EPTA professional development meeting.

My aim in each study was to recruit pianists as I was most familiar with this group of instrumentalists and I had already applied PST in my piano teaching. However, I had to accept other instrumentalists for Grp1 because the few pianists
who were taking the course were not available on the day and time arranged for the discussion.

### 3.2.4. Data collection and analysis

The data were collected in two one-hour group discussions using the same Topic Guide (Appendix 2B). The guide had three distinct parts, which fitted with the three research questions (3.2.1). I understood the need for brevity in the topic guide (Barbour, 2007, p.82) and the need for flexibility during the discussion. Using a semi-structured approach meant I could change the wording or the order of the questions as appropriate during the discussions (Robson, 2002, p.270). The meetings were audio-recorded and transcribed verbatim. I understood that transcription itself is a form of analysis or construction rather than a completely accurate record (Taylor, 2001, pp. 36-37). I chose to use symbols from the Gail Jefferson system (see Wooffitt, 2001, pp. 61-62) in transcribing all the data to try keep a sense of the interaction and the way things were said ‘making sure that things that might seem messy, ‘accidental’ or ungrammatical are recorded in the transcript and not filtered out in some form of tidying up process’ (Wooffitt, 2001). The coding symbols I used are on page 20. No computer software was used for the analysis.

Two approaches were used to analyse the data. Initially content analysis summaries were made for each group (Harding, 2013, p. 4). Categories and codes were recorded using abduction (3.1.3). I considered a priori themes such as ‘mental strategies for performance used’ and ‘mental strategies for performance taught’ but was also open to the identification of themes that had not been considered previously. The group summaries afforded comparison and contrast between both individuals and between the two groups. The transcripts were explored using a variety of matrices (see Chapter 6 in Miles, Huberman & Saldana, 2014), which allowed me to analyse each participant’s contribution to the discussion both in content and substance. The analysis was a continuous process of familiarisation with the data.

It was this process of familiarisation that led me to notice the recurrent use of the words ‘nerves’ and ‘nervous’. I then used discourse analysis, which ‘focuses on patterns of speech and the way language is used to convey meaning’ (Harding,
2013, p. 4) to uncover how the groups constructed their responses using these words. I found three concepts helpful in this analysis which are:

- interpretative repertoires,
- ideological dilemmas
- subject positions. (Edley, 2001)

Interpretative repertoires are:

... part and parcel of any community's common sense, providing a basis for shared social understanding (Edley, 2001, p. 198).

Showing how the participants in my study thought about performance using ‘interpretative repertoire’ as a metaphor revealed an important aspect of instrumental music teaching culture.

This particular way of understanding the world, Edley (2001) suggests, is tied to the ‘concept of lived ideology’ which is ‘composed of the beliefs values and practices of a given society or culture’ (p. 203). ‘Lived ideology’ or ‘common sense’ within a culture is ‘characterised by inconsistency, fragmentation and contradiction’ (Billig et al., 1988, as cited in Edley, 2001, p. 203) and it is this dilemma within lived ideologies that makes for ‘wonderfully rich and flexible resources for social interaction and everyday sense-making’ (Edley, 2001, p. 203) Subject positions can be defined quite simply as ‘locations’ within a conversation. They are the identities made relevant by ‘specific ways of talking’ (Edley, 2001, p. 210). I deliberately looked for ideological dilemmas and subject position within the participants’ ‘repertoire’ to create a balance in the findings.

3.2.5 Meeting the Challenges of focus group interviewing

3.2.5.1. The role of the facilitator

I understood that the groups needed to feel comfortable with me as facilitator, and I was aware that talking about performance might cause them to reveal things that might be personal. I therefore deliberately met with both groups ‘on their territory’ to make them feel at ease; for the student group at the conservatoire and for the
teacher group at their usual CPD meeting place in one teacher’s home. I also ensured they had information about the intent of the focus group beforehand. At the start of the interviews I made it clear they could withdraw any comments if they so wished, and could leave at any time during the interview.

I understood that facilitating a focus group needed expertise. I would only be able to cover a limited number of topics and focus group interviewing can be problematic for the researcher if the group discussion wanders off topic. The facilitator must also ensure that participants get a fair chance to speak and that individual group members should not be allowed to dominate. I had prepared a variety of prompts in order to help with these potential problems (Appendix 2B). Past experience gave me confidence that I could meet this challenge.

3.2.5.2. Focus group analysis and validity
The analysis of focus group interviews present particular challenges because it is a group conversation. For example, there can be ‘a danger of misrepresenting comments when they are read out of context’ (Harding 2013, p. 159). To avoid this problem, and check validity, I returned to the original data once I had completed my analysis. I reread the chosen quotations within context to confirm that the meaning I had attributed to each participants’ contribution was reasonable.

Another problem in thematic analysis for focus group data is that not every participant may contribute on every topic (Harding, 2013). The reason for this may not be obvious. It could be because a participant has a similar view to others, or it may be that a participant has not had a chance to speak due to others being more forceful. The researcher cannot assume a consensus of opinion ‘because it may be that some group members are unwilling to express a view different from the majority’ (Harding, 2013, p. 167; Robson, 2002, p. 289). In my reporting, where possible, I present the number of group members who express a certain opinion to reduce any chance of distorting the data.

I was aware that I should study how the groups interacted by seeking agreement and disagreement. I looked also at what was not said as well as what was said, as ‘silences can be illuminating’ (Barbour, 2007, p. 143). For validity, I actively sought to see if there were patterns that did not fit my findings (Harding, 2013, p. 171). I was able to look further into ‘how’ group members discussed performance problems and made comparisons between the two groups using the discourse
analysis. Using two types of analysis (3.2.4) gave more depth and validity to the findings in these interviews.

3.2.6. Meeting research objectives

Using focus group interviewing as a method provided data about trainee and experienced teachers and their experiences of using and teaching mental strategies for performance. The two groups, one at the start of their careers and the other very experienced, offered interesting differences in attitudes to, and opinions about, the potential of PST. As well as providing insights into my research questions these interviews revealed aspects of musical culture related to performance preparation that was also apparent in the literature. Despite the limitations discussed in 4.5 it was a method that achieved my research objectives, and provided findings that gave a context for the studies in phase 2.

3.3. Phase 2 Study 1: Interview Study

3.3.1. Aim and research questions

Given the general lack of understanding of the development of psychological skills for musicians and a lack of understanding about the type of training that might develop such skills (1.1.2, 1.1.4, 2.2 and 2.3) there were two aims in this study. The first was to further knowledge about the use of, and the ways to develop, psychological skills for musicians, and the second was to demonstrate the potential of one to one specialist performance training in a conservatoire setting, through an understanding of the work of an expert performance consultant.

My questions were:

RQ5 How can one-to-one psychological skills training benefit conservatoire students?

RQ6 How can psychological skills training work when implemented by an expert performance coach?
3.3.2. Choosing and recruiting participants

The participants in this study were a Performance Coach (PC) and seven former pianist clients. As described in 1.1.5.1, I met the PC informally and learned about her work before I invited her formally to participate in my research via email (Appendix 3A). The PC recruited the clients from her database. They were approached via an email that included an invitation letter and background information from me (Appendix 3A). I specifically asked the PC to contact only pianist clients, so I could better compare this study with the AR study, which was only going to have pianist participants. Those who volunteered to participate were sent background information about the project before we met (Appendix 3B).

There was no possibility of a sample from another conservatoire because, at the time of the study, the PC was unique in working in a UK conservatoire (1.1.5.1). Whilst the seven clients who volunteered were not necessarily representative of all instrumentalists or all pianists at the conservatoire, they were a mix of undergraduates and postgraduates of different ages and experience, who played both classical and jazz piano.

3.3.3. Choosing the method

I chose semi-structured individual interviewing as the method for this study because it was suitable for a small sample, and it offered flexibility. Interviewing face to face offers ‘the possibility of modifying one’s line of enquiry, following up interesting responses, and investigating underlying motives’ (Robson, 2002, p. 272). This was something other methods such as questionnaire surveys could not offer.

Giving the participants a questionnaire may have opened up the study to more clients, but I knew from the focus group study that there could be difficulties with language and possible misinterpretation of sport psychology terminology.

It would have been interesting to collect data through observation of coaching sessions, but this brought with it problems of confidentiality. At one of our early meetings I discussed these issues with the PC. It was agreed that potential difficulties of confidentiality would be overcome if she asked for former clients to volunteer rather than clients currently undertaking coaching.
3.3.4. Data Collection and Analysis

The interviews were arranged and conducted for each of the clients and coach over a period of a few months. Each interview lasted at least one hour, and was audio recorded and transcribed verbatim. The coding used for transcription is the same as that used for the focus groups study (see page 20). The PC spoke retrospectively about her work. None of the clients were engaged in coaching at the time of their interviews therefore they too spoke retrospectively. A pilot interview was not possible because of the uniqueness of the participants. However, some questions had already been tested in the focus group interviews. The interview topic guides for both PC and clients are presented in Appendix 3C.

Choosing a flexible approach meant that certain topics would be covered with each participant, whilst ‘the order can be modified based on the interviewer’s perception of what is most appropriate’ (Robson, 2002, p. 270). The aim was to get a view of performance coaching from each individual’s perspective not to seek a comprehensive representation of performance coaching for all (Gillham, 2000, p.16). I prepared prompts in order to keep the discussion on course, or to explore a subject in more depth.

The data were analysed using a thematic approach. The transcripts were read initially to become familiar with the data. Summaries were made of each interview, followed by content analysis to distinguish general categories and themes (Harding, 2013, p. 4). The themes between coach and client were compared. No computer software was used for this analysis. To ensure the interpretation of the data did not stray from what was actually said, quotations are given, which allow the participant to ‘speak for themselves.’ (Gillham, p. 2000, p76). The approach was largely abductive (3.1.3). As a practitioner I was aware of the techniques the coach and client might describe, as well as debates in the literature regarding a lack of performance psychology in conservatoire training (Ford, 2013; Patston, 2014) but I also was open to finding other themes I had not considered.

3.3.5. Meeting the challenges of interviewing individuals

3.3.5.1. Establishing a rapport

In the same way that I needed to establish a rapport with participants in the focus
groups (3.2.5) I needed to make the participants in this study feel at ease. I knew the discussions might include sensitive issues about performance. With this in mind I arranged the interviews in a place of the clients’ choice, and at a time of their choosing. Interviewing clients without the coach present allowed clients the freedom to express views, that may not have been possible had the coach been present. In order to develop rapport at the start of each interview I asked the PC and each client general questions about their background in music performance.

The clients spoke freely and although I suggested one hour for the interviews several clients talked for longer. The PC herself was more at ease with being interviewed than her clients. I agreed that she could video the interview for her own interest and professional development.

3.3.5.2. Preparation and transcription

Whilst interviewing is ‘a flexible and adaptable way of finding things out’ (Robson, 2002, p. 272) it is also time consuming. Preparing and organising the interview schedule as well as time spent transcribing, in this case eight interviews, all of at least an hour each was a challenge. However, the researcher is rewarded with in-depth data from the individual not possible to obtain through other methods. Interviewing individually, like focus group interviewing, demands the skills of the interviewer to cover the desired topics through prompting but not leading the participants. I was also aware of how to use prompting to either clarify what was being said or to encourage more in depth discussion. Previous experience including the focus group interviews gave me confidence to do this.

3.3.5.3. Validation

For validation purposes in this study, one of the closing questions of each interview was to ask participants if the author had led them in any way through the questioning. A comparison between the clients’ responses to the strategies they used with the coach and the responses from the coach about the same strategies served to validate my interpretations of performance coaching in practice. Transcripts were also sent to the participants, where they were given the opportunity to change or add anything to their responses. Only the coach responded.

The PC was satisfied with her transcript but felt there was much more she could have said. To ensure a deeper understanding of her work, she suggested I
observed some of her coaching sessions, a few weeks after the interview. I attended the conservatoire for a morning of seven sessions. The students I observed were assured I was not going to use the sessions as data for my study, and gave permission for me to attend. Four sessions were part of on-going work with students, a mix of undergraduates and postgraduates, who were all approaching their end of year recitals. Three were taster sessions for students considering individual coaching; only one was a pianist. The rest were other instrumentalists and two singers. I also observed a meeting between a student’s instrumental teacher and the coach about future performance coaching. Whilst these observations are not part of the data they served to validate my interpretation of the coaching process.

Because I already had an understanding of sports psychology from my undergraduate studies and my tennis coaching training I was aware that this also helped me understand the coaching process. I was also aware that this might make me biased towards interpreting the coaching as successful. In order to prevent bias I deliberately looked at the transcripts for evidence that the training did not work, or whether there was any scepticism on the part of the clients. I was also aware that the coach could be biased in favour of her approach so I purposely looked for parts of the interview in the analysis where she talked about difficulties she had, or where a strategy did not work. I interviewed volunteer clients rather than clients the PC chose, which may also have prevented a bias towards only interviewing clients for whom the coaching was successful.

### 3.3.6. Meeting research objectives

Using interviewing as the method in this study provided in-depth data regarding the potential of individual PST as a regular part of conservatoire training from two perspectives. The coach was able to give me an overview of her work, while the clients, who came from different backgrounds and had different reasons to seek help from the PC, gave a more detailed view of how she worked with individuals. As well as providing insights into my research questions these interviews also revealed much about conservatoire culture that was also apparent in the focus group study and the research literature. Limitations of this study are discussed in 5.7.
3.4. Phase 2 Study 2: Action research project

3.4.1. Research Aims

This study explored the potential of individual PST for recreational piano pupils. There were three aims:

- To demonstrate the potential of teaching one-to-one mental strategies in piano lessons for recreational pupils
- To further knowledge about psychological skills development and training for musicians of all ages and standard
- To assess change to working practice

Specific research questions related to these aims are given at the start of Chapters 6-9. The first aim was to contribute to practical knowledge about teaching PST, and the second to contribute to academic knowledge of PST, which serve the dual purposes of AR (McNiff & Whitehead, 2011, p. 10). Due to the emergent nature of AR specific research questions developed as the project progressed. In this study I wanted to examine and reflect on both my teaching of mental strategies for performance, which I had done for over ten years, and also see how I could influence other teachers new to this approach. The third aim was to assess improvement to working practice, as ‘Improvement and involvement are central to action research’ (Robson, 2002). Besides understanding how working practice had changed I was interested to know if these improvements would bring about permanent change.

The teachers participated in the project as part of their professional development therefore I chose to use the framework by Guskey (2002), a writer on professional development and teacher change, to explain the extent of change in my project (Chapter 9). Guskey (2002) explains that change happens in a particular sequence. I therefore examined three areas of development in the following order:

- Changes to teachers’ working practice
- Changes to pupils’ learning outcomes
- Changes in attitudes and beliefs (Guskey, 2002, p. 283)
I examined change and the extent of change for the teachers new to PST and also change and improvement in my own working practice.

3.4.2. Choosing and recruiting participants

Meeting experienced teachers in Focus Grp 2, enthusiastic to know more about ideas from sport psychology, led directly to the recruitment of teachers to participate in an AR project. The organiser of the local EPTA group, who had organised the participants for Grp2 (1.1.5.2) agreed to join the project, and recruited four more teachers via an email to her local teacher database (Appendix 4A). Three of the five volunteer teachers came from the Focus Group Study.

Each teacher recruited pupils through a pre-written letter from me (Appendix 4B) that was adapted for parents if the pupil was under 18 years. Two groups participated from the total of 151 pupils that comprised our teaching practices. The first took part in a questionnaire survey (107 pupils), and the second participated in the action cycles (34 pupils). All potential participants were sent background information about the project, including parents of pupils under the age of 18 (Appendix 4C).

Allaying fears and concerns was a part of the recruitment process. Prospective participant teachers emailed with a variety of concerns about the project, ranging from whether they had time to commit to the research to the suitability of their pupils for psychological skills training. I answered these concerns via email before our first meeting.

3.4.3. Choosing the method and designing the project

AR is the ideal method for a teacher wishing to investigate and improve the ‘real world’ of piano teaching, and it is a popular method of professional development for teachers (Altrichter, Posch & Somekh, 1993). It was thus a suitable choice for the participating teachers who viewed their involvement as professional development. Each teacher was presented with a letter at the final meeting as proof of participation (Appendix 4D).

I was responsible for designing the project. Whilst there are generic principles of good AR design, each project is unique. There was no AR precedent to follow that had studied PST for recreational piano pupils, so I developed the way to
I conducted my project by reading widely about AR in general (for example, Dick, 1993; Kagan, Burton & Siddiquee, 2013; Kemmis, McTaggart, & Nixon 2016; Koshy, 2005; McAteer, 2013; Norton, 2009). I found a few examples of AR music education, some in the classroom (Craine, 2013; Man, 2013; Cain, 2008), and only two in the instrumental teachers studio. Mackworth-Young (1990) studied a pupil-centred approach to piano lessons to improve the pupil-teacher relationship, and Gaunt (2007) explored a range of approaches to improve the teaching and learning of breathing in oboe playing. In my design I took note of a critique of music education AR in the UK, which observed that what was missing from the design of many studies was the use of a cyclical approach and the use of reflection (Cain, 2008).

In my design, the two action cycles of planning, action, evaluation and reflection took place from January 2014 to February 2015. Cycle 1 is shown in Figure 3.2, and Cycle 2 is shown in Figure 3.3. Cycle 1 had an additional mini-cycle of action, evaluation and plan. The rest of the procedure was the same for both cycles.
**Figure 3.2.** Action Cycle 1.

**Figure 3.3.** Action Cycle 2.
3.4.4. Data sources

I designed the tools for the data collection. Table 3.1 shows the difference data sets how many participants produced each data set, and when the data was collected. Further information is shown in the Appendices, which are referenced.

**Table 3.1.** Data collected during the Action Research Project

<table>
<thead>
<tr>
<th>Data Type</th>
<th>Participants</th>
<th>When collected</th>
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<tbody>
<tr>
<td><strong>PLANNING</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Questionnaire survey (Appendix 4E)</td>
<td>107 Pupils</td>
<td>Before the action of Cycle 1 began.</td>
</tr>
<tr>
<td>Teacher Meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle 1</td>
<td>6 Teachers</td>
<td>Before the start of Cycle 1 and two. At the end of the research.</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>5 Teachers</td>
<td></td>
</tr>
<tr>
<td>Worksheets (Appendix 4F)</td>
<td>Teachers 4/6 completed</td>
<td>Between the cycles</td>
</tr>
<tr>
<td>Summary of preparation before psychological skills training (Appendix 4G)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cycle 1</td>
<td>6 teachers</td>
<td>5 weeks before the performance</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>5 Teachers</td>
<td>25 Pupils</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23 pupils</td>
</tr>
<tr>
<td><strong>ACTION</strong></td>
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<tr>
<td>Teacher and Pupil Diaries (Appendix 4H)</td>
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<tr>
<td>Cycle 1</td>
<td>6 Teachers</td>
<td>4 weeks leading up to the performance</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>5 Teachers</td>
<td>25 Pupils</td>
</tr>
<tr>
<td></td>
<td></td>
<td>23 Pupils</td>
</tr>
<tr>
<td><strong>EVALUATION</strong></td>
<td></td>
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<td>Performance Evaluation (Appendix 4J)</td>
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</tr>
<tr>
<td>Cycle 1</td>
<td>6 Teachers</td>
<td>On the day of the performance.</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>5 Teachers</td>
<td>25 Pupils</td>
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<tr>
<td></td>
<td></td>
<td>23 Pupils</td>
</tr>
<tr>
<td><strong>REFLECTION</strong></td>
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<tr>
<td>Reflections (Appendix 4K)</td>
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<td></td>
</tr>
<tr>
<td>Cycle 1</td>
<td>6 Teachers</td>
<td>1. Before the first group meeting.</td>
</tr>
<tr>
<td>Cycle 2</td>
<td>5 Teachers</td>
<td>2. Before Cycle 2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Before the final meeting.</td>
</tr>
<tr>
<td>Research Journal</td>
<td>Lead researcher</td>
<td>Throughout the project</td>
</tr>
</tbody>
</table>
3.4.5. Data collection during the action cycles

Each teacher collected their own data and that of their pupils in individual teacher research files. Teachers who completed diaries or other paperwork on the computer printed a copy for their file. Some of the younger pupils completed the paperwork with the help of their teacher or parent, and were asked to indicate this. As practitioner, I completed the same reflections and diaries as the rest of the teachers. As researcher I documented my reading, my personal reflections, the project design and decision-making in a journal as the project developed. Additional data came from copies of email correspondence throughout the project, which showed how I answered queries, put minds at rest about certain aspects of the project and generally kept in touch with the group.

3.4.5.1 Planning

I began to collect data about the teachers through a first reflection completed prior to the first meeting. This was designed to provide baseline information about the teachers’ use of performance strategies and how they taught performance, which would help me with planning for the first meeting. I audio recorded all meetings and transcribed these verbatim, which gave additional insights into our teaching and learning. The coding used is the same as that used for the group and individual interviews (see page 20).

I involved the teachers in the design of the questionnaire survey and the pupil diaries so that we had workable tools. I collected data about the pupils through a questionnaire survey, which was distributed by each teacher to any of their pupils who had ever performed. The design of the questionnaires is discussed in Appendix 4L. The teachers were responsible for collecting the completed questionnaires. They were asked to use this information to help them select which pupils to teach during the action cycles.

After one group and one individual meeting in each cycle the teacher chose the pupils they wished to work with. The teachers were asked to complete a form to show what they planned to teach, and pupils were asked to complete a form indicating how prepared they were for the performance (Appendix 4G). Each teacher made individual teaching plans for the action cycles appropriate to their working practice.
A part of the planning in Cycle 2 was a summary of the preliminary findings in two PowerPoint presentations (Appendix 4M) during the second group meeting. Following this presentation the group discussed ways in which we could improve our teaching for Cycle 2.

3.4.5.2. Action

In both action cycles there was four weeks of teaching piano pupils strategies for performance. During this time both teacher and pupil kept diaries (Appendix 4H) as a record of the teaching and learning. Both diaries included reflection on the teaching and learning. The design of the pupil diary was changed in Cycle 2 in order to improve the quality of the data. Further details of the diary design are given in Appendix 4L.

3.4.5.3. Evaluation

Following the four weeks teaching in the action cycles each pupil performed at either a concert or an examination. Each teacher organised performances to suit the aims of their teaching. Before the performance pupils were asked to complete the first part of their evaluation form that showed their aims and performance concerns. At the performance itself both teacher and pupil completed an evaluation to assess the success of the teaching and the techniques used for that performance. The evaluations were all completed on the day of the performance except in the case of examinations when the teacher evaluation was completed at a mock examination some time before the examination. The design of the evaluation forms was changed in Cycle 2 to reflect the purpose of the teaching (see Appendix 4J).

3.4.5.4. Reflection

Reflection was important part of the project, and enabled reflection on action and action on reflection (3.1.3). The teachers had to complete three reflections during the project (Appendix 4K). I also asked the teachers to use reflection in their teaching diaries (Appendix 4H). Four teachers, including myself, had no previous experience of reflective writing, so I wrote a guidance sheet comprising reflective questions (Appendix 4K). The project ended with a group meeting where we presented our final reflections.
3.4.6. Data Analysis

I conducted two analyses. The first was at the end of Cycle 1 where I reflected on the findings, and made decisions about how to proceed in Cycle 2. The second analysis was completed after the project ended. Analysis for the qualitative data was done through a process of ‘three concurrent flows of activity: (1) data condensation, (2) data display, (3) conclusion drawing/verification’ (see Miles et al., 2014, pp. 12-14). I condensed the data by writing summaries of each data set and then categorised the data in these summaries. Having viewed the data in sets, for example, all diaries, all group meetings, and so on, I then conducted a more in depth analysis of the data for each teacher individually. This either confirmed the summary categories, or caused me to add or change my initial interpretations. To achieve more in depth analysis I used a series of progressive tables and matrices (data display) following Miles et al., (2014). These tables began as descriptions of the data followed by a more detailed analysis of themes leading to theoretical concepts. Because of the volume of data and the complication of the changing process in the action cycles the writing process was also part of the analysis as I went from ‘description to explication to analysis’ (McNiff, 2016, p. 63).

Quantitative data produced in the questionnaire survey and pupil performance evaluations were analysed using the statistical package SPSS. Most of this analysis is simple descriptive statistics due to a variety of limitations, which I discuss in 9.4.1.4. Qualitative comments for both the questionnaires and performance evaluations were summarised numerically where possible, and were analysed by using Xcel spread sheets and other matrices, which facilitated the categorization of these responses.

3.4.7. Meeting the challenges of action research

There were a number of challenges, which came about through the choice of method, and the choice to collaborate with other practitioners. The planning and decision-making over a year-long project was perhaps the biggest challenge. Planning was an evolving process during which I had to be flexible and creative. Although this is a challenge for the researcher it shows the realities of teaching and organising human beings who have their own preferences and approaches, and
where pupils can be unpredictable and unreliable as well as fascinating. I now discuss further challenges of my AR in particular, and AR in general.

3.4.7.1. Challenges during the analysis

The first challenge of the analysis was how best to present the analysis of Cycle 1 data and the questionnaire survey between the cycles. I had only a few weeks to conduct the analysis and plan the presentation, but these findings were essential for our teaching and learning and for the development of the design for Cycle 2. I overcame these challenges by thinking about what the teachers might want to know, where I could see improvements, and by presenting the findings in the way the teachers were accustomed in a workshop style presentation using PowerPoint (Appendix 4M).

The challenge in reporting the project as a whole, was how to condense the differing types of data and the vast amount of data sufficiently to tell an accurate story, in a thesis that was not just about AR but included other studies. I wanted to be able to relate the findings to both current research reviewed in Chapter 2, and the findings from the interview study where specialist musicians undertook PST (Chapter 5). The decision to write about the teaching of the six main strategies used in PST in Chapters 7 and 8 afforded these comparisons. The findings reported in Chapter 6 introduce the AR participants and present new knowledge about recreational piano pupils and performance, and also provide a context for the teaching presented in Chapters 7-8. In Chapter 9 I analyse the extent of and influences on change, essential in good AR, and reflect on the project as both critical teacher and researcher.

One of the other challenges of analysis related to the quantitative data, and the tools I designed. The section about performance aims in the questionnaire survey, which I hoped might be useful to teach the group about goal-setting strategy, was interpreted in differing ways by the pupils making the results impossible to analyse. The analysis about performance concerns was also problematic. The intention was to use the scores to show how our teaching improved the pupil performance experience, through a comparison between their scores from the questionnaire survey and two action cycles. However, only 14 pupils took part in both action cycles, and two were under the age of 11 so did not complete the same questions. Of the 12 remaining, 9 of these were my own pupils. This sample was
therefore too small and biased towards my teaching for any meaningful analysis.

Another unsatisfactory consequence of making improvements to the teaching in Cycle 2 meant the criteria for the evaluation of this cycle changed. This change and the small sample prevented me from comparing psychological skill scores designed to show improvements in the performance experience for our pupils from one cycle to the next.

3.4.7.2 Keeping the teachers motivated and interested

My concerns for the project were that:

- The teachers may not always understand what I mean.
- There may not be enough detail in the data for me to understand what they mean.
- The teachers may not continue to the end of the project.

I aimed to prevent the above through good planning, the organisation of productive meetings and good communication.

Keeping the teachers informed and making regular contact with them was one of the ways I kept their interest. I sent out information about PST and the project before we met (Appendix 4C). I also provided additional resources (Appendix 4N) and worksheets (Appendix 4F). I sent out agendas and minutes for our meetings. I also made sure I answered any questions or concerns about the project promptly.

In order to make the teachers feel they were active participants in the research I deliberately involved the teachers in the design process of some of the research tools, and I sent the tools to the teachers for approval. They were involved particularly in the decision making for the questionnaire survey and the pupil diaries. This involvement helped to provide workable tools.

Two aspects of the research helped to keep them engaged. One was the organisation of individual meetings, which gave me the chance to get to know each teacher better, and gave them a chance to express concerns or ideas they may not have wanted to share, or remembered to share in the group meetings. The other aspect was the presentation of the preliminary findings and new ideas at the second group meeting, which acted as a stimulus in Cycle 2.
3.4.7.3 Validity and the Characteristics of ‘good’ action research

One of the methodological challenges of AR is to demonstrate that the research is valid. One way to judge AR is to assess the quality in relation to certain principles set out by other researchers. Debates about what characterises ‘good’ AR appears to rest on how far the research fulfils certain criteria (see Herr & Andersen, pp. 49-68). I chose to follow the eight methodological principles described by Somekh (2005), that AR:

1. integrates research and action in a series of flexible cycles
2. is conducted by a collaborative partnership of researcher and participants
3. involves the development of knowledge and understanding of a unique kind
4. starts from a vision of social transformation and aspirations for greater social justice for all
5. involves a high level of reflexivity and sensitivity to the role of self
6. involves exploratory engagement with a wide range of existing knowledge
7. engenders powerful learning for the participants
8. locates the enquiry in an understanding of broader historical, political and ideological contexts. (Somekh, 2005, p.6-8).

Principles 1, 2 and 5 are demonstrated in this chapter where I have described the process of flexible cycles of action, the collaboration between the teachers, and the importance of reflection. In section 1.1, I discuss how this research came from identifying a need to find a way to give musicians positive performance experiences, and to find a way to train musicians to perform (Principle 4). Chapter 2 demonstrates Principle 6 through engaging in an exploration of a wider body of literature from both music and sport about PST. Chapter 9 presents the process and extent of teacher and pupil change (Principle 7), and Principle 8 is shown in Chapters 1, 9, and also 10, where the findings from the AR are integrated more widely with findings from the other studies.

Principle 3, which is that good AR should involve the development of knowledge and understanding of a unique kind, has led to some debate regarding how knowledge is described as well as the value of the types of knowledge created.
A typology of knowledge from Garvey and Williamson (2002) used by Cain (2010) to analyse seven secondary school music education AR projects uses the terms ‘Big K and little k’. Big K is described as knowledge that is shared through publication and passed from one generation to the next, while little k is practical knowledge created of, for and about the individual. In a discussion about rigour and relevance Levin (2012) suggests that academics often view highly rigorous scientific research as the ‘real deal’ (Big K) and relevance not of the greatest importance (little k). Cain (2010) argues that this idea may be too simplistic and that knowledge that is practical is not necessarily little k. He quotes examples of music methods such as Kodaly and Suzuki that are passed on and have spread through shared publication.

Levin (2012) to an extent resolves the debate surrounding academic integrity in AR by using the two faces of the god Janus as a metaphor, one face representing ‘practical action and reflection’ and on the other ‘reflective distance and rigorous analysis’. It is better to view these two types of knowledge as two variables both of which can be judged to be of high or low quality. The aim in my AR research was to create high quality practical and theoretical knowledge, which could inform both practice and theory about PST, to improve performance training for musicians.

3.4.7.4. Validity and the ‘mess’ of AR

As suggested in 3.1.1, AR is not a linear process. Cook (2009) refers to the ‘mess’ in AR, and acknowledges that ‘mess’ and ‘academic rigour’ are not good companions. More traditional researchers may question such ‘messy’ research is in fact ‘proper research’. Cook (2009) argues that only by including the ‘mess’ can the action researcher successfully integrate ‘the development of practice with the construction of research knowledge’ to give an ‘honest account’ of the research process. The action researcher needs to have an open mind about an evolving design, and be relaxed about what has to be a flexible process. I recorded all aspects of the ‘mess’ of my research in my journal and have been aware of the need to include this in my reporting.

As instigator of change process I need to document my roles, actions and decisions.

Herr and Andersen 2005 Primary rule p77 for AR ‘to be aware of the choices one
is making and their consequences' AR is a "messy somewhat unpredictable process and a key part of the inquiry is a recording of the decisions made in the face of this messiness" p78 (Research Diary 22.4.14).

Teaching by its very nature is ‘messy’. In particular, ‘messiness’ arose because I allowed the teachers to choose different pupils for each action cycle, which resulted in too small a sample for comparison. The preliminary analysis of the Cycle 1 data (see 9.1.2) made between the cycles created ‘mess’, because improvements made to the teaching meant I was no longer able to analyse the quantitative data as intended. However, as Cook (2009) states, 'The purpose of entering this mess is to enable and allow new directions to emerge...' (p. 17). Allowing the teachers choice and making improvements for Cycle 2 meant they were more engaged in the project, and the changes created new findings that I had not anticipated.

3.4.7.5. Validity and researcher positionality

Acknowledging the position of the researcher within their research is a key concept that Herr and Anderson (2005, p. 3) argue 'will determine how one thinks about power relations, research ethics, and the validity or trustworthiness of the study's findings'. In practitioner research the researcher tends to be an insider, whereas in more traditional research the researcher is an external outsider, who does not see him or herself ‘as part of the reality they are studying’ (p. 47). In this AR project I took up both positions described by McNiff and Whitehead. (2011) as both research interpreter for the other teachers, and self study action researcher; or the ‘outside insider and the inside insider’ (Herr & Anderson, 2005, p. 31).

While I was an outsider when analysing the teacher data, the fact that I was also a piano teacher gave me a perspective and understanding of the data not possible for a non-practitioner. I was aware however that this position could lead to biases and assumptions, which I have considered in my reporting. Reflection was important for establishing validity. It:

ensures the research process as a whole is scrutinised throughout and that the researcher continuously reviews his or her own role in the research. This discourages impositions of meaning by the researcher and this promotes validity. (Willig, 2008, p.16).
To this end, I make my positions clear in my report, either as critical researcher or critical practitioner.

### 3.4.8. Meeting research objectives

This research method led to improved teaching and learning and to new practical knowledge and theoretical understanding about PST and the development of psychological skills. By participating in my own research as well as collaborating with the other teachers involved in the AR there was intent to improve our own learning and therefore that of our pupils, thereby creating a more positive learning environment in which to perform. Due to the cyclical and reflective nature of the research it was possible to see how the teachers, pupils and researcher responded to the teaching of mental strategies and to see how we improved and reflected on our practices. I was able to study change and influences on change. AR as a method allowed us to seek ‘new beginnings’ (McNiff, 2016, pp. 42-43) rather than definitive outcomes.

### 3.5 Ethical considerations

Sheffield University Music Department Ethics Committee gave ethical approval before the commencement of each study. I was aware that I needed to consider the ethics of the AR project carefully, because teachers and their pupils, some of whom were young children, were going to be co-creators of knowledge. Amendments had to be made to certain questions in the questionnaire survey accordingly. In the following I discuss ethical considerations of consent, confidentiality, anonymity, sensitivity, and safe keeping of data.

#### 3.5.1. Consent

Participants in all three studies completed a generic consent form before each study began (Appendix 4P). Pupils in the AR consented to participation in the questionnaire survey by whether they completed and returned it to their teacher or not. Consent from pupils to participate in the action cycles was organised by each teacher prior to each cycle. Parents also consented, if the pupil was under the age of 18 years. Those pupils new to Cycle 2 completed a form before the start of that cycle.
Prior to giving consent at the start of each of the studies, participants were given information about that study, as mentioned previously. Participants were reassured that they could withdraw from the research at any time.

### 3.5.2. Confidentiality and anonymity

Research participants were assured of confidentiality and anonymity (Willig, 2008, p. 19). To protect their identity, participants in all three studies are referred to by pseudonyms. The piano pupils are referred to by a code (see Chapter 6). The anonymity of the PC was discussed particularly at the start of her interview. She understood that her identity could be discovered from information in this study. Nevertheless, she agreed to proceed and to be referred to as the ‘Performance Coach’. She did not know which clients had volunteered for the study. The client interviews were not discussed with the coach. Neither did the coach refer to any individual clients by name in her interview.

### 3.5.3. Sensitivity

In all three studies I was aware that discussing performance concerns might be a sensitive issue. I assured all participants of complete confidentiality and anonymity as part of this process. In both focus group and individual interviews participants could refuse to answer any question and could ask for data to be removed at any time.

During the AR research the teachers were responsible for acting in a sensitive way towards their pupils, and their parents. It was made clear that if pupils did not wish to answer any of the questions either on the questionnaire or during the action cycles the teachers would respect their decision. If a pupil showed any signs of distress during the action cycles we would change our approach. Five of the teachers, including myself, were members of EPTA and one teacher belonged to the Incorporated Society of Musicians (ISM). Through these professional organisations we were bound by their codes of conduct (EPTA Code of Conduct, 2017; ISM Code of Conduct, 2013), which cover all aspects of teaching and the safeguarding of children.
3.5.4. Safekeeping and ownership of the data

Participants in all three studies were assured that access to their data was restricted. In the AR project data protection had to be considered in more detail because the project lasted for a year and the data collection was on-going. The safekeeping and ownership of the data in the AR was discussed at the first group meeting. Whilst the data generated by each teacher was given to me at the end of the project, each teacher was free to keep a copy of their own data for use in their teaching. Our own research data was an extension of our regular record keeping, which was already protected in an ethical way. Computer files containing any information about the project had restricted access. This included the audio recordings of the teacher meetings. The overall data for the project, which were compiled in separate teacher research files, was to be secured by me safely until the end of my studies.

3.6. Summary

In this chapter I have described the approach, design and process of my research including its pragmatic underpinning. The benefits of using a multi-method approach for an under-researched topic were discussed. In Chapters 4-9 I present my research findings. Chapter 10, the final chapter, brings the findings together to compare and contrast PST from the perspective of both specialist and recreational pianists and practitioners. This multi-method design enabled ‘new beginnings’ for practitioners who participated in the AR, and for researchers interested in studying the musician as performer through challenging current models and posing many new questions.
Phase 1
Focus group study: exploring what strategies teachers use and teach to prepare for performance.
4 Talking about performance preparation

This chapter presents the findings of my first study, which constitutes research Phase 1 (3.1). A comparison between studies of elite athletes and professional musicians suggested that teachers are not involved in helping students prepare psychologically for performance (1.1.4). However, I had developed my teaching to include psychological preparation for performance using ideas from sport (1.1.3). I decided to find out more about the role instrumental teachers played in performance training, as I felt it was unlikely that teachers did not help pupils with performance. I could not assume that I was the only piano teacher to have thought about teaching performance skills to their students or to have thought of using sport psychology principles in their teaching. I wanted to discover if my approach was unusual, and if so, might other teachers see a potential in using ideas from sport psychology.

The findings from two focus group interviews revealed that instrumental teachers use few performance skills themselves, and they are not deliberately teaching performance skills to their pupils. The two groups had differing attitudes to the idea of using sport psychology in their teaching, which showed up cultural differences inside and outside specialist higher music education. What was most revealing in this study was the way the participants discussed performance using the word ‘nerves’ as the commonality.

The following research questions guided the two group interviews (Appendix 2B):

RQ2 Do instrumental teachers use mental strategies themselves to prepare psychologically for performance, and what role did their teacher play in helping them develop these strategies?

RQ3 Do instrumental teachers teach mental strategies to their pupils to prepare them psychologically for performance?

RQ4 Can instrumental teachers see a potential in using sports psychology in their teaching?
Recruitment of the participants is discussed in 3.2.3. Data collection and analysis are discussed in detail in 3.2.4. I took two approaches to the analysis. Content analysis followed by discourse analysis (3.2.4.). These two types of analysis were essential in answering my questions and giving a richer understanding of a culture that has prevented musicians from engaging in purposeful performance training.

4.1. Participants

Demographics of the two groups are shown in Table 4.1. Individual participants have been assigned pseudonyms.

### Table 4.1. Focus Group Participants

<table>
<thead>
<tr>
<th>Participants</th>
<th>Gender</th>
<th>Age Range</th>
<th>Pseudonym and instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grp1 Five students studying for an MMus in Performance and Pedagogy at a UK conservatoire.</td>
<td>2 female 3 male</td>
<td>21 – 24 years.</td>
<td>Hannah - classical violinLaura - classical violinRoss - jazz drummerAdam - jazz saxophonePaul - jazz saxophone</td>
</tr>
<tr>
<td>Grp2 Six piano teachers from a European Piano Teachers Association (EPTA) professional development group.</td>
<td>5 female 1 male</td>
<td>40 – 60 years.</td>
<td>Angela – piano teacherJanet – piano teacherLiz – piano teacherYvonne – piano teacherCaroline – piano teacherTony – piano teacher</td>
</tr>
</tbody>
</table>

4.2. Findings

4.2.1. A contrast in perspectives

The framework for the interview topic guide was written using the model of performance enhancement. The letters inviting the students and teachers to participate in this research (Appendix 2A) stated that the discussions would be about psychological preparation for performance and the role of the teacher.
However, at the outset of both focus group discussions it was evident that both groups thought I was there to talk about nerves not performance enhancement. The discursive analysis showed that the words ‘nerves’ or ‘nervous’ were repeated throughout the discussions (23 times for Grp1, 43 times for Grp2) and were used by everyone. The first respondents in both groups immediately demonstrated this ‘interpretative repertoire’ (3.2.4). Ross, the jazz drummer, the first to speak in Grp1, said:

Yeah I’ve (. ) mmm struggled I’ve kind of with this that (. ) erm (. )... on the subject of stagefright (. )

and Liz, who spoke second in Grp2 said:

...when I was young like ... I thought nothing of performing I never considered being nervous or thinking about nerves ...

I analysed what the participants meant by ‘nerves’ and how they perceived the causes of ‘nerves’ to help me better understand the discussions. In the next section I describe the types of ‘nerves’ participants experienced as well as the causes. Whilst I had not set out to discuss ‘nerves’, understanding the group members’ perspectives on this was crucial in this analysis, because the participants’ understanding of, and need for, performance strategies was to cope with ‘nerves’.

4.2.1.1. Types of ‘nerves.’

Participants described very personal experiences of ‘nerves’, which were of two types:

- physiological symptoms of arousal
- worrying thoughts

Physiological symptoms were ‘the shakes’ (Hannah, Adam, Grp1), ‘shaky thumb’ (Laura, Grp1) and ‘my whole body shook’ (Yvonne, Grp2). Tightness of the chest, which affected breathing and the tuning of the voice or instrument was also
mentioned by Angela, Janet (Grp2) and Adam (Grp1). Paul, the jazz saxophonist, described how his ‘psychological barrier’ was physiological symptoms of arousal:

...when I get on stage for the first tune you know I will be sweating, and bright red and there's nothing I can do about it.

Everyone in Grp1, except Ross, expressed worries or concerns about the physiological symptoms, and anticipatory worries that were understood to sometimes manifest themselves in physiological symptoms. Laura, Hannah, Ross (Grp1) and Tony and Angela (Grp2) had anticipatory concerns about the audience judging them. Laura expressed the most worries, which also included worrying about lack of practice, order of play in the performance, and the intimidating venue. But she added that you need ‘nerves’ as they were part of performing. In Grp2, Caroline said it was ‘fear of the unknown’, while Angela worried about difficulties or challenges in the piece to be performed and feeling out of control during the performance. Only Liz mentioned worrying about her memory letting her down and this was only as she has become older. Grp1 had the most concerns, which may have been because they were performing regularly at the time of the discussions and could easily recall their concerns.

4.2.1.2. Causes and timing of ‘nerves’.

The causes of ‘nerves’ for Grp1 were clearly linked to conservatoire culture. The two classical violinists in particular, linked their ‘nerves’ to negativity coming from their teachers. Hannah thought ‘nerves’ was definitely connected to the ‘way you are taught’ which even led to negative responses to praise. Ross the jazz drummer reflected:

well I suppose everyone can relate to this cos we’ve already said the more you know the more you realise you actually don't know ...of the things that contributes to performance pressure in my case is just that feeling you know there's so much stuff that I don't know about...

In Grp2, all but Liz, who was not nervous as a child, attributed the main cause of their performance ‘nerves’ to ‘playing solo’ and bad performance experiences when
they were young. They also discussed performing on other instruments and whether
the piano itself has an influence on ‘nerves’ but the conclusion was there are
individual differences.

Grp1 also discussed the timing of their ‘nerves’, which was mainly before the
performance. The exception was Ross whose ‘nerves’ always arrived during the
performance. Laura said her ‘nerves’ could come at any time.

Despite not being clearly defined by anyone, the word ‘nerves’ seemed to be
mutually understood. Yet the manifestation, the perceived causes of ‘nerves’, and the
timing of ‘nerves’ before and during a performance were very personal experiences.

4.2.2. Focus group participants as performers: the teacher’s role

Content analysis showed that neither group had considered the role their own
teachers played in their performance preparation with any clarity.

4.2.2.1. Group1

In Grp1, there was a noticeable difference between the responses of the two
classically trained violinists (Laura and Hannah) and the three jazz musicians (Paul,
Ross and Adam) with regard to their teachers’ influence. Laura and Hannah spoke in
short outbursts and were quick to criticise their teachers. They felt their main
preparation for performance was through experience.

My teachers didn’t really do anything about that (.) it was more trial and error of
what worked and what hasn’t worked over the years (.) (Hannah)

Laura added that she had received some positive advice from her teachers but
overall the negative ‘stood out’. The three jazz musicians gave longer, more
considered contributions to the discussion. Their teachers had been more positive
and helpful. Both Paul and Adam credited their teachers for encouraging regular gigs
and improvising opportunities. Paul’s teacher gave him a positive attitude:

The main thing he gave to me was just the fact it’s not the end of the world you know
you screw up it doesn’t matter that much and people forget these things and even if
someone who is really important is in the audience if you have the opportunity to
play for them again … nine times out of ten you’ll play better next time.
Adam’s teacher had a good attitude to mistakes, and demonstrated for Adam how a ‘completely bum note’ could become an integral part of an improvisation. Advice from Ross’s teacher was implicit:

... before doing an undergraduate degree I only had one drum teacher for sort of over 10 years, from when I started and erm (.) we never kind of (.) we never that I can remember discussed any kind of specific techniques for performance and I don’t know if he even sort of said this is the way it works but his approach seemed to me if you just do huge amounts of practice you’ll probably be alright, which is kind of true? I suppose? ...

4.2.2.2. Group 2
At first, the consensus in Grp2 was that they had not had any specific advice about performing other than to just ‘do it’. Caroline summarised:

It was kind of sink or swim I’ll toss you in at the deep end make you do it and it will happen it will come in time that was the general approach erm to it (.)

The exception was Janet who had been given advice from three teachers:

... voice viola and piano..., and it was things like (said slowly) techniques for coping with the shakes or when the music blurs .. it was sort of little things like don’t rush the start, give yourself a moment (.) concentrate on the first two or three bars do make sure you are starting on the right notes and then and then go and that only takes what a second? and it makes all the difference in the world...

In response to Janet, Caroline then realised that there were ‘little things’ her teacher had possibly helped with:

...like you say about taking time at the start and erm performing to friendly people (.) So family members and friends getting them in to run things through lots of running things through on the day making sure you play the entire piece you are going to play on that day not over-practising...
In summary, a few participants in both groups had been given some help from their teachers regarding performance but this was in the main advice rather than purposeful teaching.

4.2.2.3. Dealing with ‘nerves’
When asked directly what strategies they had learned from their own teachers for performance participants in both groups felt they had not learned much. The impression was that they did not therefore have any strategies for performance. However, the discourse analysis showed that despite a lack of teaching, participants in both groups had developed coping strategies for themselves to deal with their ‘nerves’. Grp1 had more specific strategies for the day of the performance, which seemed to distract them from worrying about the performance. Adam liked to exercise, Laura knitted and avoided ‘manic practice’, Hannah did ‘anything but play the music’. Only Ross used a recognised technique, ‘mindfulness’, in his preparation, which he had discovered himself.

With the exception of Liz, who enjoyed performing and said she had no particular coping strategies, the rest of Grp2 either avoided performing or chose performance situations that would make them feel more comfortable; for example, accompany rather than play solo, (Angela, Caroline) or perform in a more informal setting such as a café ‘where no one is listening’ (Tony).

In both groups, at the performance itself, there was a sense of inevitability in their ‘nerves’ and for several participants the way to cope was acceptance; ‘nerves’ would inevitably go away either as the performance began or after the performance (Yvonne, Paul, Laura). Adam said sometimes he liked to socialise just before he went on stage and sometimes he liked to be quiet and play the piano.

4.2.2.4. Summary
Neither group had had much input from their teachers regarding psychological preparation for performance, like the professional musicians studied by Bellon, (2006), Partington (1995) and Talbot- Honeck & Orlick (1998). The help their own teachers had given was in the form of advice not structured teaching. Like the professionals in the aforementioned studies, the musicians in these focus groups had developed coping strategies for performance largely out of necessity or by chance. Coping strategies were very personal and individual. The students (Grp1)
had developed more coping strategies than the teachers (Grp2), which is perhaps because the students had been training to be performers for three years before embarking on the MMus course.

4.2.3. Focus group participants as teachers: the teacher’s role

4.2.3.1. Making performance enjoyable

Content analysis showed that Grp1, who had very little teaching experience, had less to say about their teaching strategies for performance than Grp2 who were very experienced. What Grp1 said they would pass on to their students was influenced by their experience, and was largely supposition. I had to prompt them during this part of the discussion. However, they instinctively understood the importance of regular performance opportunities, which would help pupils become comfortable with performance as shown in the following extract:

Adam  ...because I was doing that every week, every two weeks from the age of 14 through to 17 and it just made me a lot more comfortable in the environment and that's possibly the best way of (.) just exposing your students

Paul  Just making the performance a familiar thing

Adam  Rather than being a scary thing

Laura Hannah Yeah (said together)

With the exception of Liz, who enjoyed performance, Grp2 wished to make performance enjoyable and normal for their pupils because they did not have good experiences as performers themselves. Caroline explained:

...there's a certain amount of you don't want them to feel the way you felt ...I don't want it to be a huge deal to enjoy playing to other people... partly it's a reaction against what my experience was...

4.2.3.2. Provision of performance opportunities

Grp2 all provided performance opportunities for their pupils by entering them for examinations and, apart from Tony, they all organised pupil concerts. The group
seemed uncertain as to whether examinations were classed as performances. Janet thought that for very young ones,

...They've never taken a formal exam before quite possibly (.) certainly not an instrumental one, and it is a sort of performance taking an examination (.)

There was a long pause after this comment when I thought someone might agree that examinations also involved performing but there was no response, perhaps suggesting this was not a widespread view.

Paul and Adam (Grp1) both had experience of preparation for performance in exams through discussion with their teacher or mock situations. Although Laura and Ross had not had this experience they thought mock exams could be useful for pupils. Paul described his mock examinations:

... I know I was marked very generously by my tutors (.) obviously three weeks before they're not going to give you you're going to fail but there was always that constructive criticism you're in the mock examination so that it also gave me an opportunity to improve towards it almost gave me a kick up the arse to move forward and focus a little bit...

Interestingly he had not mentioned this as a way his teacher had helped him prepare for performance earlier in the discussion.

Grp2 distinguished between types of performance opportunity using the terms formal and informal. A formal performance might be a Festival or examination or a concert with an order of play and possibly have a paying audience (Angela). Informal concerts might be called a ‘musical afternoon’ (Janet). Angela, Janet and Liz had considered carefully how to make the informal first concerts a pleasant, ‘less scary’ experience. For example, Liz had thought about how ‘nerve- wracking’ it can be waiting to play when you are last in the concert, and made her concert seem like a game for her younger pupils.
we never have a programme written out we have a little bag with everybody's name in and we just do it that way so they don't know when they are going to play (.) because if it's all written out that makes it feel a little bit more intimidating...

She only used a prescribed order for older children. Janet had considered the performance environment carefully for her informal concerts. She felt that performing on a grand piano might be ‘terrifying’ for some pupils and the size of the venue could be intimidating. For her ‘musical afternoon’ she chose a small venue with an electric piano.

Angela had considered the suitability of formal and informal performance situations for her pupils according to age and ability:

...if I've got high fliers I do have a paying public concert for charity but eerr (.) but more recently I've wanted to involve the younger ones as well and the less experienced ones so I've made it a bit more informal, they also play in music festivals two or three festivals a year not that all of them do that ...

She also described how she helped pupils progress from informal to formal performances. First she took pupils to the Festival as an audience member, and then they would play at the next Festival. The Festival performance acted as a ‘stepping stone’ to the more ‘pressurised’ exam situation. Not all teachers agreed with this idea. Yvonne thought this was ‘risky’ taking a student to a Festival before they participated (implying it may put pupils off performing altogether) but Angela said it had the opposite effect. Caroline agreed that letting pupils see a performance before they do it themselves helps conquer ‘fear of the unknown’.

As the discussion progressed the teachers also mentioned other performance opportunities, for example at school assembly, in lessons, or to the pupil and/or parents in adjacent lesson. Unlike when they were young the teachers felt there were more performance opportunities nowadays for children. Angela also pointed out that performing is now part of the school music curriculum. When she was young she noted that you could get a music degree without doing any performing: ‘it's just unbelievable really.’
4.2.3.3. Practising the performance

Grp2 understood that performance needed practice. Liz and Angela discussed this as the best way to prepare for a performance:

Liz ...and sometimes I invite their parents in before an exam and things like that but do tell them that the best way of preparing is just practise playing in front of people and to actually get their parents to sit down and listen rather than just do it while they are making supper or whatever
YES agreement from several
Angela so often you get parents say oh I've not heard them play that when they are supposed to have been practising for weeks but yes playing to the person who comes next as well when they are about to do a performance and then swapping over and listening
Liz Yes I've done a bit of that too

Both Yvonne and Caroline mentioned recording their pupils' performances to use for feedback about the performance in lessons. Caroline was the only one to distinguish between practice and performance, and also to have clear reasons for practising the performance:

...even with you know for my young ones I try and do make sure the difference between performing and practising () so we always make sure we perform in a lesson at some point whether that's at the start ... and I find I have to do that otherwise they just constantly stop and start too much and they never really focus .. and I get them to talk about it afterwards as well to sort of evaluate how they've done...

Besides the provision of an audience in practice all the teachers, except Tony, discussed using role-play and mock examinations to simulate performance conditions in these practice performances:

...what I do to prepare them is just myself I sit back from them somewhere where they're not used to me being they are used to me sitting close to them and I sit further away and say I am listening from a distance and that I find makes them play completely differently I find... (Liz)
It was agreed that ‘play acting’ was a good idea, but there was no one particular role-play or mock performance idea common to the whole group.

4.2.3.4. Performance Routines

Besides role-play, Angela included a performance routine in her teaching leading up to a Festival or examination. She did not refer to what she taught as a routine but was quite specific about what she did in particular when preparing a pupil for a Music Festival:

...I do a lot of preparation for performance in controlling ‘nerves’, practising walking up to the stool (.), adjusting the stool (.) making sure the music is in the right place, put post-its on the music so they don’t suddenly have to find the right page...

Yvonne said she did this for examinations ‘especially for the prep test’ which is the first examination grade in the UK.

When I asked Grp1 if they would consider the teaching of performance routines to their pupils this notion was not well received:

**Hannah** I think putting the idea there would be a good thing I don’t think you could teach it it’s down to your personal (.)

**Laura** Personally for me if I did that every time before I played then if I didn’t do that I would convince myself I was gonna fail. so that's my problem with it (.)

**Ross** its a crutch that’s the problem my lucky socks or something (.)

**Adam** yeah

**Laura** I’d stay away from that frame of mind (.)

**Ross** and then suddenly thinking I didn’t do them I forgot them then I’d panic (.)

**Hannah** There’s little things I do like I won’t drink tea on the day like(.) I won’t put myself into a certain routine yeah I will practise in the morning and afternoon and work out when to leave for the concert.

The irony here is that Hannah almost describes a routine even though she says she does not want one. Later in the discussion she described that she always ‘moves the music stand’ just before she plays. In addition, all three jazz musicians describe quite
specific behaviours that they do on the day and immediately prior to performance, which was comparable to a pre-event routines (2.2.5.1).

4.2.3.5. Helping pupils to cope with ‘nerves’.

Discourse analysis showed that the main reasons to practise performing and to perform regularly was to help pupils cope with ‘nerves’. There were two theories:

Theory One  Performance practice replicates ‘nerves’ in practice
Theory Two  It is easier to cope with ‘nerves’ if you start performing when you are young

Grp2 valued the first theory, and as described in the content analysis used role-play to make the pupil more ‘nervous’.

Both groups expounded the second theory. In Grp1 Laura attributed the problems she had to her lack of performance experience when she was young. However, Hannah pointed out that she had started young and did not have any problems, whereas now she did have worries, which were about ‘being judged’. Ross added his observation that ‘nerves’ seem to develop in adolescence.

... it seems as well that in my experience erm ... if ever I have done any stuff with quite young children they don’t seem to have those ‘nerves’ they just seem to kind of want to do it maybe it’s perhaps ... becoming ... I dunno more body conscious or image conscious at a certain age maybe it's that...

Grp2 also discussed the idea that young children were not ‘nervous’. They thought encouraging young children to perform was helpful to prevent future ‘nerves’. For example:

I think if you can get them doing it when they’re young then its hopefully not going to be such an issue later on ... but also its knowing it’s good practice to do lots before they get to the stage of doing exams and competitions and things then hopefully they’ll be in the swing of it. (Caroline)
However, I noted an ‘ideological dilemma’ here because Grp2 implied in their discussion that youngsters had no ‘nerves’ yet they had given considerable thought to strategies that they believed would help combat ‘nerves’ and make performance ‘less scary’ for their young pupils.

4.2.3.6. Summary

It was evident that Grp1 did not have enough teaching experience, either before or during their course, to have firm views on strategies they would teach their students to prepare themselves for performance. In contrast Grp2 spent a considerable amount of discussion-time sharing stories of ideas they used with their students. They based their teaching of performance skills on experience, a variety of resources such as books, websites and magazines, as well as professional development courses run by EPTA. Only Angela mentioned that her teaching diploma has given her strategies. She also said she had learned a lot from listening to Festival adjudicators. Despite Grp2 having strategies to help their students for performance, their approaches were very different, and the two theories they held about the best ways to cope with ‘nerves’ were inconsistent.

4.2.4. Recognising the potential of sports psychology

4.2.4.1 Group One

Grp1 put up barriers to any comparison between their training and that of athletes. I knew that they had attended a workshop with a Performance Coach who used sport psychology techniques amongst others to enhance performance. I challenged the group about the relevance of this workshop and about the notion of performance enhancement. The initial reaction was to defend their negativity because they were in a conservatoire culture, which fostered self-deprecation and perfectionist tendencies, shown in the following extract:

Paul  As musicians the reason I think we go from the point of getting rid of ‘nerves’ is cos we are really self-deprecating. As musicians everyone who is a musician is convinced they are not as good as they are. Just that (.) I think that's where the (.)

Laura  (Interrupting) you think everyone is better than you every single day…
Hannah You walk into your lesson and the minute you play they criticise you so that you can be better. It seems

Laura (interrupting) you are always striving for better things every day and like

Ross Also you view anyone who doesn't think they're rubbish with great suspicion.

Everyone Yes Yes ...

The two classical musicians were noticeably more self-deprecating than the three jazz musicians. They could not seem to see a way to think positively or to critically evaluate themselves.

Hannah (interrupting) Whatever you are performing you think I could have done that better. That was terrible instead of thinking how could I do that better

Laura I've never come out of a performance and I thought that was great.

The jazz musicians however wanted to be more positive:

Adam ...I would rather someone said that's good but you could have done that better...

Paul that's right but I think you need to be able to say that was bad that was bad that was bad but

Ross Yes or this was good this was good this was good but these things

Laura the problem is the bad things come first with me.

(all talk at once)

When I suggested that they seemed to be in a competitive environment rather like an athlete, they refused to find similarities. The participants found as many differences as they could between themselves and athletes, which were:

- musicians experience a different type of anxiety to athletes
- there are no opponents in music
- for musicians the performance has a different purpose and is evaluated differently
- the training of a musician differs to that of an athlete
While discussing these differences both Paul and Laura pointed out that musicians seemed ‘alone’, judged and felt self-conscious when performing. Paul, who had chosen music over a career in rugby, said:

It was an excitement before a game you know we're gonna get involved (.) It didn't really matter if you lost because it was a collective - it was a team effort (.) on show individually I am much more conscious of myself (in music) and that I am putting my ideas on the line as opposed to just my body (.)

Laura noted in music you compete with yourself not an opponent and added:

... when you are on the stage on your own (.) people are looking at you performing (.) they are looking at you performing except when you are in an orchestra (.) when you are a soloist you (.) and I dunno I find that different personally.

The group became embroiled in comparisons between different types of athlete and musician to justify why sports psychology might not be appropriate, despite various members of the group mentioning diet, exercise and nutrition all considerations in the routines of athletes. Laura thought that the training of the musician was much more complicated than that of the athlete because athletes only have to concentrate on one thing, and musicians constantly have so much to learn. These comparisons between themselves and athletes prevented any reasoned discussion about the potential of sports psychology in their future teaching.

4.2.4.2. Group Two

Grp2 had not given sport psychology much thought shown by Yvonne’s opening remark ‘...I feel I don’t really know anything about this topic (nervous laughter) so I was hoping to learn(.)’. Unlike Grp1, they were open to the idea of sport psychology and the discussion followed a pattern of making connections between what they taught and the behaviour of athletes. Firstly they discussed the importance of warming up:

Tony One of the things I do with mine is to try and I’m trying to get them to be relaxed at the piano physically relaxed, the muscles get rid of any tension in the arms and back
and all the rest of it ... and try and tell them you're like an athlete doing your warm up stretch and exercise just working with finer muscles.

Others in the group discussed sporting metaphors they used. Yvonne said:

children can relate well to sport I think from what we said we use the metaphor of sport quite a lot ,you obviously do and I do ( mmm in agreement) I had no idea (.)

Using warm ups and yoga were discussed by Tony and Angela, who felt that not all pupils would engage with this, and that it might be difficult for the teacher:

Angela ...but I actually find that myself and pupils feel a bit embarassed about it somehow ( laughs) and yet I go to yoga and pilates myself so I can see the benefit of it really (.) but ...

Connections were made between how focused musicians and athletes have to be when performing. Angela suddenly made a connection. She recalled a grade 7 student who had not eaten the day before her exam and stayed up practising all night.

...I suppose it hadn't occurred to me to tell her that she needed to get enough sleep and to eat breakfast and things...I think there is a lot more to being just well prepared with the pieces and you're playing (.) it's all about preparing your body and your mind and like the sports people have to.

Gradually the group used more technical vocabulary that they associated with sport. Caroline spoke about the idea of mental rehearsal as a technique to help you not to over-prepare and not to 'peak too soon'. Janet joined in:

I've tried visualisation sometimes imagining yourself playing in that concert room erm yes successfully ( laughs)(.)
When I asked them if they had used any of these techniques or ideas with their own students, Caroline responded:

...I have not overly(...) I have not had a lot yet who have done big performances or big public performance but I do talk about it for exams and I find a simple way...

The implication seemed to be that psychological preparation is more relevant for advanced standard pupils playing at a formal occasion rather than for all pupils.

As the discussion developed Caroline made the most connections between psychological preparation for sport and music, which I have included in full:

Caroline I do think there is a lot of crossover probably we don't just even think about it but just things like your practising routine and you are doing your scales and you're doing your practice through the week and the routine of the lessons that's like your training and  
(Janet that's right)  
Caroline you build up to a competition like a big sporting event erm ...my teachers would say to me two weeks out before ... you've got to have your programme sorted ... then you are just going over and over it and practising your performing side of things rather than try to learn notes at this stage(...) You've got to have that time to be confident so its' kind of getting yourself into peak physical condition and then get doing your run through and doing your final things getting enough sleep in the run up to it making sure you are eating properly you're not doing too much on the day of performance and so you are mentally focused and prepared so you are psyching yourself up for it ... and I'm sure although it's not written down anywhere it is the same kind of stuff that sports people have to go through before they get a big race

Caroline described her teachers’ advice about performance here yet she did not explicitly recognise and acknowledge this as such earlier in the conversation, showing again that the teachers had not thought about their teaching in relation to performance in any great depth before.

4.2.4.3. Summary

Grp1 participants were almost hostile to the idea of using ideas from sport for themselves because they could not see a connection between athletes and sport and
themselves. This restricted the discussion. Grp2 were more enthusiastic to talk about the connections they had already made with sport and they were interested to think through how sport psychology might help. However, their understanding of sport psychology was limited.

4.3. Discussion

4.3.1. Simple answers

These focus group discussions provided simple answers to my three research questions:

**RQ2** Do instrumental teachers use mental strategies themselves to prepare psychologically for performance, and what role did their own teacher play in helping them develop these strategies?

**Answer:** The participants in both groups had hardly developed any constructive strategies for performance. Their teachers seemed to give little help, which came in the form of advice. What coping strategies these participants had developed were out of necessity in order to cope with ‘nerves’.

**RQ3** Do instrumental teachers teach mental strategies to their pupils to prepare them psychologically for performance?

**Answer:** This was different for the two groups. Grp1 had little or no teaching experience and had not developed their ideas about helping pupils in the future with performance. Grp2 valued regular performance opportunity and performance practice. Three used role-play and two taught performance routines, although they did not use those terms. There was no consistent agreement about why they should use these strategies other than to help pupils cope with ‘nerves’ by replicating ‘nerves’ in practice.

**RQ4** Can instrumental teachers see a potential for using sports psychology in their teaching?
**Answer:** The answer was different for the two groups, although neither group knew much about sport psychology. Grp1 was actively resistant to comparisons with athletes, whereas Grp2 was interested and open to learning more about sport psychology. They realised that they had already made some connections between sport and music in their own teaching, but their ideas had not been clearly articulated before.

The simple answers show that this sample of trainee and experienced teachers had no real understanding of performance psychology. In Grp1 apart from Adam, whose mother was a psychotherapist, there was a complete lack of knowledge about basic physiological responses to pressure. This lack of knowledge was also shown through examples where participants described strategies they were given, or strategies they taught, which were not recognised as psychological techniques. Previous research has shown that professional musicians are also not familiar with sports psychology terms but use sports psychology principles without really being aware of it (Bellon, 2006; Talbot-Honeck, 1994; Kamin, Richards & Collins, 2007). Like participants in the studies aforementioned, these participants had trouble talking about performance preparation because they seemed not used to verbalising their mental processes (1.1.4). Furthermore the language they used did not permit them to explore performance preparation in any depth. This was one of several barriers to the notion of performance training, which I discuss.

### 4.3.2. Barriers to performance training

#### 4.3.2.1. Lacking a common language

The ‘interpretative repertoire’ of ‘nerves’ noticeably limited participants’ use of language and therefore their thinking about performance, which acted as a barrier to considering the idea of sport psychology and performance enhancement. At the time of the discussions I was aware that at times the participants and I were talking at crossed purposes, but I was not sure why. During the discursive analysis I came to realise that I was unwittingly imposing the idea of performance enhancement into a well-established ‘nerves’ framework. Despite talking about personal experiences of ‘nerves’ and coping with ‘nerves’ as if they were the same for everyone, it was evident that participants were not describing commonalities.
It was noticeable that the two groups operated in a different way when discussing their relationship with performance. The student group (Grp1) was noticeably more guarded when talking about their own performance experiences than the teachers. It was difficult to judge whether this was because of the competitive nature of the conservatoire, or because they did not know each other very well. I felt they might not be used to talking about performance and therefore may have been reluctant to share in case it showed them to be weak. Hays (2002) noted that performing artists in general do not want to admit to any kind of vulnerability.

4.3.2.2. Teacher education

Lack of consistent teacher training, both inside the conservatoire and out, was discussed in 1.1.2. This undoubtedly contributed to the lack of knowledge about performance psychology in both groups. The fact that Grp2 did not know much about performance psychology might suggest a lack of training but two teachers indicated in the discussion that they attended music college or university. However, like me, they were trained teachers, not trained piano teachers.

What the group had in common was an interest in professional development to further their education. This training through professional development showed in the way that Grp2 were able to share ideas about teaching and discuss problems more freely. When I compared the student group responses they were reluctant to share. Some group members gave long detailed individual contributions, and others very short interjections. In a study of UK piano teachers Cathcart (2013) found that, with experience and professional development, teachers develop in their use of resources, and develop a ‘more holistic approach to teaching and learning…’ (p. 365). This probably explains why Grp2 was open to new ideas, and therefore was interested in discussing sport psychology.

Grp1 were studying on a new course entitled ‘Performance and Pedagogy’. Given this fact, and the fact that ‘it is not unusual for music students at an undergraduate level to be involved in teaching and/or aspire to teach’ (Simones, 2017, p. 253), it was surprising that they had not given much thought to their own teaching. I also thought they might have thought more about teaching performance skills, because I knew they had attended an introductory course given by a
Performance Coach (whose work is the subject of my research; see Chapter 5) using sport psychology principles. There seemed to be underlying aspects of the culture connected to identity that might explain this.

4.3.2.3. Issues of Identity

Previous research has highlighted that conservatoire culture values performers and performance rather than teachers and teaching (Bennett, 2008, Burt-Perkins, 2008). The UK conservatoire where Grp1 took place was beginning to value sound pedagogical training by the introduction of the new course at their conservatoire, at that time the first course of its kind to include Pedagogy in its title in the UK. However, the students in Grp1 had only just started the course and showed in their discussion that they identified themselves as ‘performers’ under a variety of pressures from conservatoire culture: a culture that included self-deprecation, elements of perfectionism, and competition.

This replicates the findings of Burt-Perkins (2008), who shows that very few students identify themselves with teaching, even though teaching is likely to form part of a portfolio career for most. Teacher identity comes often ‘as a result of not gaining a career as a performer or through a less dramatic maturing process.’ (Huhtanen, 2008, p. 1). Becoming a piano teacher for some is a ‘painful’ process and it is seen as a failure rather than a valued career path (Huhtanen, 2004). Similarly, Weller (2008) describes teaching as a ‘distant third career choice’ (p. 150) after a solo career, and a second ‘fall back option’ after an orchestral or chamber career. It seemed that this cultural identity was prevalent at this conservatoire, at least for this group of students, and would explain their apparent lack of interest in performance psychology for their pupils.

Besides identifying themselves as performers the students in Grp1 also identified themselves within the genre of music they performed. In the group discussion the classical musicians’ obsession with accuracy and perfection compared to the jazz players ‘sense of exploration and freedom’ was apparent (see Dobson, 2010, p. 42). In addition there seemed to be a difference in the way the two sub groups spoke about their teachers. Although the teachers of all the Grp1 participants only gave advice regarding performance, the violin teachers seemed more critical, negative and demanding about their students’ playing, whereas the jazz teachers seemed more accepting and encouraging. In two cases the jazz
teachers had given their students permission to fail. Reasons for these differences in
teacher attitude are not clear in this study, and the differences may only be specific
to these particular teachers. If these differences are real then it may be that teachers
of classical music may be harder to convince of the value of performance psychology
than their seemingly more relaxed jazz colleagues.

Grp2, the experienced teachers of recreational pupils, who had met at
professional development courses, were more interested and open to the idea of
using ideas from sport than the student group. Although all but one of these teachers
did not enjoy solo performance themselves, they had not chosen to teach because
they were ‘failed’ performers. They had a strong teacher identity. It is likely that a
‘love of music’ was the motivating force, as found by Cathcart (2013). It was easy to
see that with more education that Grp2 teachers could be persuaded that the
deliberate teaching of performance skills was appropriate.

4.4. General summary

This study gave simple answers to my questions that I had expected to find based on
the evidence in the literature and my own experience. Student and experienced
teachers had a ‘haphazard’ approach to their own psychological preparation like
students interviewed by Clark (2010, p. 98), and they did not directly teach
performance strategies to their students. These findings explain why professional
musicians in the studies of Bellon (2006), Partington (1995) and Talbot Honeck &
Orlick (1998) do not give credit to their teachers for helping them develop
psychological skills. Put simply, instrumental teachers have no training in
performance psychology.

Grp1 discussion about the potential of PST from sport offered insights into
cultural barriers to the acceptance of systematic performance training in the
conservatoire. Grp2 teachers however were open to new ideas and they seemed to
have developed some teaching strategies based on instinct and experience. In some
cases they were using strategies that had a name in sport psychology. However, the
‘nerves’ discourse limited their language and conceptual framework. Like the
findings of Talbot- Honeck (1994) it was not usual to discuss performance and
mental processes (1.1.4).
Having chosen these two groups as the most likely to have some understanding about performance psychology (see 3.3.2), it is possible that these findings could be generalizable to other instrumental teachers. Recent research confirms that musicians in general are ignorant of performance psychology (Pecen et al., 2016). It is perhaps surprising when performance is such an important part of musical life, inside and outside the conservatoire, that performance training is not properly considered.

4.5. Limitations of focus group discussion

There were general limitations to this study in common with all interview studies. The researcher using this method is relying on accurate recollection of previous experience. Just because the participants did not credit their teachers with any input does not necessarily mean that they did not receive more input or advice on performance than was discussed. It may be because this teaching came across as advice rather than purposeful teaching that participants found it difficult to recall where the advice on performance had come from. For example, Paul pointed out advice given to him by his mother as well as his teacher. Looking back it might be hard to recall who was most influential. Caroline at first did not think her teachers had helped her, but later in the discussion pointed out ways she had been helped. The participants were not used to discussing these issues. Longer discussions or more in depth interviewing might show that teachers did give more advice and help to their students than was recognised in this study.

Only two small groups were interviewed for one hour and these groups were not necessarily representative of all piano teachers and all conservatoire students. The student group was particularly keen to talk about ‘nerves’ and performance problems. It was possible that the student group volunteered because they had performance problems that they thought I had come to solve. A different group operating on a different premise may not have shared their views.

Whilst the members of each group were acquainted with one another there was a noticeable difference in the group dynamics between the students and the teachers. The students were not as forthcoming in their dialogue as the teacher group, who knew each other well and were used to the sharing of ideas in their usual meetings. I rarely had to prompt them. The student group did not interact well
at first. Initially I made sure everyone had a chance to speak through prompting. The violinists had less to say than the jazz musicians and were also the most negative. At the end of the hour I felt they were starting to relax and communicate better with one another. The discussion ended almost at the point where it was beginning to become interesting. A longer discussion with Grp1 may have shown changes in opinions and attitudes. Longer discussions with both groups may have revealed other insights.

Because of my own interest and particular knowledge about pianists and teaching the piano I wanted to study this group of musicians. However, the two pianists taking the course in Performance and Pedagogy were not available on the day arranged for the discussion. Had I interviewed only pianists the findings may have differed.

Despite these limitations the method was advantageous in several ways. Group discussion allowed the members of the two groups a degree of freedom in discussing performance that they may not have had in individual interviews. Using group discussion clearly highlighted the shared cultural frame of reference. The interpretative repertoire of ‘nerves’ may have been apparent in individual interviews but group discussion showed how the participants understood one other through this framework. Another advantage of focus groups was that it was possible to make group comparisons.

**4.6. Conclusion**

The findings in this study raise questions about the training of both musicians and their instrumental teachers in the UK. If performance psychology is to become part of teacher training there is a considerable amount of education to be done to change the limited and somewhat flawed conceptual framework of ‘nerves’ to the more positive notion of performance training. The discourse perpetuates the myth that ‘nerves’ are inevitable, and that the performance will be a success if the performer can get rid of or cope with ‘nerves’.

The experiences of ‘nerves’ and the strategies they used to cope with ‘nerves’ were very individual. This is similar to the qualitative findings from the PST programme studies discussed in 2.3., and also in the findings of Williamson et al.,
(2014) in a study of virtual training (see 2.2.6.2). The pedagogical implication of these differences is that teaching mental strategies to improve psychological skills might be better taught individually.

In the next phase of my research I aimed to show that using one-to-one PST could be the best way to deliver performance training, and that PST as an approach, could be a way to change perceptions and provide direction in performance training for both specialist and recreational pianists. The next chapter presents the findings from the first of two studies: an investigation into the potential of PST from sport delivered by an expert performance coach (PC) in a UK conservatoire. Grp1 were students at the same conservatoire. They had experience of an introductory course on performance coaching delivered by the PC as part of their training, yet were not convinced about sport psychology. This made me curious to discover more about the work of the PC and how she managed in a potentially hostile environment.
Phase 2 Study 1

Exploring the potential of individual psychological skills training in a UK conservatoire: performance coaching in practice
5 Performance coaching in practice

The potential of individual psychological skills training (PST) is investigated in this chapter through an examination of the work of the Performance Coach (PC), introduced in Chapter 1.1.5.1. Through interviews with the PC and seven of her former pianist clients, PST is observed from both coach and client perspective. The interviews revealed why clients might need coaching, what strategies were used, and how coaching worked in practice.

This investigation builds upon the Focus Group Study (Chapter 4) by showing that not all conservatoire students are as skeptical about performance training based on sport psychology as the students who comprised Focus Grp1. However, similar cultural barriers are shown to exist in both studies. The Focus Group Study also showed that instrumental teachers of those studying at a conservatoire (Grp1) are not involved in performance preparation in the same way a coach might be with an athlete. This study builds on this finding by demonstrating that teachers can play a role in PST in specialist music education.

Little is known about the potential of using a specialist PC consultant working in higher music education to enhance performance, because such specialists are hard to find. In sport specialist practitioners have existed since the 1980s, when professional athletes were allowed to compete in the Olympic Games for the first time alongside amateurs. This raised the stakes; an understanding of what it takes to be a winner psychologically became of great interest for researchers and practitioners (Vealey, 2006). The joining together of research and practice in the founding of the Association for the Advancement of Applied Sports Psychology (AAASP) in 1986, a branch within the American Psychological Association, led to a shift from a ‘clinical model of correcting problems within a remedial model’ to a focus on ‘education, teaching skills, and personal growth and development’ (Vealey, 2006, p 144). This has not yet happened in the world of music, but the work of the PC in this study shows that such a change is possible.

Studying the practice of the PC adds to research about PST for elite musicians and addresses several research gaps. Previous studies in specialist higher music education settings have investigated the use of PST as interventions where all participants undertook the same programmes (2.3). Studying PST tailored to the
individual delivered by a member of staff at a UK conservatoire at the time I conducted the research was a new departure. Most recently Hatfield (2016) and Osborne et al., (2014) tailored the training to the individual but PST is still introduced as an intervention administered by the researcher in consultation with a sport psychologist, rather than as part of the students’ regular training programme. In this study the benefits of the work of a PC using individual PST and working as part of a team within a conservatoire is evident.

5.1. Aims of the study

There were two aims in this study. The first was to further knowledge about the use and development of psychological skills development for musicians, and the second was to demonstrate the potential of one-to-one specialist performance training in a conservatoire setting. My questions were:

RQ5 How can one-to-one psychological skills training benefit conservatoire students?

RQ6 How can psychological skills training work when implemented individually by an expert performance coach?

The PC and each client were interviewed for an hour or more using a topic guide (Appendix 3C). Recruitment of the participants is discussed in 3.3.3. Data collection and analysis are discussed in detail in 3.3.4. In the next section background information regarding conservatoire training and performance coaching is presented.

5.2. Background

5.2.1. Conservatoire training

Performing and preparing for performance is the essence of specialist music education. There are currently eleven conservatoires in the UK offering:
education and training in the performing arts to talented students from all over the world in the disciplines of music, acting and dance, as well as theatre and screen production. (Conservatoires UK, 2018).

The ability of conservatoire music students to perform to their potential in high-pressure situations such as auditions, recitals and examinations is crucial. However, the backbone of conservatoire training is the one-to-one instrumental lesson, which does not include specific performance training (Ford, 2013). More commonly specialist employees in conservatories are trained in Alexander Technique or counselling and use a medical model of treating problems. According to Pecen et al., (2016), who writes about the potential of sport psychologists, and other specialists to work with elite musicians, ‘performance psychology as it is used in sport for the purposes of performance optimization is not widely known to musicians’ (p. 31).

At the time of the interviews, the PC and her ways of working in a conservatoire were unique in the UK. She had been a professional musician in a leading UK orchestra and following her retirement from the orchestra she educated herself and established her own coaching consultancy. Other conservatories at that time were beginning to take an interest in sport psychology but employed visiting practitioners who were sport psychologists, not a trained musician turned performance consultant like this PC employed as a regular member of staff.

5.2.2. The Performance Coaching model

Performance Coaching, referred to as Executive Coaching in the business world, has its origins in sport with the ‘Inner Game’ approach promoted by Gallwey (1986). Whitmore (2009), who took these ideas into business and management, is credited with coining the term performance coaching, to differentiate it from coaching sports (Wilson, 2014, p. 6). Confusion can arise in terminology. In the field of Applied Sports Psychology there is a range of accredited practitioners who call themselves sports psychologists and others who call themselves performance coaches. However, not all practitioners using these titles are accredited, and the term performance coach in both music and sport can refer to the highest level of teacher or instructor.
The PC’s role in this conservatoire was like that of an accredited sport psychology practitioner, who might work with individual athletes or who might work as part of a multidisciplinary team of professionals within one or more sports (American Psychological Association, Division 47, 2018). The team may include a dietician, manager, physiotherapist and sports and exercise physician, who concentrate on the development of mental skills for performance at the highest level. At this conservatoire the coach was a member of the support staff for ‘Health and Well Being’, and she worked as part of a team with the student and their instrumental teacher as well as other professionals.

The aim of Performance Coaching in all performance domains from sport to business is ‘unlocking people’s potential to maximise their own performance’ (Whitmore, 2009, p.10). The guiding principle is not instruction but ‘self directed learning’ (Wilson, 2014, p. 8). Some of the techniques used by coaches, such as reframing or cognitive restructuring, are also used in counselling and psychotherapy. However, the aim in coaching is not to treat individuals who are in some way dysfunctional but to enhance the performance of individuals who are already successful. Like therapy and counselling, confidentiality in coaching is paramount. But unlike therapy and counselling the aim is to focus on ‘strengths and solutions [...] The interaction between coach and client is geared more toward facilitating growth than treating illness’ (Hays & Brown, 2004, p. 333). In her interview the PC summarised this role:

Well I think coaching first of all .(.) I don’t get people to do very much I see if I can get people to help themselves .(.) so that basically I’m redundant in the end .(.)

5.3. Findings and Discussion

5.3.1. The journey into performance coaching

At present there is no specific career path for anyone aspiring to be a PC from within the music world. The PC had worked as a professional musician for 33 years in a UK leading orchestra, and through a lifelong passion for sport she became interested in
sports psychology and the model of performance enhancement for herself as a performer. She said,

during my life as a professional musician just working day in day out at a high level allied with my interest in sport (.) I just became interested in what else one can do to give you the edge (.) if you like in terms of performing so that it leads to happy performer (.) and more consistent performances...

Anxiety was not a word she used. She said:

my kicking off point was (.) mm (.) what do I do with those doubts that I had (.) or what do I do if I feel less comfortable ... (.) I didn’t identify with this concept of going to talk to somebody about performance anxiety...

She noticed that the conversations in sport were more open about performance than in music and that it was usual to have access to resources from a team of specialists for high-level performers. This was almost non-existent in the world of the professional orchestra. She could see:

that was a gap (.) so I was interested to see who I could go and talk to (.) about getting mentally tougher (.) than I was (.) and I couldn’t find anybody (.) I could find plenty of counsellors I could find psychotherapists who I could and talk to about my problems (.) I couldn’t find anybody that could talk about performance enhancement ... so there began my journey ...

The PC discussed her ideas with her orchestral colleagues, who found them interesting and applicable.

There was no conventional path to follow to train herself as a PC in music. On the advice of a sport psychologist she took an A level in Psychology followed by an Open University degree in Psychology, whilst still a member of the orchestra. Her journey was not pre-planned:
...just about four years ago now (...) to stop playing and just see whether I should take a big leap (...) and I did do and what’s happened is the whole thing has just ballooned from there ... it certainly wasn’t a career path that I set out to establish (...) absolutely not (...) so I’ve fallen into it through a personal interest and then it’s just gone on from there...

Her education continued through attending any relevant courses and conferences:

so I’m a bit like a magpie (...) erm because there’s no preordained route (...) I think what’s a gap in my understanding here (...) what could I strengthen (...) so I look around to see what I can find (...)

She was a member of a variety of professional associations including the British Association of Performing Arts Medicine (BAPAM), the British Psychological Society (BPS), the British Association of Sports and Exercise Science (BASES) and the British Association of Behavioural and Cognitive Psychotherapies (BABCP). As a trained practitioner she had a supervisor ‘...from the world of psychology not music (...) who also I see at least once a month and he (...) advises and guides and shapes as well’ (see Van Raalte & Andersen, 2000).

5.3.2. Introducing the clients

Seven former pianist clients of the PC volunteered for the study. They were recruited via email through her client database (3.3.2). Pianists were specifically requested as the rest of my research was to focus on this group of musicians. Background details for the clients are shown in Table 5.1. The clients are referred to by pseudonyms.

Three male and four female pianists volunteered. Two of the male pianists were jazz trained and the rest were classically trained. At the time of the interviews, Richard and Val were mature students over the age of 50 years. The other clients were aged between 20 and 30 years. Sophie, Sasha and Annette had come to the conservatoire from overseas. The rest of the clients were educated in the UK. Andrew and Val had already left the conservatoire at the time of the interview.
<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Training and degree level</th>
<th>Previous education</th>
<th>Ambition</th>
<th>Performance Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophie</td>
<td>Female</td>
<td>Classical Undergraduate Final Year</td>
<td>Non specialist music education</td>
<td>To perform</td>
<td>Regular performance opportunities at school</td>
</tr>
<tr>
<td>Sasha</td>
<td>Female</td>
<td>Classical Postgraduate Doctoral Programme</td>
<td>Specialist music education in Europe</td>
<td>To perform</td>
<td>Frequent performance opportunities until attending specialist academy for 4 years.</td>
</tr>
<tr>
<td>Annette</td>
<td>Female</td>
<td>Classical Postgraduate Masters programme</td>
<td>Specialist music education In Europe</td>
<td>To perform</td>
<td>Performing opportunities frequent to the age of 12. No piano performance from 13 -16 years.</td>
</tr>
<tr>
<td>Edward</td>
<td>Male</td>
<td>Jazz Undergraduate</td>
<td>Non specialist music education</td>
<td>To perform</td>
<td>Frequent performance opportunities at school</td>
</tr>
<tr>
<td>Andrew</td>
<td>Male</td>
<td>Jazz undergraduate</td>
<td>Non specialist music education</td>
<td>To perform</td>
<td>Frequent jazz performances Avoided larger venues.</td>
</tr>
<tr>
<td>Richard</td>
<td>Male</td>
<td>Classical Undergraduate</td>
<td>Non specialist music education</td>
<td>To improve playing</td>
<td>Performed in an occasional Music Festival. Took exams.</td>
</tr>
<tr>
<td>Val</td>
<td>Female</td>
<td>Classical Personal Study Programme</td>
<td>Non specialist music education</td>
<td>To improve teaching</td>
<td>Performed in an occasional Music Festival. Took exams.</td>
</tr>
</tbody>
</table>
There was a difference in ambition between the two mature students and the rest of the clients. Like most students, who enter a conservatoire the main aim of the majority of the clients was to become a professional musician. Richard and Val wanted to improve their playing, and Val felt this would help her to become a better piano teacher.

Sophie, Sasha and Annette, classical pianists from overseas, and Edward, a jazz pianist from the UK, had only positive things to say about their performance experience and preparation prior to specialist higher music education. Factors they mentioned contributing to their success as performers were:-

- Frequent performance opportunities
- Frequent performance practice
- Solid music practice
- Support from teacher and parents
- Feeling in control of the performance

Only Andrew out of the five younger clients spoke about performance concerns in his early years. Andrew, a male jazz pianist, loved performing in general but he had a particular concern about performing at ‘big concerts’. He was so worried he felt sick. His parents were very supportive and arranged for a hypnotherapist, which he said worked at the time. He said his concerns improved as he did more concerts.

All the clients’ stories were different but the younger clients who were aiming to be professional performers seemed to have been given early positive performance experiences through the support of their teachers and parents. What came across was a love of music and performing. Sasha and Annette credited their teacher and parents for indirectly ‘doing the psychology’ for them by being ‘positive and calm’ (Sasha).

The mature students loved playing but were not as positive about performance. They had both mainly performed in examinations rather than concerts prior to the conservatoire, which seemed to affect their desire to perform in public. Their teachers did not specifically teach any strategies for the performance other than to ensure the music was thoroughly prepared and memorised. Val had a very
encouraging teacher but not very supportive parents. Richard disliked his first teacher and gave up lessons for a long time when he was a teenager. His second teacher, however, had written a book on performance anxiety and discussed strategies such as visualisation and mental rehearsal (Elliott, 1992).

These findings replicate those from the Focus Group Study (4.3) and the literature (1.1.4) that instrumental teachers are not deliberately teaching performance skills. Both teachers and parents of the younger clients were given credit in arranging regular performance opportunities, and giving encouragement and support for practice. This also replicates the findings of MacNamara and Collins (2009), who studied young musicians’ development leading to specialist music education, (1.1.4), and found that some teachers create good development environments, but are mostly concerned with teaching music. Prior to entry into specialist music higher education, the main performance strategy that aided confidence and control for the clients in my study was practice, perpetuating the myth that practice is the best form of preparation. However, at the next stage in these musicians’ lives, on leaving school to attend higher music education, practice alone was not sufficient to sustain their development (see 5.3.3.2).

5.3.3. Performance coaching in practice

5.3.3.1. Referral – the coach perspective

The PC felt that the majority of her clients found her by ‘word of mouth’ although she mentioned a variety of ways that students might come across her work. At the conservatoire she organised introductory courses and taster sessions. Information about coaching was also displayed on a board at the conservatoire and there were links to the PCs website there and online. She emphasised that the ‘real’ work was done in one-to-one sessions. She said she did not like to work in a ‘one-off way’ because clients benefitted by attending several sessions. She summarised the variety:
The reasons the coach gave for clients to seek her help were also varied. She said 'Yeah could be all sorts of things (.) stuff going on in life (.)'. She noted that there could be particular problems for overseas as well as UK students because they were not used to organizing their musical lives:

there's a cultural difference quite often (.)... yes I think there's been this transition hasn't there from a life for some of them where it has been very organised for them (.) then they've got this freedom to choose what to do (.) not surprising some of them go off the rails(,) then they come back on

She also said that some students were referred to her because they thought they had an anxiety problem. In many of these cases the problem was practice, and the student did not understand how much practice was needed to achieve the highest standard. The PC said she kept a 'magic wand' in her bag, which she might throw across the room to demonstrate there was no 'magic cure':

no magic wand (,) shame isn't it (laughing) (,) then I've got their attention and the realization that they've got to go and practise (,) and if they're not practicing then I need to help that (.)

The PC said most students were referred to her for help about performance. Her role in helping clients with practice and their musical lives in general was incidental to this.

5.3.3.2. Referral – the client perspective

Table 5.2 shows the routes to and reasons for referral for the clients in this study.
The clients’ routes to and reasons for referral were as varied as the coach had suggested.

Table 5.2. Client routes to referral and reasons to seek help.

<table>
<thead>
<tr>
<th>Name</th>
<th>Route to referral</th>
<th>Reason for referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophie</td>
<td>Introductory course</td>
<td>Self doubt about preparation and practice</td>
</tr>
<tr>
<td>Sasha</td>
<td>Teacher referral</td>
<td>Self doubt about ability as performer, and musical life in general</td>
</tr>
<tr>
<td>Annette</td>
<td>Teacher referral</td>
<td>On stage problem</td>
</tr>
<tr>
<td>Edward</td>
<td>Recommendation</td>
<td>Overuse injury</td>
</tr>
<tr>
<td>Andrew</td>
<td>Advertisement</td>
<td>Feeling insecure and overwhelmed in conservatoire environment</td>
</tr>
<tr>
<td>Richard</td>
<td>Teacher referral</td>
<td>Performance anxiety</td>
</tr>
<tr>
<td>Val</td>
<td>Introductory course</td>
<td>Problem with teacher</td>
</tr>
</tbody>
</table>

The clients confirmed what the PC said about students needing help with other aspects of conservatoire life besides performance. These were:

- Insecurities relating to peers and musical life in general;
- Management of injury;
- Relationships with teachers.

On arrival at the conservatoire two clients had not anticipated the pressures of this new competitive world. Sophie, an undergraduate from overseas, said she doubted her own preparation and practice strategies when she felt ‘hit in the face’ by meeting people ‘who are as good if not better than you’. She also had a knock back from her teacher, who told her she did not ‘really have much of a technique’. She described the sudden change in practice culture and expectations:
... you’ve only been doing maybe an hour and a half while dad was watching telly (.) and then suddenly you’re supposed to be in a room on your own to practise (.) What to practise, and for how long that can be a bit daunting.

Similarly Andrew, a jazz pianist, sought help in his second year because:

... I was very depressed and insecure about a lot of things and I think a lot of that was part of growing up (.) erm and being at music college where there’s quite a lot of pressure I guess to be good...

In contrast, the other jazz pianist Edward, was extremely secure. He was so enthusiastic about being at the conservatoire he joined in everything and sustained an overuse injury early in the first term.

... the Summer before I started college I was just at home and I didn’t really do much playing and then I started and I was playing 6/7 hours a day ... I had a diary full of all these exciting things ... I didn’t want to slack anything off, so I basically played through it until the end of term and I think it really ground itself in then ... I really overdid it.

The two postgraduate clients developed performance concerns at specialist academies they attended in their home countries before attending the UK conservatoire. In both cases they attributed lack of performance opportunity, as well as negative comments from their teachers to their self doubt (Sasha) and onstage concerns (Annette). These issues had continued when they started their studies at the UK conservatoire.

The mature students, Richard and Val, talked about the pressures they felt because of the high standards that were expected and the expectation of playing from memory. The hours of work required were much more than they first realised. Richard felt he had a performance anxiety problem. Val experienced a problem with her teacher. She was reluctant to seek help at first because she felt it was difficult to criticise a teacher in the conservatoire environment, and she felt lucky to be there.

What these stories all had in common was that their performance concerns appeared to begin in transition to specialist higher music education. A similar
variety of problems for students in transition to higher education have been
highlighted in a number of studies from school to conservatoire (Burt & Mills, 2006;
Juuti and Littelton (2012) or university (Burland & Pitts, 2007) and also from higher
education into a professional career in music (Creech, Papageorgi & Duffy, 2008).
MacNamara, Holmes and Collins (2008) noted that musicians who successfully
negotiate key transitions, one of which is from school to conservatoire, are the ones
who develop the relevant coping strategies or Psychological Characteristics of
Development Excellence (PCDEs). Rather than having to struggle to negotiate
problems in transition themselves, with possibly devastating consequences, in this
UK conservatoire the PC was someone who could help clients address transition
issues. She could help her clients develop suitable coping strategies and PCDEs for
their future. How she did this is examined in the following section.

5.3.4. Techniques

5.3.4.1. The ‘tools in the kit’
The PC discussed and described mental strategies researched in Applied Sports
Psychology (Weinberg & Gould, 2015) and reviewed in Chapter 2, as well as
‘cognitive reframing’ or restructuring. She also educated clients about their
physiological symptoms of arousal. She emphasised that her approach was adapted
to each individual.

....there’s quite an art to coaching... someone sitting across from you is a person first
and foremost (,) and what they do is play the violin or piano (,) so you have to be
alert I think to being flexible (,) and drawing on these different tools in the kit (.)

All the techniques I discussed with the coach were confirmed in the client interviews
and are listed in Table 5.3. Val is not listed because she went to the coach about a
problem with her teacher, therefore PST techniques were not directly applicable to
this problem. Val had not worked with the PC individually but she had attended an
introductory group workshop. This helped her to form opinions about the coaching,
which were expressed in her interview.
Table 5.3. The ‘tools in the kit’

<table>
<thead>
<tr>
<th>Mental Strategy/ Technique</th>
<th>Clients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagery</td>
<td>Sasha, Annette</td>
</tr>
<tr>
<td>Positive Self Talk</td>
<td>Sophie, Sasha</td>
</tr>
<tr>
<td>Cognitive Reframing</td>
<td>Annette, Edward, Andrew, Richard</td>
</tr>
<tr>
<td>Education regarding own ‘nerves’</td>
<td>Sophie, Sasha, Annette, Andrew</td>
</tr>
<tr>
<td>Goal-setting</td>
<td>Sophie</td>
</tr>
<tr>
<td>Pre-performance routine</td>
<td>Sophie, Sasha, Annette, Andrew</td>
</tr>
<tr>
<td>Simulation Training</td>
<td>Sophie, Sasha, Annette</td>
</tr>
</tbody>
</table>

The skill set used by each client was tailored to the individual. How the coaching worked and the perceived benefits of a particular strategy varied from one individual to another, which I examine in the following.

5.3.4.2. Imagery and positive self talk

On the topic of imagery the coach said:

> We also do a lot of imagery work (.) mental imagery visualization mental rehearsal (.) call it what you will using all the senses that we can (.)

She did not give any specific examples or say why imagery might help, and I did not ask her to expand on this. Only two clients discussed imagery. Sasha explained that she used mental rehearsal of the music before she went on stage as part of her routine, and this was part of helping her achieve her ideal performance state. Annette imagined herself on stage in practice. She thought this helped her to keep going no matter what happened.

These two examples demonstrate the use of images for motivational functions (Motivational General Arousal MGA, and Motivational General Mastery MGM, see 2.2.1.3). Sasha’s MGA imagery seemed to control arousal and her emotional state, and Annette used MGM to help stay focused and confident before and during the performance. Previous research has focused on imagery for learning and memorization. These examples show that imagery for specialist students can also be used to improve the performance experience.
I did not discuss positive self talk or the use of ‘trigger’ words in any detail with the PC in the interview. However, I knew from attending the conferences (1.1.5.1) she organised, prior to her interview, that she used these strategies. There was evidence from Sophie and Sasha that ‘key words’ or ‘trigger’ words could be usefully integrated into their performance routine. Sophie’s trigger words in her routine were ‘excited’ or ‘animated’. They acted as reminders of the emotion she wanted to convey in the piece to the audience. Sasha used a combination of key words to create an ‘inner peace’ before the performance.

I develop this technique with NAME OF COACH quite a lot this key words (.) erm when you erm choose words which are important for you and somehow mean something for you (.)She mainly advised me to think what I want from my performance and I also added words which helped me how I want to feel (.) to be comfortable (.)

In these examples, cue or trigger words were used for both instructional and motivational functions (2.2.2.). What is evident, that was not shown in the research reviewed in Chapter 2, is that cue words can be used by a musician to improve the performance experience.

5.3.4.3. Use of positive language and thought reframing

As mentioned previously (5.3.4.1) the PC used the psychological technique of cognitive reframing. This consists of identifying irrational or maladaptive thoughts, which are then changed to more positive ones. She said she explained this technique as part of her clients’ education. The clients confirmed the use of this technique. Annette, who had developed very negative self talk that she could not control said, ‘I was simply telling myself on stage that it’s rubbish and no one enjoys it so just go off stage so I did (.)’. She said that the coach changed the negative talk to ‘no talk’ so she would not be distracted before she went on stage, and she gave her positive things to do and think in a performance routine (5.3.4.6.). This helped her to be calm and prepared both before and during the performance. Sophie was encouraged to keep a ‘thought diary’, which she said helped her to work out when she had extraneous or irrational thoughts that prevented her performing well.
The PC was deliberately positive in her choice of language. Edward, who had the overuse injury, and could not play for a considerable time said:

She was like very positive in her language (.) She was like, I noticed that if you kind of like throw out a negative thought she’d be like can you rephrase that in a positive way... yeah it’s really easy to get into a detrimental thought pattern and you know especially when you have an injury ... it’s helpful thinking positively.

Andrew was also helped to use positive sentences about his ability as a musician and his good work ethic prior to performance. He said this helped him to achieve the ideal performance state. He added ‘you can’t afford to be neurotic because you have this job to serve the music’.

Cue words were not ‘taught’ by the coach, and neither did the coach say that certain images could be used in certain ways. These clients seemed to develop imagery and use of positive self-talk through suggestions from the PC combined with their own ideas. Two clients integrated imagery and self-talk into their performance routines specifically to help improve the performance experience (see 5.3.4.6).

5.3.4.4. Educating clients about ‘nerves’
The PC in this study did not mention using any well-known physical or mental relaxation techniques to control arousal or performance concerns. She focused instead on education about symptoms of arousal and worrying cognitions. The PC helped the client to put their symptoms into perspective by normalizing what they experienced. This alone seemed to be very beneficial for four clients in this study to improve their performance experience. When the PC and the clients were talking about ‘nerves’ they were referring to physiological symptoms of arousal. Educating clients about ‘nerves’, which she said ‘permeates the vocabulary’, was done through discussion:
She also spoke about helping clients to ‘manage their chimp’ from the book ‘The Chimp Paradox’ (Peters, 2012). She said some clients loved the idea that unwanted thoughts and symptoms of arousal were their ‘chimp’. At the conference I attended a client spoke about how she fed her ‘chimp’ a banana to keep it calm before she went on stage to perform.

Educating four clients about their own ‘nerves’ was a revelation to them. It was not clear if their ‘nerves’ had begun under pressure at the conservatoire or if their usual performance responses had become worse. Symptoms might include the heart beating faster, sweaty or shaky hands or butterflies in the tummy. Sophie, Sasha, Annette, and Andrew all reported similarly:

... one of main things that helped me was erm (.) the interpretation of the physical sensations that you feel leading up to a big performance and you know up to then I just assumed I was terrified(.) but she was like (.) she made me realise that those sensations are the same as when you are extremely excited about something coming up or when or even when you are in love ...it’s all about what mind you’re in ...that was very a big key thing for me to remember. (Andrew)

Psycho–education was included in a recent study of training using graded exposure (2.2.6.3), but it was not possible to say exactly how this was beneficial because it was included in a programme of strategies. The PC in this study normalised symptoms of arousal and helped clients to interpret their emotional response to performance in a positive way so they could manage it better.

5.3.4.5. Goal-setting and practice
The PC discussed with me all kinds of planning that was beneficial to conservatoire students.
we’ll do quite a lot of planning (,) a lot of young people are not always organised in their lives (,) and without exception they adore (,) planning (,) it’s amazing (,) just to get a bit of discipline (,) on their lives (,) so we might plan for the day of an exam (,) a recital (,) what they’ll do (,) and planning actually frees them up to not have to do it if they don’t want to (,) but they’ve got a plan (,)

She spoke about helping a good number of students with the organization of their solo practice because they did not know how to practise effectively:

they don’t concentrate (,) they’ve got a phone to hand so they’re always checking their phones (,) somebody might come in and talk to them (,) just short attention spans (,)

She also said that learning how to practise was not a regular part of a students’ education in the conservatoire and that group training did not necessarily work:

practice skills crazily enough don’t get talked about that much or if they do it is in a group format where students are told this is how you practice this is what you do (,) unfortunately there are about 90 individuals our there (,) those practice methods might work for one or two (,)

Although we did not talk about using SMART principles of goal setting (2.2.4.1) the PC seemed to be using some of these principles. She acknowledged she used:

a lot of goal-setting both in terms of short- medium- long-term (,) in terms of performance (,)

She said that she always consulted with the students’ instrumental teacher so they could decide how best to work together towards the students’ goals.

Sophie confirmed that the PC helped with practice. The PC helped to make her practice more efficient, by suggesting how Sophie could set goals for herself and build in breaks to help her concentration. Sophie said her teachers gave her different ways to practise technically but the PC helped to make more drastic improvements.
I think you need both those inputs (.) I think you need technically how to practise and also mentally (.) you must be aware of the mental state you're in ...I felt like I needed to keep on doing more hours (.) and the PC was like how I needed to think about sit down and really evaluate whether the practice was quality over quantity or quantity over quality and it was definitely the latter for me (.) up until very recently (.)

The PCs work with Sophie also included a particular type of performance practice using goal-setting strategy. Sophie and the PC together made detailed long-term and short-term plans for practice, memorization and other skills leading up to a particular performance. They independently discussed with me how athletes in major competitions plan their training to ‘peak for the performance’, by training intensively until a few days before the performance when the amount and intensity is reduced in a ‘tapering off period’ (see Le Meur, Hausswirth, & Mujika, 2012). The idea of the ‘taper’ is to reduce stress and optimise performance.

Sophie’s plan included many different practice performance situations (see 5.3.4.7). The PC used the idea of tapering off in the week before Sophie’s final recital, which led her to understand:

... I was putting in the time in an efficient and productive manner and I no longer have the panic practice that people have you know the week before the concert when you know I need to do 8 hours a day (.)

By giving Sophie specific ways to improve solo practice and making her understand the benefits of performance practice had the effect of giving her confidence in her preparation, which in turn led to confidence in performance.

The coach seemed to use the term goal-setting in two ways. The first was to help clients plan their practice more effectively and the other was to use goal-setting strategy in the same way a sport psychologist might use it to motivate and give a clear purpose to practice leading up to an important audition or examination (outcome goal). Although I did not specifically discuss goal-setting strategy with the PC it appeared that goal-setting strategy as used in sport and business was
beneficial to music students. Making preparation more efficient led to performance confidence and thereby improved the performance experience.

5.3.4.6. Performance routines

When I asked the PC about performance routines she explained that she encouraged all kinds of routines, which was part of ‘planning’. She said that pre-event routines stemmed from behaviour the client might already be using:

so perhaps when it comes round to a performance we’ll just slightly more formalise those behaviours (.) a feeling of organization and control (.) management of what’s going on (.)

She also encouraged ‘two minute before’ routines and ‘post mistake routines, between movement routines’. She added that routines ‘are flexible and can be changed’ and that she had done ‘nothing original’ in using ‘all kind of routines borrowed from sport... it’s all there (.) it’s all laid out’. She did not describe a routine in any detail but suggested that for some individuals the routine might include positive self-talk, thought-reframing or arousal management. When I asked how the routines helped the performer she responded, ‘You probably need to ask them erm (.) exactly what they get out of (.) routines...’.

Four clients, Sophie Sasha Annette and Andrew, discussed their performance routines and they were able to express how routines helped. Sophie had developed a pre-performance routine (PPR), which included what to think while she was waiting to go on stage, and what to think about specifically before playing each piece. She said the routine helped her to feel in control of the performance ‘this is my audition’. Andrew said that his PPR was designed to empty his head of music before going on which he felt distracted him from being creative in the jazz performance. Sasha and Annette both had pre-event routines and PPRs. Both said that their PPRs helped them manage their arousal to achieve the ideal performance state.

Annette talked about her routines in some depth. She said:

I always did a pre-performance routine I just had to realise the one I had was just not very helpful.
The PC helped her change from:

I didn't really do anything to calm myself down or to make myself positive all it was about panicking letting everyone know how panicked I was and practicing up until the last minute (Annette)

to having both a pre-event routine, which included jogging and having a bath to calm her down, as well as how to choose suitable clothes for performance. They also worked together on a PPR, which was designed to slow her down and connect with the audience:

I take a rescue remedy which I chew just before I go on stage and I just spit it out before I go on stage which makes me calm down a little bit and I wear warm gloves and I don't talk to anyone I look at the score maybe and do centering it gets me instantly in a mood and I try to look at 5 audience members when I walk in and bow and again 5 different ones when I come up from bowing and then do the same thing when I bow again (Annette)

When bowing, she had to look at her shoes and say 'hello shoes' to slow her down; '... it is just enough time so it doesn't seem hurried to bow'. She explained that she needed to make a connection with 20 people:

so at least 20 people feel like I am playing personally playing to them and then it makes me feel better and at least 20 people have more positive feelings towards me

At first she said she had read about connecting with an audience member by deliberately looking at them. When I asked Annette how she developed the routine. She said:

Well I dunno its mainly my own ideas but she made me work hard on them because I had to realize that what I was doing was really bad.
This confirmed what the coach said about starting to develop the routines from the clients’ existing behaviour and prior knowledge.

The evidence in this study supports the findings in the literature (2.2.5) that PPRs would appear to function in a variety of ways; to manage arousal, to maintain confidence, and to help connect with the audience. There is also support for the findings in the sport literature that PPRs function in the way that the individual chooses; for their own purpose. Annette’s story strongly suggested that belief plays a part in the use and development of routines as surmised in the literature.

5.3.4.7. Simulation training, practice and preparation

The PC talked about working on pressure practice ‘a lot’ with her clients. The coach said that she simulated performance pressure through the use of role-play, creating distractions and graded exposure, although she did not use these terms.

so I might have a student outside the room (.) then walk in (.) and I’ll throw stuff at that you know in terms of the regimes they need to go through (.) again with their permission I may even video them to add pressure (.) may even bring in photographs of the people who’ll be on their panel (.) so this is again practising the pressure (.) I adopt a completely different persona with them (.) and then we’ll debrief (.)

She also stressed the importance of having a tough mindset when it comes to technical examinations:

cos quite often the person who is a friendly head of department for 363 days a year (.) for two days a year he’s going to be on an exam panel (.) and will not be a friendly person so I need to bulletproof the young performer for that (.)

Some of the clients confirmed strategies described by the PC. Sophie and Sasha both said they had undergone simulated auditions where photographs of the panel were put on chairs while they performed. Sophie said it helped her feel relaxed at the audition and Sasha said this helped gain mental control. The PC had also used distraction training as a technique with Annette. She performed with either the
coach or friends deliberately simulating possible performance distractions such as mobile phones going off, which helped her be more focused in performance.

Sophie talked about the coach using graded exposure in a series of four practice performance situations in preparation for her final recital. The first was in a room with no windows where:

the pianos are not great and it doesn’t make you sound good. the acoustics of the room are not good. so I had an audience of 2 or 3 and I played the entire programme through...

She then played in two more practice rooms that had better acoustics but distractions from outside. In these performances she organised small audiences of friends. The pianos were all very different. Finally she performed in the concert hall on the grand piano where the recital was to take place.

so I was able to pick up how quickly I can adapt to a new piano ... from those practice performances in different locations I realised how. how the opening measures you know of the opening piece can help me gauge what the acoustics like and very quickly I got used to adapting my playing style to the surroundings.

The PC did not have the luxury of a virtual training environment at her disposal. However, she showed that with some imagination, using role-play and deliberate distractions could simulate some of the pressures of the performance in practice. Although Sophie did not call her practice graded exposure (see 2.2.6.3), and the PC did not use this term, this technique was also found to be successful in improving the performance experience for this client. The benefits for Sophie were that she felt able to adjust to differences in performing environments more quickly and confidently.

5.3.4.8. Summary
The strategies used for each client was individual and varied. It was not possible to credit one strategy with a particular outcome. The PC said the benefit of PST was:
...trying to take care of as many of the variables as possible, around this thing called performance in which anything can happen ...so actually that all the stuff around the notes is as much taken care of as possible, and managed so that the notes have the best chance of happening.

Clients said that the benefit of working with the PC was improved performance preparation and performance experience. It is notable that none of these clients or the PC talked about improving performance quality. There was an underlying assumption that if the performance experience was managed performance quality would follow.

5.4. Factors for success in performance coaching

In order for the techniques to be effective the following factors seemed to be of importance:

• An understanding of the coaching process and a belief that the coaching would work
• Mental strategies need practise
• Solid musical preparation
• Coach needs to be part of the team

I discuss these in turn.

5.4.1. Belief and understanding of the coaching process

Understanding your own nerves and having a belief seemed to be connected. Once clients understood their own psychology it seemed much easier for them to accept suggestions from the performance coach. Developing a belief seemed to be the first stage before the real practise of the mental skill could begin. For example, Annette said:

...so for me when I first started to work with the PC I didn't practise any of these things (. ) I would listen and I agreed but I didn't follow up on anything so it took about two years to really become part of me...
She thought that doing mental skills would be a waste of her valuable practice time which was 8–10 hours per day, a belief noted by Brown (2012) as a barrier to accepting other ways of performance training other than just doing your practise. Andrew said it took possibly half a year to develop a belief:

'It's still not automatic (.) I still have to make the decision to make it erm an attitude (.) so it's still something I have to direct every time there is a performance coming up ... but when I first started doing it was still alien it was kind of like me telling myself something I didn’t believe (.) but I had to just keep on telling myself until it became more of a more of a belief.

At first, Richard thought the coaching made him feel worse about performance. He went to the sessions because 'I felt as though as I was doing something about it, I was making an effort but actually most of the time... I didn’t feel as though it was helping me'. It seemed to take the two years of coaching for him understand that it was ineffective practice that affected his performing, not anxiety.

He did not seem convinced by performance coaching at first, because he thought it would be more instruction based. He said he tried imagery but it ‘just did not work’, and when the coach talked about goal-setting strategy he rejected this because he thought he was already good at planning. However, he said he thought the coach was:

...very good at listening to what you say and presenting it back to you in a way that you may not have considered at all (Richard).

The coaching seemed to work through a combination of previous experience and the learning in the coaching sessions. For example, Andrew had already learned Alexander technique and Edward had tried Hypnotherapy. Sasha and Annette both referred to resources, psychology books and websites that they had used to develop their own ideas for performance. This way of working seemed to help foster belief.

5.4.2. Mental strategies need practise

Mental skills need practise just like any other skill (Connolly & Williamon, 2004). The evidence from these clients showed this to be true. How long you should
practise for, and for how long before the strategy became automatic or normal seemed to depend on the individual. For example, Sasha, the PhD postgraduate who already was performing professionally, talked in detail about the practice required for her to achieve her ideal performance state. She practised regularly, every day at first, until it became an automatic part of her performance, and when she went on a concert tour she said she did regular maintenance practice.

...if I have time quite in advance of the performance so let’s say two weeks before I tried to create this inner peace within me with a very strong focus on this particular feeling... I try to have this routine that every evening ... and it is a bit automatic now to induce this feeling of concentration...

Annette talked about it taking almost two years to change her bad habits for performance because she needed to believe in what she was doing but she also said that it took some time some time to practise and remember all her routine:

and if I remember all that then I already have a very good performance () and sometimes I forget some of it () or obsess about that I didn’t drink my ginger tea or take my gingko or something and then it doesn’t go that well...

The evidence from this study was that these skills and strategies took a considerable time to become embedded in the students’ performance behaviour. This was much longer than the time allocated for training in the PST intervention studies discussed in 2.3, as well as the allocated number of sessions for performance coaching within this conservatoire. Research into the length of time it takes for the majority of individuals to embed mental strategies into performance behaviour could inform future planning of PST for conservatoire students.

5.4.3. Solid music preparation

For any kind of mental skills training to work it was clear that mastery of the music was essential. The coach brought this up in our conversation:
... the work that we do will strengthen the work that’s done (...) if somebody hasn’t prepared well then there’s no doubt they are going to be under confident when they go on stage because they can’t trust their preparation.

She mentioned that a number of clients arrive at their first session thinking they have a definite psychological problem when it is really their preparation that is at fault. This was true for Richard who finally realised he did not have anxiety:

...it was just that I hadn’t prepared in the right way (...) I wasn’t sufficiently prepared to go out and do the job...

5.4.4. Being part of the team

The PC emphasised that she did not work in isolation, and I observed this after the interview when I was invited to watch observe her work (1.1.5.1). She said:

The quality of the relationships I have with instrumental and vocal tutors is vital, and needs lots of investment and nurturing.

The PC acknowledged that relationships with instrumental teachers were not all straightforward but the fact she had been a professional musician herself seemed to help:

and as you would understand that relationship can be quite intense (0 so sometimes it can be a positively intense thing and sometimes if can be a negatively intense thing (.) again it’s not unusual that I’ve had to be a kind of go-between (.) sometimes between teacher and student I guess again my background is quite useful isn’t it? I have worked in the profession with so a lot of these teachers (.) we know each by name (.) so again we’ve got that level of understanding between each other (.)

Annette and Val both spoke about how the PC acted as liaison between them and their instrumental teachers. She also liaised with other health professionals to help Edward the jazz pianist to overcome his injury and deal with subsequent issues resulting from his injury.
With these factors for success in place, performance coaching from both coach and client perspective worked well and benefited the clients in various ways. It was also clear from the comments in all the interviews that within the conservatoire, performance coaching was not accepted or clearly understood by all the staff and students. There were a number of barriers to the acceptance of performance coaching, which I now discuss.

5.5. Barriers to performance coaching

When the clients were asked about sports psychology and its potential, certain traditions and aspects of the culture emerged that seemed to conspire against an acceptance of performance coaching. These were:

- Performance coaching is another kind of therapy.
- Musicians do not have much in common with athletes.
- Lack of open discussion about performance.
- Instrumental teachers are traditionally performers not trained teachers.

5.5.1. Performance coaching – a type of therapy

The idea of performance enhancement training is a relatively new concept and it is easy to understand that without education students and staff might think coaching is another kind of therapy. Several client interviews hinted that what prevented students from seeking help from the coach was this belief. Admitting that you need a therapist in the conservatoire seemed to be viewed as a sign of weakness or shame. ‘I mean no one wants to go to therapy, people are quick to say I don’t need therapy’ (Sophie). The misinterpretation of ‘performance enhancement training’ as another kind of therapy not only seems to apply to musicians but to performing artists in general, who are also more acquainted with psychotherapy, psychologists and counsellors than athletes (Hays, 2002, p. 306).

5.5.2. Musicians and athletes have little in common

A prevalent misconception, as had been the case in the focus groups (4.2.4.1), was that musicians and athletes have nothing in common. When I talked with the clients about the relevance of PST from sport for musicians the reactions were mixed. The
PC discussed the similarity between athletes and musicians for herself as a performer:

...on a given day (.) at a given time (.) somebody else says when that day is when that time is (.) we have to perform and (.) perform to our optimum (.) give a winning performance if you like (.) that for me is a massive similarity (.)... we have to know how to manage ourselves under pressure how to cope with pressure (.) both in sport and in music...

As happened in Focus Grp1, Val could not see the psychological connection, only the differences between the activities themselves:

because music isn't quite like sport (.) it's to do with emotion (.) you're expressing (.) a different type (.) different to sport (.) I mean I'm not a sports person (.) I like running and swimming or I liked running until my legs packed up (.) and swimming (.) not competitive at all (.) so (.) surely in music you're (.) you're communicating with people (.) do you do that with sports?

In contrast, Sophie made a clear connection:

well now I've gone through some of the working with the PC you can definitely approach musicians as being a different kind of athlete and we're both as sports people do we're both training our bodies erm to a one day performance (.) and yeah I think the same mental techniques that sports people use to keep in focus can very much be used for musicians as well (.)

Richard gave a reason why there was little mental skills training for musicians:

yes I'm not saying (.) that all of this doesn't enhance performance (.) but the reason it's in sport and not in music is because there is not enough money in music to attract the people to come to it (.) that's afraid (.) probably the explanation for it (.)

Both mature students were sceptical about sport psychology in general. However, Val towards the end of her interview conceded that when she attended the
introductory course she thought pre-performance routines and simulation training made sense and might distract you from thinking about symptoms of arousal.

Focus Grp1 (4.2.4.1) were forthright with their views that musicians and athletes could not be compared and therefore implied that the use of sport psychology for musicians was of little value. This study showed that within the same conservatoire not all students were sceptical or ignorant about performance coaching. Education and open-mindedness, was the key to changing beliefs. It was notable that those clients who had worked with the coach and had educated themselves about psychology could see the benefits. Val, who had only experienced an introductory group session and sought advice about her teacher, was the most sceptical.

5.5.3. Lack of open discussion

Another aspect of conservatoire culture conspiring against the acceptance of performance coaching was that students and staff did not discuss performance issues or concerns openly. This was apparent in several interviews. The PC noted that the ‘conversation’ in music was different to sport.

we're still very tight lipped because the general vocabulary in music and performing arts is about problems (,) you'll hear lots and lots of people talking about going to talk about their problems with somebody (,) whereas I say we're going to talk about performance enhancement (,) so the conversation in sport is much healthier...

When performance was discussed ‘nerves’ was the interpretative repertoire as shown in Chapter 4. Sasha said the main language used to discuss performance was through using the word ‘nerves’ in a negative way. Edward commented:

I've never heard anyone talk about enhancing performance, it's always like trying to conquer nerves, yeah it's definitely framed in that negative way...

Annette felt that because the teachers talked about ‘nerves’ it could make you nervous, a subject discussed by Patston (2014) who observed that teachers may ‘unintentionally’ be ‘facilitating the development’ of performance anxiety by their
use of negative language. This repeats the findings from student Focus Grp1 regarding negativity coming from their teachers and the language of ‘nerves (4.2.1.2).

5.5.4. Lack of teacher and student education

It was also apparent that not all staff and students understood or accepted performance coaching. Edward, who had been injured, said neither he nor his friends had ever heard about sport psychology. He added, ‘I don’t think there are any barriers, I just don’t think people are aware of it...’. With regard to teachers, Andrew overheard a member of staff telling students they could go to the PC for ‘anxiety coaching’. He said:

... and I told my teacher he had got the wrong end of the stick and that maybe he should reword it in order to get people to go along because he was telling everyone that it was here’s how to get help with this weird thing you suffer from (.) whereas it needs to be more about here’s how to get the most out of music, here’s how to put the right spirit into music (.)

All the barriers to the acceptance of performance coaching seem to be linked by a lack of education about coaching, and by inadequate instrumental teacher training that lacked psychology in general. Not understanding the potential of coaching and the difference between coaching and therapy seemed to stem from the tradition of employing instrumental teachers who are primarily performers and not trained teachers (Purser, 2005). Patson (2014) observes that:

musical pedagogues are highly trained in the technical aspects of playing musical instruments. However, they have rarely had any formal training in music performance psychology. (Patston, 2014, p. 95).

In the interviews there was a difference of opinion as to the role of the instrumental teacher. To an extent several clients defended teachers. Val said teachers were there to be an inspiration and to share their experience. Andrew thought they were there to be amazing musicians. However, some clients felt their teachers were limited in what they taught. Sophie said her teachers were good at advising how to practise
techniques but did not discuss the best ways to use her practice time. Sasha felt some teachers did not consider psychology to be important because ‘they are mainly focused on the practise of the notes’. However, Sasha and Annette also defended the teachers saying that they have not enough contact time each week for them to deal with psychology. Both mature students thought that the teachers were there to teach music not psychology. The PC confirmed that the teachers themselves thought this too, and were relieved to have a PC working in their conservatoire:

I can almost say 100% positive in their responses (.) like oh thank goodness (.) I haven't got to concern myself with stuff (.) I can get on with the vocal instrumental teaching (.)

5.5.5. Signs of change

Despite the cultural barriers apparent in this conservatoire it was evident that, with education through the employment of a performance expert, the climate could change over time. Three teachers in this study had referred their students to the PC, and I subsequently met with teachers positive about the performance enhancement model. I observed a clear demand for the services of the coach, when I attended her sessions just before end of the year recitals. She said three coaches like her could be employed at audition and examination time.

The coach was fully aware that not everyone accepted her ideas but hoped that in the future:

I would love to see that they had some kind of performance coach resource (.) erm in terms of performance enhancement strategies (.) erm in place in every music conservatoire (.)...

She thought it should be possible for musicians to talk naturally about going to see their coach because ‘I've got this audition coming up’. She mentioned that teachers of Alexander Technique and counsellors were accepted members of staff at conservatoires and so it could and should be with performance coaching. There was some optimism even from Val at the end of her interview. She said of the coach,
I think she's ploughing a furrow and I think in the future (,) it will work itself out like with all pioneers (.)

As Sophie explained:

...the word coaching means you're already good but just be better (,) so I think that it's a very good way of putting it across...

5.6. Discussion

The findings showed that the strategies used by the PC individually and in combination served a variety of functions, which included better understanding of performance preparation and the improvement of psychological skills. Using the guiding principle of self-directed learning (Wilson, 2014) the PC was not teaching clients performance strategies; she was trained to help clients to understand their own psychology and enabled them to help themselves (Hays & Brown, 2004).

There were a wide range of individual needs and different approaches used by the PC even in this small sample. PST was effective delivered individually which questions delivery of PST in general programmes. However, the participants in the PST intervention studies (2.3.) perceived that group training was also beneficial (Braden et al., 2015; Clark & Williamson, 2011; Hoffman & Hanrah, 2012; Osborne et al. 2014). It may be that the ideal could be a combination of group and individual training (see Hatfield, 2016).

The evidence in this study suggests that some students seek and need specific help to cope with the challenges faced in transition from school to specialist higher music education. Some of the challenges were directly related to performance and being on stage. However, some of the challenges were about injury and coping with a new and competitive life at the conservatoire without the support of family and familiar teachers. Three of the clients in this study came from overseas and so were exposed to greater cultural change and lack of support networks. The PC was able to provide help and support with these general challenges as well as the challenges of performance.

This study confirmed findings in the literature (1.1.4) and findings from the focus group study (4.3) that instrumental teachers are not directly involved in the
development of psychological skills in the conservatoire setting. If the conservatoire professors’ primary role is to teach music and not psychology, this study shows that an expert performance consultant can work alongside the teacher for the benefit of the student. The teacher must be educated enough to be able to work with the coach and know when a pupil needs referral. For performance coaching to be effective all staff and students need educating about its potential.

5.7. Limitations of this study

One of the limitations of using interviews as a method is that the researcher is relying on accurate recollection of previous experience at the moment of the interview. It is possible that participants may recollect other things after the interview is over. Inevitably some of the interviews were developing in interesting ways when time ran out. Had I had more time it is possible the clients may have responded differently. The PC herself wrote to me about the limits of her interview and how she had not had enough time to give me enough details. However, this was to an extent redressed through my subsequent visits to the conservatoire. (1.1.5.1).

This study was limited to a small sample of pianist clients. During subsequent informal observation of seven more clients undertaking taster or coaching sessions the wider applicability of the methods to other instrumental and vocal students was clearly evident. Making findings generalizable from a small sample of interviews can be a limitation. However, several clients expressed the same descriptions of the coach’s work, which were also confirmed by the coach. This helped to give a general view of how coaching was perceived at that time in that particular conservatoire. The students in Focus Grp1, also expressed some of the views expressed by some of the clients in this study. This data triangulation gives more credibility to the findings (3.1.2).

5.8. Conclusion

Whilst psychological skills for musicians may be learned incidentally, this glimpse of performance coaching in practice has given an insight into how psychological skills might also be learned and developed with the help of an expert PC working in a UK conservatoire.
The first question in this study was:

**RQ5 How can one-to-one psychological skills training benefit conservatoire students?**

The benefits of the training were various. Clients learned a variety of strategies to selected to improve the performance experience, improve practice and preparation like the specialist participants in studies of Clark & Williamon (2011), Hatfield, 2016, Osborne et al. (2014), and to support their health and wellbeing. Some clients learned about their own symptoms of arousal and how to manage them. The different strategies were shown to lead to perceptions of improvements in the psychological skills of concentration, confidence and control. The strategies chosen and the perceptions of success were individual. It was these improvements in their psychological skills worked on together with the PC in conjunction with their instrumental teachers that helped students perform their best and survive in the competitive environment of a UK conservatoire.

The second question was:

**RQ6 How can psychological skills training work when implemented by an expert performance coach?**

The way the coaching seemed to work was that the PC enabled clients to help themselves. She used strategies commonly used in PST programmes, and educated clients about their own physiology and psychology. Her skills were extensive due to the variety of problems her clients encountered, which were not all directly about performance. The PC worked closely with the instrumental teachers and other professionals for the benefit of her clients. The PC seemed to be particularly important to her clients in the transition from school to specialist higher music education, and when important performances were imminent.

In this chapter I investigated the potential of one-to-one PST for specialist pianists. In the next four chapters I investigate the potential of one-to-one PST for recreational pianists delivered by their teachers in regular piano lessons. In the final
chapter (10) I compare and contrast the applicability of PST for both specialist and recreational pianists.
Phase 2 Study 2

Exploring the potential of individual psychological skills training in the piano teachers' studio: an Action Research Project
6 Introducing the teachers and their pupils

Meeting teachers interested in psychological skills training (PST) in Focus Grp2 (Chapter 4), directly inspired the concept of a collaborative project (1.1.5.2). Five teachers joined me to teach common strategies used in PST programmes in sport to improve the performance experience for our pupils. As teacher, my aim was to formally examine my existing teaching of mental strategies (1.1.3). As researcher, my aim was to create both applied and theoretical knowledge through Action Research (AR) (see 3.1.1).

In this chapter, the first of four presenting the findings of the project, the participant teachers and pupils are introduced. Following demographic information the main focus of the chapter is to discover existing approaches to teaching and learning performance skills and to explain the performance experience from both teacher and pupil perspective. We were teachers at work, and the pupils were developing pianists. Establishing baseline information at the start of the project was essential to provide a context for the teaching and learning of performance strategies (Chapters 7 & 8), and for the assessment of change that occurred during the project (Chapter 9).

The data sets used to describe the teachers and their experience of using and teaching performance skills comes from their first reflection, teacher meetings, and background information I collected via email. Three of the teachers participated in Focus Grp2 (Chapter 4). Where relevant I reference their earlier contributions. My own performance experience is described in the thesis introduction (1.1.1) and is also referenced. The recruitment process of teachers and pupils is described in 3.4.2.

The data used to describe the pupil demographics, learning of performance skills and performance experience comes partly from information from their teachers but mostly from the results of a questionnaire survey administered to 107 pupils. (see Appendices 4H and 4L for the questionnaires and their design). Those who did not complete the survey were children who had only just begun lessons, or adults who had never performed. The survey was written with two aims:

- To provide an overview of recreational piano pupils' performance experience to be subject to analysis for trends
• To provide a diagnostic tool to help the teachers choose pupils to participate in the action cycles.

Throughout the teachers are referred to by pseudonyms. Each pupil is referred to by a code. This is their teacher’s name together with the letter P and a number, for example, MaryP1. I am identifiable by my real name.

My research questions for part of the study were:

**RQ7** What performance strategies do teachers teach and use for themselves in preparation for performance?

**RQ8** What performance strategies do recreational piano pupils use? How did they learn these strategies, and for what purpose?

**RQ9** What is the experience of performing like for recreational piano pupils?

Cathcart (2013) provides some demographic information about UK piano pupils and the provision of performance opportunities, but recreational pianists and their teachers to my knowledge have not been specifically surveyed about their performance experience, and use of performance skills. The majority of recreational learners in my research are children under the age of 18 years. As discussed in 2.4.2.2 the focus of research pertaining to young children and adolescents has been on practice, performance stress and anxiety; research that reflects and reinforces the myths about practice and reductions in anxiety as being crucial factors in producing optimal music performances. Since Rae & MacCambridge (2004) recommended future research on the coping strategies of young musicians in practical examinations and ‘the extent to which these have been acquired from their teachers’ (p.438), there has been little progress on understanding about how young musicians cope with the performance experience and the role of their teachers.

I designed this AR project from a positive standpoint, that there were actions we could take, and strategies we could teach, to influence our students to produce their best possible performance. The questionnaire survey was designed to explore performance concerns some of which might be described as anxiety but others which may not. This chapter therefore presents information about teacher and pupil
experiences of teaching and learning performance skills, which contributes to new knowledge about musicians of all ages and abilities outside specialist music education. The following two sections describe the demographics of the teachers and their pupils.

6.1. Introducing the Teachers

The group comprised six piano teachers. The group was acquainted with one other through local professional development meetings. I had met only Yvonne and Angela prior to the research. Janet, Yvonne and Angela were participants in Focus Grp2 (Chapter 4), and had attended an introductory workshop on PST following the focus group. Fiona and Lynn were new recruits, and had little prior knowledge of PST. Our qualifications and teaching experience are shown in Table 6.1.

Table 6.1. Teacher Demographics.

<table>
<thead>
<tr>
<th>Teacher Name</th>
<th>Professional Membership</th>
<th>Music Teaching Qualifications</th>
<th>Teaching Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet</td>
<td>EPTA* member</td>
<td>MA BA Hons PGCE Primary Teaching</td>
<td>28 years</td>
</tr>
<tr>
<td>Fiona</td>
<td>EPTA member</td>
<td>CTABRSM</td>
<td>18 years</td>
</tr>
<tr>
<td>Yvonne</td>
<td>EPTA member</td>
<td>Grade 8 Piano CTARBSM Open University Diploma in Music</td>
<td>23 years</td>
</tr>
<tr>
<td>Angela</td>
<td>EPTA member</td>
<td>BA Hons Music PGCE in Primary Education LLCM and ALCM piano teaching diplomas</td>
<td>29 years</td>
</tr>
<tr>
<td>Lynn</td>
<td>ISM** member</td>
<td>ABRSM Teaching Diploma PGCE Primary Teaching</td>
<td>12 years</td>
</tr>
<tr>
<td>Mary</td>
<td>EPTA and ISM member</td>
<td>MA Psychology for Musicians BA Comb Hons Music/ Physical Education Cert Ed Primary teaching LGSM (T) Music Therapy</td>
<td>37 years</td>
</tr>
</tbody>
</table>

* European Piano Teachers Association
** Incorporated Society of Musicians
All teachers are female and aged between 40 and 60 years, which is fairly typical of UK piano teachers, according to Cathcart (2013, pp. 97-98). The variety of qualifications held by the group is also typical in the UK (Cathcart, 2013, pp. 105-114), where there is no regulation in instrumental teacher training (see Robinson, 2011, pp. 3-5), and professional development for piano teachers is entirely voluntary.

Our experience, education and interest in professional development are not quite so typical. As stated by Cathcart (2013, p. 136), typically two thirds of UK piano teachers have taught for over 16 years. In this sample, only Lynn had taught for less time. We were also a highly educated group. Our level of qualification is atypical according to Cathcart (2013, p. 135), who found that 42% of UK piano teachers had no academic qualifications, and that most teachers had grade 8 or some performance-related rather than teaching-related qualification. An interest in professional development was a motivation for the teachers wishing to take part in my research, yet one third of UK piano teachers are not members of professional organisations, and teachers with musical qualifications but no academic qualifications are most likely to attend professional development (Cathcart, 2013, p. 367). This group therefore represents highly engaged teachers, who were interested in how participation in this project could improve their teaching.

6.2. Introducing the pupils

The total number of pupils in the six teaching practices was 151. Figure 6.1 shows how the sample was distributed by age group and teacher.
Figure 6.1. Number of pupils by age group and teacher (N=151).

The average number of pupils per teaching practice is 25, which is just above the mean of 24 for teachers aged 46 – 60 according to Cathcart, 2013, p.139). 58% were female, and 42% were male. Overall, the majority of pupils were aged between 8 and 16 years, typical of most piano teaching practices in the UK (Cathcart, 2013, p.144). Only three pupils were aged 17 – 18 years. Twenty-four were adults.

Yvonne taught the most pupils, and Janet taught the least. Janet had no adult learners. The majority of pupils of Yvonne and Lynn were young beginners, not dissimilar to findings of the ABRSM Making Music Survey (2014), which shows that the majority of musical learners are young beginners, with a gradual decline in numbers through the teenage years. However, teenagers were the majority for the other four teachers, which may not be so typical. Most pupils were taught privately in their teachers’ homes. Yvonne and Lynn also taught some pupils in local schools.

Figure 6.2 compares the total sample of pupils with those who completed the questionnaires by teacher.
All teachers had some pupils who did not participate in the survey. The information about the pupils for the rest of this chapter comes from this survey.

### 6.2.1. Age, gender and playing standard

Figure 6.3 shows the pupils by age group and playing standard. The age groups correspond to key stages in UK schools and the playing standard was decided according to examination board grades.

The youngest pupil to complete the survey was a 7 year old beginner, and the oldest an advanced adult over 50 years. Figure 6.3 shows that the youngest performers were mainly beginners, and the majority of teenagers were intermediate standard. There were adult pupils of all standards, who had performance experience. In this sample 58% were female, and 42% were male, the same as the overall sample.
6.2.2. Playing and learning experience

Descriptive statistics about pupils’ playing and learning experience are shown in Table 6.2. The number of years pupils had been playing varied from a child who had been learning for 6 months to an adult who had been learning for 60 years. Pupils had been having lessons from 6 months to 13 years, and had spent 6 months to 12 years having lessons with their current teacher.

Table 6.2. Pupils playing and learning experience (N=107).

<table>
<thead>
<tr>
<th></th>
<th>Years playing the piano</th>
<th>Years of lessons</th>
<th>Years with current teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td><strong>Standard Deviation</strong></td>
<td>9</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td><strong>Range</strong></td>
<td>6</td>
<td>13</td>
<td>12</td>
</tr>
</tbody>
</table>

Figure 6.3. Number of pupils by age group and playing standard (N=107).
6.2.3. Performance experience - opportunity and frequency

The performance frequency and opportunity offered to the pupils seemed to be affected by the teachers’ own performance experience. All the teachers, including me (1.1.1), were reluctant performers. We all had limited experience of performing, and an unease when playing solo. Janet enjoyed singing solo and playing the violin, and was not sure why she did not enjoy piano solos. I suggested that, ‘maybe we should have a concert and do techniques for ourselves’ (First Group Meeting). Lynn agreed:

maybe I should make myself perform at my pupils concert. I also have the same issues and we are all saying how we dislike performing. (First Group Meeting).

Apart from Janet, the teachers’ own reluctance to perform solos had become a rationale for their teaching. Fiona’s experience led her to feel ‘an empathy’ with her pupils regarding performance. Both Lynn and Yvonne said this was with the proviso that they probably would not force pupils to perform who were not ready, or who simply did not want to perform. These attitudes affected the importance they attached to performance in general, and affected the performance opportunity and frequency they provided. The types of performance offered are shown in Figure 6.4. Angela and I offered the widest range of performance opportunities. Like me, she encouraged performance as a reaction to her own performance experience. She said ‘I’ve always wanted my pupils and my own children to have more self-confidence than I ever had and this colours most of my teaching’ (First Reflection).

The performance experience offered by each teacher shows individual differences, although the majority of pupils performed in pupil concerts with the next highest opportunity being examinations. Janet and Yvonne’s pupils performed slightly more in examinations than concerts, which was confirmed in their comments. Janet said at our first individual meeting, ‘I don’t like really doing as much about exams as I do. I would prefer to teach without exams in many ways...’ and Yvonne wrote in her first reflection, ‘I probably encourage more exams than concerts’.

Pupils of Fiona, Angela and I performed more in pupil concerts than examinations. Cathcart (2013) found ‘a tendency for those with longer teaching experience to be more pro-active in the organising of concerts and other
performance opportunities (p. 175), which seems to be true of this sample. Cathcart (2013) also states that 76% of all teachers regularly used the examination system as a performance opportunity and 45% organise concerts for their students. In this sample pupils were given more opportunities to perform in concerts than perhaps is typical. In the focus Grp2 discussion the teachers made a distinction between formal and informal performances. Angela talked about using performances in a progression from informal to formal, when pupils were ready (4.2.3.2). Lynn, who was new to the AR group, also made this distinction, and said she preferred to hold informal concerts at home.

The category ‘other’ included:
- playing for school assembly,
- playing for GCSE or A level examinations,
- accompanying a choir,
- playing for their Brownie badge,
- Musicathon performance for charity,
- Rotary club competition
- Playing for the teacher at school.

**Figure 6.4. Type of performance (Responses N=336).**
The frequency of performance per year is displayed in Figure 6.5. Of the total of 107, 37% performed once a year, 33% three times a year and 25% twice a year (7% missing). The majority only performed once or twice a year.

Performance frequency varied by teacher. The pupils of Angela and I performed most often. Most of Lynn’s pupils performed twice a year with pupils of Fiona and Yvonne performing mostly once a year. In summary, those teachers who offered the most frequent performance opportunities also offered the most type of performance opportunity (Angela, Mary).

Figure 6.5. Performance frequency (N=107).
6.2.4. Performing from memory

The data show that, unlike specialist pianists, these recreational pupils typically did not perform from memory.

10% always performed from memory
40% sometimes performed from memory.
43% never played performed memory (7% missing)

The pupils that always performed from memory were almost all pupils of mine. My interest in Suzuki method led me to encourage pupils to learn and perform from memory. The pupils who indicated ‘sometimes’ did not clarify how often or why they would sometimes play from memory.

6.2.5. Piano in the context of pupils’ lives

Unlike specialist musicians, recreational piano pupils are learning the piano as a leisure activity. Figure 6.6 shows that these pupils pursued a wide range of interests in which performance is an integral part.

![Figure 6.6. Range of performance activities undertaken by pupils (Responses N=372).](image)

The category ‘other’ included giving a presentation. There were only two pupils who did not have at least one other interest. Figure 6.7 shows which hobby was their number one preference for two age groups.
For the younger age group, sports were most popular with piano second. In the older age group other instruments or singing were preferred slightly more than piano. For the whole sample, sports and piano were almost equal favourites.

Pupils were asked to give reasons why piano might, or might not be, the preferred performance activity. Not all pupils gave reasons, but there were interesting insights. For both age groups being good at the activity was a reason to enjoy it more. For example, ‘Performing on the piano is fun. It’s good to show off my talent to other people’ (AngelaP8). Words used by respondents to describe the activities they enjoyed were ‘fun’, ‘exciting’ and ‘energetic’.

The main reason for preferring other activities to piano was that pupils preferred to be part of a group. Some liked a group because it gave them a chance to be with friends and added to the fun. JanetP10 enjoyed working in a team. Others said they preferred being part of a group because it was ‘more relaxing’, or gave ‘security’. Teenager MaryP5 did not like audience attention when performing alone. She wrote, ‘In netball the attention is not on you as you are in a team. In piano it
feels like everyone is watching you’. There were additional comments about preferrring a group activity to performing alone in both age groups. Older teenager (FionaP12) wrote, ‘I prefer performing in groups – I get very nervous playing alone so I find solo performances on piano hard’.

Another reason to prefer other activities to piano related to mistakes, and that mistakes seemed more obvious in piano performance than other activities. Some young respondents were concerned that the audience can hear mistakes, or might stare at you, if you go wrong. Mistakes and being in the spotlight were also mentioned by a few in the older age group.

Because when you are acting you’re not you, you’re the person you’re acting so it’s less nerve wracking. If you’re dancing and it goes wrong sometimes you can wing it but when you’re playing the piano that’s harder to do (FionaP2).

6.2.6 Summary

The demographics of this sample of recreational piano pupils show that they had the chance to perform in both evaluative and non-evaluative contexts. The majority performed infrequently, and performing from memory was not the norm. The data also show individual differences in the types and frequency of performance opportunities depending on their teacher. All pupils played the piano as a leisure activity, and most pursued other hobbies. Piano was not necessarily the favourite. Like their teachers, some pupils disliked piano because it was a solo pursuit, which could make them feel exposed when performing.

6.3. The Teachers: using and teaching strategies for performance

Before we met, I sent background information about the project and psychological skills training (PST) to the teachers. This included explanations of the terms imagery, positive self-talk, relaxation, goal setting, pre-performance routine (PPR), and simulation training (Appendix 4C). In their first reflection, (Appendix 4K) the teachers were asked to consider if they used these strategies for themselves as performers, and if they taught these strategies. The responses are summarised in Table 6.3.
Table 6.3. Strategies used and taught by the teachers prior to the project.

<table>
<thead>
<tr>
<th>Used for self</th>
<th>Taught</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Janet</strong></td>
<td></td>
</tr>
<tr>
<td>Imagery</td>
<td>Self talk</td>
</tr>
<tr>
<td>Self talk</td>
<td>PPR</td>
</tr>
<tr>
<td>PPR</td>
<td>Simulation</td>
</tr>
<tr>
<td>Simulation</td>
<td></td>
</tr>
<tr>
<td><strong>Fiona</strong></td>
<td></td>
</tr>
<tr>
<td>Imagery</td>
<td>Reassurance</td>
</tr>
<tr>
<td>Self talk</td>
<td></td>
</tr>
<tr>
<td>Simulation</td>
<td></td>
</tr>
<tr>
<td><strong>Yvonne</strong></td>
<td></td>
</tr>
<tr>
<td>Self-talk</td>
<td>Reassurance</td>
</tr>
<tr>
<td>Practice</td>
<td>PPR</td>
</tr>
<tr>
<td>Eat a banana</td>
<td>Simulation</td>
</tr>
<tr>
<td><strong>Angela</strong></td>
<td></td>
</tr>
<tr>
<td>Self-talk</td>
<td>PPR</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Simulation</td>
</tr>
<tr>
<td>Simulation</td>
<td></td>
</tr>
<tr>
<td>Distraction</td>
<td></td>
</tr>
<tr>
<td><strong>Lynn</strong></td>
<td></td>
</tr>
<tr>
<td>Imagery</td>
<td>Reassurance</td>
</tr>
<tr>
<td>Self-talk</td>
<td></td>
</tr>
<tr>
<td>Relaxation</td>
<td></td>
</tr>
<tr>
<td>Simulation</td>
<td></td>
</tr>
<tr>
<td>Distraction</td>
<td></td>
</tr>
<tr>
<td><strong>Mary</strong></td>
<td></td>
</tr>
<tr>
<td>Practice</td>
<td>Goal setting</td>
</tr>
<tr>
<td></td>
<td>PPR</td>
</tr>
<tr>
<td></td>
<td>Simulation</td>
</tr>
</tbody>
</table>

Comparing the number of strategies used by the teachers for themselves to those they taught shows that, apart from three teachers, who used simulation training for themselves and their pupils, the majority appeared not to transfer their own coping strategies to their pupils. Janet, was the exception, using three strategies for both herself and her pupils.

Table 6.4 reveals the reasons that teachers used and taught strategies for performance. These reasons show individual differences, and an instinctive rather than theoretical understanding of why they did what they did. Some of the reasons
were quite general. No one strategy or combination of strategies was connected to a particular outcome.

Table 6.4. The purpose of using and teaching performance strategies.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Purpose of using strategies for self</th>
<th>Purpose of teaching strategies for pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet</td>
<td>A sense of order and structure</td>
<td>Increased confidence and ‘make nervousness a positive (ideally – this does not always happen)’.</td>
</tr>
<tr>
<td></td>
<td>Increased confidence</td>
<td></td>
</tr>
<tr>
<td></td>
<td>‘less likely to be upset by something unexpected’.</td>
<td></td>
</tr>
<tr>
<td>Fiona</td>
<td>Test the learning through practice performances.</td>
<td>Helps pupils relax and ‘get used to a performance situation’.</td>
</tr>
<tr>
<td></td>
<td>‘I find out which bits are insecure and can practise more those bits’.</td>
<td></td>
</tr>
<tr>
<td>Yvonne</td>
<td>‘Perform more so that it becomes less unusual – less of an ordeal’.</td>
<td>Helps pupils to ‘be aware of how nerves will affect them on the day’.</td>
</tr>
<tr>
<td>Angela</td>
<td>‘Many people have said I don’t look nervous so I suppose the strategies help me put on a good act’…’ I think I might have had a nervous breakdown if I had had to perform without some ideas as to how to cope. (First reflection)</td>
<td>Increase confidence although occasionally she notes ‘we have a bad experience’ The majority think it is fun and want to perform again.</td>
</tr>
<tr>
<td>Lynn</td>
<td>‘Calming’ and give you experience of the situation, helping you ‘feel prepared and therefore in control’.</td>
<td>Lynn thought her teaching improved self-esteem and helped them prepare for the situation.</td>
</tr>
</tbody>
</table>

Apart from Janet who wrote that increased confidence was a purpose for both herself and her students, the purpose of using strategies for themselves was not the same as the purpose of the strategies they taught. There was evidence of the ‘nerves’ repertoire’ for discussing performance issues (compare 4.2.1). Even so, some teachers showed an instinctive understanding that these strategies could also improve psychological skills such as confidence.
In my first reflection I considered the inadequacy of my main performance preparation strategy, which was ‘practice’. Whilst practice gave me confidence prior to the performance it did not help at the performance. On the day and during performance my symptoms of arousal and lack of ability to manage mistakes made the experience unpleasant. I noted that my teaching strategies were more purposeful. Goal setting gave motivation to practise, and commitment to long-term goals (see 1.1.3), and that PPRs helped pupils in differing ways (2.2.5.3). Unpublished data from my MA dissertation (Hawkes, 2009) showed that pupils developed routines for a variety of functions. I noted that the purpose of routines for some pupils was musical; to set the tempo and mood of the performance, or to give a structure and professional air to the performance which transfers to the audience.

I reflected that the purpose of simulation training was to help pupils learn how to cope with mistakes and other distractions, which might increase confidence or improve concentration for the performance. As I had been using ideas from sport in my teaching of performance skills already, my reflection on the purpose of the strategies taught was more focused on psychological skills than that of other teachers.

I noticed a lack of consistency regarding the meaning of the terms used. For example, the meaning of self-talk for some teachers was as I had described it in the workshop, which is using positive language to motivate and give confidence. For others the statements were simple reassurances. Similarly simulation training, which I defined as a practice performance replicating as near as possible the performance conditions, was more of a chance to test the repertoire than a chance to pre-experience the performance.

6.3.1. Theories and considerations when teaching strategies for performance

Janet, Yvonne, and Angela expanded on what they said in the focus group discussion. They said they adapted their teaching to the individual needs of the pupil, and that pupils should not be ‘pushed’ into performing if they were not ready. Janet wrote that the strategies she would use for performance depended on the age, ability, and previous exam/performance experience and repeated that she mainly uses strategies taught to her as a child and ‘adapted as far as possible to the needs of each
pupil’. Yvonne wrote ‘how much pressure I put on them to perform would vary according to the type of pupil’. She said that pupils sometimes surprised her in their reactions to performance:

I had a pupil recently who could only perform one piece because he was so nervous and I never thought he would be because he is so laid back in the lessons... and I have another little girl who would not play and just burst into tears (Individual Meeting).

This had made her cautious about the idea of asking all children to perform.

Angela had provisos for encouraging pupils to perform and the way she used the strategies. She was ‘careful not to introduce a pupil to performing before they are competent’. She thought it important to introduce strategies ‘at the right time for the individual pupil ‘rather than feeling that ‘one size fits all’. She noted that some strategies ‘would embarrass a teenager or shy pupil’ and that ‘some pupils don’t have the motivation to follow things up’. She thought it was not always appropriate for pupils to perform.

If that means no performing or exams for a year or two or just learning for pleasure, we concentrate on exploring lovely music (First Reflection).

Fiona and Lynn did not seem to use different strategies with different age groups of levels of experience. However, Lynn had a dilemma:

And I wonder how much of my job is to push(...) I mean some people love performing... the majority want to do it so what percent do you push them if they don’t want to do it. You know how you feel yourself (... Some of them like me don’t want the pain beforehand for that little buzz afterwards (First Group Meeting).

I reflected that I tailored my teaching to the individual, and I was aware of age and stage of learning. I used less obvious strategies for the youngest pupils, who seemed confident performers. My teaching about performance became more structured with older pupils, especially those who lacked confidence. I had learned not to allow
pupils to perform pieces that were not thoroughly mastered. I got them to be more involved in choosing the music they performed, and made time to discuss performance concerns and possible solutions. At this stage I felt that Angela and I were similar in our teaching of performance skills. The main difference was our frame of reference. She was encouraging performance skills to give confidence within the 'nerves' framework, whereas I was convinced that what I was doing was teaching pupils to perform to improve psychological skills.

In answer to RQ7 What performance strategies do teachers teach and use for themselves in preparation for performance?, this sample of piano teachers showed individual approaches to performance preparation for themselves and their pupils. These approaches were based on personal experience and instinctive understanding rather than theory, and they lacked clear purpose in the use and teaching of a variety of performance strategies.

6.4. The Pupils: using and learning performance strategies

In this section and the following sections the pupils' use and development of performance strategies, as well as their performance experience and concerns are described. There were three different versions of the questionnaire, designed age appropriately (Appendix 4E). The questions on demographics were the same but not about performance. The number of pupils answering each questionnaire was as follows:

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>12 years and above</th>
<th>8 -11 years</th>
<th>7 years and under</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Questionnaire One</td>
<td>60</td>
<td>40</td>
<td>7</td>
<td>107</td>
</tr>
</tbody>
</table>

The youngest children, aged 6-7 years, were not asked about performance strategies. Instead they were asked to draw themselves at their most recent performance. As there were only seven children who answered this questionnaire it was not possible to analyse the drawings in any meaningful way.

Pupils aged 8 years and older were asked if they used imagery, mental rehearsal, self-talk, relaxation, routines and performance practice. I did not use the term goal setting because it is a complicated strategy, which I did not expect the
teachers or the pupils to use. I included mental rehearsal because I thought pupils might be more familiar with that term than imagery. The quantitative data shows general patterns, in particular with regard to age. I used two age groups in the analysis to make a more meaningful sample. Only 11 pupils were aged 16 years and older. Figure 6.8 shows the mental strategies divided into two age groups.

![Figure 6.8. Mental strategies used by age group (Responses N=187).](image)

There were 91/100 pupils who indicated that they used performance strategies: 53 in the older age group and 38 in the younger age group. For the sample as a whole, practising the performance was the most used strategy (76% of the responses), and performance routines the least (7% of the responses). Mental rehearsal (24% of the total) was only used by the older age group, and was the second highest strategy. There were similar percentages of responses in using imagery (34%) relaxation (30%), self-talk (28%) and each age group used these strategies almost equally. It was not possible to show statistically that one age group used an individual strategy significantly more than another, because the sample was too small and not representative enough.
Figure 6.9. shows the mental strategies of pupils aged 8 years and older by playing standard. Practising the performance was the most used strategy for all standards. After this strategy the beginners appear to use more imagery and self-talk, whilst intermediate pupils use mental rehearsal and relaxation more, with advanced pupils using mental rehearsal and imagery. Apart from mental rehearsal all the strategies were developed in each age group and at all playing standards. The data show that only older intermediate and advanced pupils use mental rehearsal.

Figure 6.9. Mental strategies used by playing standard (Responses N=187).

The sample was too small and not representative enough to demonstrate significant results in cross tabulation analyses between strategy use and age, or playing standard. Qualitative comments gave further insight into how and why recreational pupils might use these strategies for performance, which are discussed in the following sections.
6.4.1. Imagery and mental rehearsal

Six participants wrote that imagery helped them to pre-experience the performance. They all imagined themselves at the concert, either imaging the venue or playing in front of an audience or both. The reasons for using imagery were individual. For some, it seemed to be part of their preparation to get used to playing in a concert. For others, it helped with confidence:

I know this gives me a sense of how it feels to perform in front of a larger audience (MaryP6).

...helps for the real thing by having confidence I can play the whole piece through well (FionaP8).

Ten older participants wrote about their use of mental rehearsal, which had the same meaning for all, that is, playing their piece(s) in their mind away from the piano. For most, this helped reassure and encourage them for the performance. FionaP5 wrote, ‘I rehearse away from the piano to keep myself thinking about it and to reassure myself that I know the piece’. It helped AngelaP15 remind him more exactly ‘how I will start the piece’, and for AngelaP16 ‘If I can remember the fingering without seeing the keys then I feel more confident’. AngelaP19 said that using mental rehearsal and imagery combined ‘helps me remember stuff that I could’ve forgot so I remember on the day’.

6.4.2. Positive self-talk

Several pupils used positive statements to motivate themselves. For example, ‘I can do this’ (LynnP18), and ‘You can do this’ (YvonneP17). Some pupils, like their teachers (6.3) gave themselves reassurances rather than positive motivational statements, such as ‘It’s really not that bad’ (AngelaP3), ‘It’s going to be ok’. (YvonneP28), and ‘It doesn’t really matter if I make a mistake, the audience/examiner might cringe but they probably won’t care or remember’ (YvonneP26). For those who wrote how positive self-talk helped them, MaryP2 said positive words ‘put me in the right frame of mind’. Two others said their words made them feel calmer. MaryP8 said positive words helped to ‘take away the butterflies’ and maintain focus.
6.4.3. Deep Breathing/relaxation

Ten participants gave reasons why they used deep breathing before a performance. Four of these wrote that deep breathing helped them to relax or made them feel calm. Two specifically said deep breathing helped ‘calm their nerves’. The other four had a variety of reasons to use deep breathing:

- Stops me shaking (AngelaP15)
- Keeps my mind occupied (MaryP4)
- Helps me 'think things through rationally' (FionaP3)
- Gives confidence and makes me feel less nervous (FionaP15)

6.4.4. Pre-performance routines

Examples of PPRs, the least used of all the mental strategies, are given below. Most routines are better described as idiosyncratic performance behaviours rather than PPRs:

- Sing the tune to myself in head (LynnP11)
- Pretend it’s just a normal lesson, put audience out of mind (AngelaP4)
- Deep breath, jig up and down (YvonneP24)
- Relax, walk to the piano, get music open and start (FionaP10)
- Practise walking up to the piano announcing my programme bowing (AngelaP1)

The last two statements are more consistent with a routine that might be repeated at each performance. However, only one pupil wrote out ‘systematic behaviour’ that she had used at a performance:

- Sit down
- Check stool is right height/close enough to piano
- Find hand position
- Look at adjudicator
- Think how the piece sounds in my head
- (MaryP6, Music Festival performance).

Only two participants wrote exactly how they thought a PPR helped. AngelaP17, who wrote he was always encouraged by his parents to take a short walk before an
examination, wrote that this served to calm him down ‘so I don’t get nervous when playing’. One adult, who had experienced a ‘first terrifying performance’, wrote that she had developed a strategy to ‘give myself a little time to settle at the piano and I adjust my eyes and focus and position my body’.

**6.4.5. Simulation training – practice performances**

Fifteen pupils wrote about practice performances, which took place mostly at home in front of family members, and for some in front of the teacher in lessons. Ten participants mentioned that exposure to an audience was most helpful. It got them used to people listening, ‘have a feeling of other people watching’ (YvonneP29), and it ‘makes me feel more confident for the real performance if it goes well in front of my family’ (JanetP7). Two participants wrote about how the practice performance can show up ‘small areas for improvement’ (AngelaP16), and also ‘can help settle nerves’ (FionaP15).

**6.4.6. Combination of skills**

Six of the participants wrote about how a combination of mental skills helped them rather than just one. JanetP10, who used mental rehearsal, imagery and deep breathing said that they ‘help me keep calm, focus and put things in perspective’. Four participants mentioned that all their strategies helped with confidence and to feel relaxed. An advanced level adult, who ticked all the skills described:

> I try to create as much pressure on myself in a safe environment as I can to prepare myself for the real performance. Although, the real performance always feels very different, I also try to minimise the amount of self-doubt I have prior to a performance in the hope that it will be minimal when actually performing (MaryP9).

A few respondents wrote that mental strategies did not help. AngelaP18 an adult pupil who had learned self-talk from public speaking, thought this and imagery helped very little for piano performance. One teenager felt that imagining playing at the concert:
never actually creates the environment that there would be and the words I say to myself just make me imagine what would happen if I go wrong and worry more (YvonneP26).

However for the majority, who wrote about their use of mental strategies they helped in a variety of individual and positive ways to boost confidence, create a state of relaxation, aid focus either just before or during performance, or to simply help the individual be prepared for an audience, the venue and the occasion of performance.

6.4.7 How pupils learned performance strategies

Pupils were asked who helped them to develop the strategies they used. Figure 6.10 shows that pupils learned strategies mostly by themselves (31% N=33) or in combination with their teacher, parent or another source of help (21% N=22).

![Figure 6.10. How pupils learned performance strategies (N=107).](image)

I conducted cross tabulation analyses using SPSS to see if there were any significant relationships between who helped pupils to prepare for performance and the individual strategies, age group or playing standard. The sample was too small and not representative enough to demonstrate significant results.

Several participants wrote more specifically about how they were helped and for which skill in their qualitative comments. The majority of pupils, who indicated...
that they did practice performances for friends and family, wrote that their teacher had suggested this (12 were Yvonne’s pupils). JanetP21 said she did a mock exam with the teacher and AngelaP8 wrote that the teacher listened to him perform in lessons.

Two out of three pupils of mine who acknowledged my help said they used routines. One pupil of Angela also said he was helped to use a routine which was also developed by dad, ‘who has similar ideas to my teacher’. Only a small percentage of those who wrote they had a ‘combination’ of help, acknowledged being helped by their teacher or parent. Most pupils who used self-talk had learned this by themselves, although one young pupil of mine said her granddad had helped her think positively.

There was evidence of influence of pupils’ hobbies and school activities on the learning of mental strategies that were transferred to piano. One pupil had help from work experience in public speaking, and another from a teacher at school. AngelaP4 credited her gymnastics partner for helping her ‘when she was nervous before a competition’ and had transferred this to piano. MaryP13 said her teacher at school ‘said imagine you are at the performance’ when they were practicing for a school play and she tried to do this for piano performances. FionaP4 said he had learned about deep breathing to relax from his sister who did singing.

6.4.8. Summary

This section answers RQ8, which asked:

What performance strategies do recreational piano pupils use? How did they learn these strategies, and for what purpose?

The findings show that recreational piano pupils use a variety of performance preparation strategies at all ages and levels of ability. Even though the teachers seemed resourceful in developing ideas about their teaching related to performance, there was a mismatch between what we thought we taught and what the pupils said they were taught. This was particularly baffling to the teachers with regard to routines. Four out of the six teachers said we taught routines yet very few pupils claimed to use a routine, and even fewer said their teacher had helped them. All the
teachers were fascinated to find that even young beginners use imagery and self-talk, which the literature suggests are skills that can be developed spontaneously (2.2.1 and 2.2.2).

Both quantitative and qualitative findings reveal that the majority of pupils used and learned these strategies without help. However, some pupils gave credit to teachers and their parents, and some pupils were resourceful under performance pressure to seek help from other areas of life, such as hobbies and school.

The perceived benefits of the strategies were several. They included keeping pupils calm and relaxed, and helping pupils improve confidence and concentration. For several pupils the strategies enabled them to pre-experience the performance. Mental rehearsal was used to give security in the playing.

6.5. The Pupils: the performance experience

In this section I discuss the experience of performance from the pupil perspective through examining the performance concerns of pupils, and through asking pupils to recollect a recent performance and answer questions about this performance (Questionnaires One Q14 and Q17; Questionnaire Two Q13 and Q15; Questionnaire Three Q12. see Appendix 4E).

6.5.1. Pupils aged 6 -7 years

For the seven very youngest children (6-7 years) performance seemed to be a joyous experience. Two liked playing for people to listen, one liked the audience clapping and playing with her mum. One of the pupils who liked playing in front of people said the reason was that he would ‘like to make other people want to go home and play too’ (LynnP4). LynnP5 wrote, ‘I like the feel of the keys going down and you can choose how fast to play the notes. I pretended I was just playing the piano at home’.

Only two of the seven children had a dislike about performing. They both played at the same concert, and commented on their dislike of the piano stool, which one wrote was ‘not comfortable’ (YvonneP22) and the other described as ‘wobbly’ (YvonneP16). These children had only positive remembrances of their performances. Two said they just remembered ‘all of it’, and YvonneP22 said he remembered ‘I ran round afterwards’. LynnP4 thought it ‘felt quite exciting’, and LynnP5 enjoyed the social approval. She wrote, ‘when I finished it felt good because
mum and dad were in the audience to see me when I finished’. The youngest children were not asked about their performance concerns for ethical reasons.

**6.5.2 Pupils aged 8 -11 years**

For the majority of the forty pupils aged 8-11 years, performance was also an enjoyable experience. Only one pupil said they did not enjoy the performance. Responses are summarised in Figure 6.11.

In the category ‘playing for the audience’, pupils enjoyed playing for the examiner at their examination, as well as for their parents or just the audience in general. Seven pupils simply enjoyed everyone watching and five enjoyed the clapping afterwards. The category ‘feeling of satisfaction’ included the experience of playing in a concert or just doing well. Two pupils, who enjoyed the music, wrote that they had enjoyed playing their favourite or familiar pieces. Only two comments suggested relief to finish rather than enjoyment, and this was achieved through not making mistakes.

![Diagram](image)

**Figure 6.11.** What pupils aged 8-11 years enjoyed about their last performance (Responses N=401).
This age group had few dislikes about their recent performance. Figure 6.12 shows the responses. Almost half of the pupils had no dislikes at all about their recent performance. The dislikes that seemed to be developing in this age group were about being nervous before the performance, and making mistakes. A few were focused on wrong notes, and a very few disliked playing an unfamiliar piano. One answer could not have been predicted; that the pupil did not like the 'examiner's hairstyle' (YvonneP23).

![Bar Chart]

**Figure 6.12.** What pupils aged 8-11 years disliked about their last performance (Responses N=38).

Remembrances of these performances were varied and are categorised as positive or negative as shown in Figure 6.13.
Figure 6.13. What pupils aged 8-11 years remembered most about their last performance. (Percentages of positive and negative comments).

There were more positive recollections than negative. No pupils wrote that they would never perform again after their experience. There were a number of comments that were the same or similar to those of the 6-7 year olds. For example, some pupils simply said they remembered enjoying playing the pieces. Enjoyment also included playing duets with mum or dad, or the feeling after they had played, and the feeling when the audience clapped. Two pupils said they had enjoyed doing
well, which I added to this category. Feeling embarrassed included one pupil who said he remembered ‘me blushing bright red’ (LynnP2) and another ‘everyone laughing when I lost my music’ (LynnP6). Other comments were difficult to categorise. They included ‘getting the book upside down’ (YvonneP10) and ‘walking up to the piano’ (FionaP11).

These recollections of performance suggest that for the majority of pupils age 8-11 years performance is a positive enjoyable experience, and that there were individual differences. Data from the question about performance concerns also reflects the individual nature of the performance experience and shows that these young pupils have a mix of concerns, some of which are musical and others that might be described as arousal, anxiety, and the seeking of social approval. Table 6.5 shows the responses of 40 pupils who indicated (yes or no) if they were concerned at all with 22 items before a recent performance.

Table 6.5. Performance concerns of pupils aged 8-11 years.

<table>
<thead>
<tr>
<th>PERFORMANCE CONCERNS 11 years and under</th>
<th>Number of responses</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making mistakes</td>
<td>27</td>
<td>68%</td>
</tr>
<tr>
<td>Playing at correct speed</td>
<td>20</td>
<td>50%</td>
</tr>
<tr>
<td>Remembering louds and softs</td>
<td>16</td>
<td>40%</td>
</tr>
<tr>
<td>Butterflies in tummy</td>
<td>15</td>
<td>38%</td>
</tr>
<tr>
<td>Who was in the audience</td>
<td>14</td>
<td>35%</td>
</tr>
<tr>
<td>Pleasing my teacher</td>
<td>13</td>
<td>33%</td>
</tr>
<tr>
<td>The piano you have to play</td>
<td>12</td>
<td>30%</td>
</tr>
<tr>
<td>Sweaty hands</td>
<td>12</td>
<td>30%</td>
</tr>
<tr>
<td>Size of the audience</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>Done enough practice</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>Pleasing my parents</td>
<td>8</td>
<td>20%</td>
</tr>
<tr>
<td>Order of play</td>
<td>7</td>
<td>18%</td>
</tr>
<tr>
<td>Thinking about other things when performing</td>
<td>7</td>
<td>18%</td>
</tr>
<tr>
<td>Heart racing</td>
<td>7</td>
<td>18%</td>
</tr>
<tr>
<td>Put off by sounds in the room</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>Being embarrassed or self conscious</td>
<td>6</td>
<td>15%</td>
</tr>
<tr>
<td>Feeling tight in different parts of body</td>
<td>5</td>
<td>13%</td>
</tr>
<tr>
<td>Playing on your own</td>
<td>4</td>
<td>10%</td>
</tr>
<tr>
<td>The music you were playing</td>
<td>2</td>
<td>5%</td>
</tr>
<tr>
<td>The size of the room</td>
<td>1</td>
<td>3%</td>
</tr>
<tr>
<td>Forgetting what to play when playing from memory</td>
<td>1</td>
<td>3%</td>
</tr>
</tbody>
</table>

40 Respondents 199
The number one performance concern for this age group was *mistakes* (68%). The next seven highest concerns were a mixture of physiological symptoms of arousal, the performance environment and musical concerns. The responses confirm the individual differences that were apparent in the qualitative comments. The qualitative comments suggest that mistakes may be perceived in two ways, which may account for the large percentage of pupils who wrote that mistakes was a concern. The first was positive; that pupils were pleased not to make mistakes. The second was negative: that pupils feared making mistakes.

**6.5.3. Pupils aged 12 years and older**

**6.5.3.1 Evidence from a recollection of a recent performance**

The older pupils were asked to write three good things, three things they could improve and what they remembered about their most recent performance. The good things about their last performance are summarised in Figure 6.14.

<table>
<thead>
<tr>
<th>Good things about the last performance of pupils aged 12 years and above (Responses N=207).</th>
</tr>
</thead>
<tbody>
<tr>
<td>The music itself</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

**Figure 6.14.** Good things about the last performance of pupils aged 12 years and above (Responses N=207).

For the majority of these pupils (69%) the good things about performance related to musical considerations, which were accuracy, fluency, and attention to musical detail. For 43% of pupils the good thing about their most recent performance related to the accuracy of their playing either as a positive thing, getting the right notes (63) or as a negative (25) - not making mistakes. Seven
respondents said it was good that they played the right notes, and three said they did not play any obvious wrong notes. The notion of accuracy was good if there were ‘only a few mistakes’ (11 participants) and no mistakes (5 participants). Three mentioned mistake management, and how pleased they were to recover from slips. The category attention to musical or technical details included comments about fingering, pedalling, articulation, or rhythm, voicing, dynamics, style and character. For example, ‘I maintained some of the phrasing/dynamics’ (JanetP5).

Comments that included confidence, concentration, motivation or relaxation were categorised as psychological wellbeing (14%). This included responses from five participants who said they managed to remain calm or performed well under pressure. Other comments included ‘feeling relaxed’, and ‘having a confident start’. Two said it was a good thing that they did not give up, and a few were reassured in their performance by either playing with their teacher or having support from parents in the audience.

Comments regarding fluency and good tempo used the word ‘relief’ to indicate that the pupil had to ‘got to the end without a major breakdown’ (FionaP17) or ‘got through calmly and steadily’ (JanetP3) as well as seven pupils who said they played at a good tempo. 14 pupils thought it was good that they did not ‘stop’. Hardly any pupils wrote that the piece of music they played was a good thing about their performance.

The responses to how pupils could improve their performance for the future are categorised in Figure 6.15.

![Figure 6.15](image-url)  
**Figure 6.15.** Three things pupils aged 12 years and older wanted to improve following a recent performance (Responses N=157).
The desire to improve their psychological wellbeing for performance comprised 39% of the responses; for example improvements to confidence, concentration and control. Five pupils wanted to improve their concentration and nine wanted to be more confident in general or be more confident in their ability. Participants wrote about improvements to wellbeing in both a positive and negative way. There were 20 statements that could be regarded as positive thinking. For example, ‘be more relaxed’ (YvonneP2), ‘start with more confidence’ (AngelaP15). There were 22 negative statements, such as ‘Don’t be put off by people in the audience’ (MaryP6), and ‘don’t be nervous’ (11 pupils).

Improving musical details was the next biggest category with regard to improving performance (24% of responses). This included dynamics (11 pupils) and tempo (10 pupils) as well as responses about improvements in practice behaviour. Some said they just needed to practise more and 15 pupils said they needed to practise to eliminate mistakes, but others were more specific; writing that they needed to improve practising ‘page turns’ (YvonneP26), practise ‘on different pianos’ (AngelaP9 and P10), ‘practise the harder bits more’, ‘practise ‘reading ahead’ (AngelaP18) etc.

Accuracy, through eliminating mistakes, was mentioned by several pupils who wrote not to make mistakes, or conversely ‘be more accurate’ (YvonneP4). Some pupils were specific in that they wanted to be able to carry on if they made a mistake and ‘be able to start anywhere in the piece’ (MaryP8). Having a more accurate memory was also indicated. The last category referred to statements about examiners or getting better marks in exams.

Remembrances of their last performance for this age group were also both positive and negative, as shown in Figure 6.16. They remembered almost equally well ‘enjoying their performance’ and ‘playing well’ (20), as they remembered ‘distractors’ to performance (18). Distractors included physiological responses to pressure, feeling embarrassed, going wrong and other things that did not go well, for example, having to start again or a foot slipping off the pedal. Some pupils wrote more positively. For example, ‘I didn’t rush and I was cool and calm’ (FionaP6).
Some comments were categorised as feeling a sense of relief. However, there were other memories that gave satisfaction from a ‘sense of achievement once I had finished’ (AngelaP16) and ‘I tried my best’ (JanetP9) The category atmosphere included remembering relatives were in the audience, ‘the coffee cake afterwards’ (AngelaP2) and the feel of the piano. YvonneP13 remembered she ‘had to press down hard on the keys, it was a German piano’.

6.5.3.2. Evidence from performance concerns recollected from a recent performance
In question 18 of questionnaire one the older age group was asked to indicate on a Likert-type scale from 1 (not at all) to 10 (very much) how concerned they were about a list of 29 items (see Appendix 4L for the design of this scale). 59 pupils responded to this question. Principal Component Factor Analysis was used for the analysis. (see Appendix 4L for discussion about the suitability of Factor Analysis for this data).

Four factors were initially extracted with Eigenvalues equal to or greater than 1.00. Orthogonal rotation using Varimax provided the ‘best solution’, which is shown in Table 6.7. The first factor accounted for 15% of the variance, the second 4% of the variance, the third 3% of the variance, and the fourth 1%.
I reported this analysis at the second group meeting and asked the teachers how they might interpret component one. The group were expecting that one factor might be called ‘nerves’. I had expected that my a priori categories (Appendix 4L) would become the components. We were all surprised. Lynn said:

... but that gives you the idea that that component came together as one thing and that it is not one thing. It is maybe not be the usual things you think about like You would think it might be the physical things were listed together oh I have butterflies in my tummy or going red and there are more things you can explore. There are a surprising number of things for example the piano and the venue (Second Group Meeting).

Factor one comprised 17 concerns, which included symptoms of arousal, external and internal distractors, as well as musical concerns. The term ‘stressors to performance’ was suggested but this was rejected because we felt musical concerns were not stressors. The interpretation ‘Factors that compete for attention in performance’ made the best conceptual sense.

### Table 6.6. Rotated component matrix.

<table>
<thead>
<tr>
<th>Rotated Component Matrixa</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Remembering phrasing and dynamics</td>
<td>.943</td>
</tr>
<tr>
<td>Sounds in room</td>
<td>.941</td>
</tr>
<tr>
<td>Getting tempo right</td>
<td>.934</td>
</tr>
<tr>
<td>Butterflies in tummy</td>
<td>.934</td>
</tr>
<tr>
<td>Heart racing</td>
<td>.932</td>
</tr>
<tr>
<td>Done enough practice</td>
<td>.928</td>
</tr>
<tr>
<td>Breathing</td>
<td>.927</td>
</tr>
<tr>
<td>Piano you play</td>
<td>.926</td>
</tr>
<tr>
<td>Tension in body</td>
<td>.926</td>
</tr>
<tr>
<td>Venue size</td>
<td>.919</td>
</tr>
<tr>
<td>Pleasing myself</td>
<td>.916</td>
</tr>
<tr>
<td>Being embarassed</td>
<td>.916</td>
</tr>
<tr>
<td>Sweaty hands</td>
<td>.915</td>
</tr>
<tr>
<td>Thinking about other things</td>
<td>.911</td>
</tr>
<tr>
<td>Whether i like the music i am playing</td>
<td>.907</td>
</tr>
<tr>
<td>Order of play</td>
<td>.720</td>
</tr>
<tr>
<td>Knowing the venue</td>
<td>.674</td>
</tr>
<tr>
<td>Parents in audience</td>
<td>.905</td>
</tr>
<tr>
<td>Teacher in audience</td>
<td>.873</td>
</tr>
<tr>
<td>Pleasing my teacher</td>
<td>.701</td>
</tr>
<tr>
<td>Pleasing my parents</td>
<td>.690</td>
</tr>
<tr>
<td>Size of audience</td>
<td>.829</td>
</tr>
<tr>
<td>Playing solo</td>
<td>.811</td>
</tr>
<tr>
<td>Examiner</td>
<td>.603</td>
</tr>
<tr>
<td>Expressing the music</td>
<td>.850</td>
</tr>
</tbody>
</table>

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 6 iterations.
Factor Two, ‘seeking social approval’, was not a surprise but we were perhaps surprised that this age group still sought social approval. Factor Three items seemed to relate to the pressure of evaluative performance. Factor Four, which comprised only one item, mistakes, was somewhat of a puzzle. One could argue that this component should be discounted because it is not usually acceptable to have less than three items per component (see Appendix 4E). However, the qualitative comments suggested that mistakes were of particular concern to this age group. I explored the data further by converting the Likert scores 1-10 as follows (1-5 = NO, 6-10 = YES). These results are shown in Table 6.7.

**Table 6.7.** Summary of performance concerns of pupils aged 12 years and older.

<table>
<thead>
<tr>
<th>PERFORMANCE CONCERNS 12 years and above</th>
<th>Number of responses</th>
<th>Percentage of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making mistakes</td>
<td>51</td>
<td>86%</td>
</tr>
<tr>
<td>Size of the audience</td>
<td>31</td>
<td>53%</td>
</tr>
<tr>
<td>Playing at the correct speed</td>
<td>26</td>
<td>44%</td>
</tr>
<tr>
<td>The piano you have to play</td>
<td>25</td>
<td>42%</td>
</tr>
<tr>
<td>Playing on your own</td>
<td>25</td>
<td>42%</td>
</tr>
<tr>
<td>Pleasing my parents</td>
<td>23</td>
<td>39%</td>
</tr>
<tr>
<td>Remembering louds and softs</td>
<td>22</td>
<td>37%</td>
</tr>
<tr>
<td>Being embarrassed or self conscious</td>
<td>22</td>
<td>37%</td>
</tr>
<tr>
<td>Pleasing my teachers</td>
<td>21</td>
<td>36%</td>
</tr>
<tr>
<td>The size of the room</td>
<td>20</td>
<td>34%</td>
</tr>
<tr>
<td>Heart racing</td>
<td>19</td>
<td>32%</td>
</tr>
<tr>
<td>Who is in the audience</td>
<td>18</td>
<td>31%</td>
</tr>
<tr>
<td>Done enough practice</td>
<td>18</td>
<td>31%</td>
</tr>
<tr>
<td>Order of play</td>
<td>16</td>
<td>27%</td>
</tr>
<tr>
<td>Butterflies in tummy</td>
<td>15</td>
<td>25%</td>
</tr>
<tr>
<td>Sweaty hands</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td>Being put off by sounds in the room</td>
<td>12</td>
<td>20%</td>
</tr>
<tr>
<td>Fast breathing</td>
<td>10</td>
<td>17%</td>
</tr>
<tr>
<td>Feeling tension in different parts of body</td>
<td>9</td>
<td>15%</td>
</tr>
<tr>
<td>Thinking about other things when performing</td>
<td>5</td>
<td>8%</td>
</tr>
<tr>
<td><strong>59 Responses</strong></td>
<td><strong>401</strong></td>
<td></td>
</tr>
</tbody>
</table>
These results show that ‘mistakes’ was the number one concern for this age group, and was a high percentage of the total (86%). Like the younger age group concerns about other items show a mix of concerns with no one category of concern apparently higher than another. The order of concerns seems to reflect the development of self-awareness (playing on your own, and the piano you have to play) and less about physiological symptoms of arousal compared to the younger age group.

The qualitative findings suggest a breadth of individual differences. This is confirmed in Table 6.8 which shows the Component One concerns from the factor analysis for the sample of pupils who went on to participate in both action cycles. Nine of these pupils were my own, therefore the results were of practical interest to me. To give the reader an idea of the patterns in the data I have coloured coded the scores:

- High concern is scored 8 – 10 in red,
- Moderate concern 5 – 7 in yellow
- Little concern 1 – 4 in green.

The items are in a priori categories, which further demonstrates the individual nature of pupils’ performance concerns.

The bottom row of Table 6.8 shows the total number of high scores (in red) for each pupil, which shows a variation from 2 – 8.

6.5.4. Summary

These findings answer the following question:

**RQ9 What is the experience of performing like for recreational piano pupils?**

There were both individual and developmental differences apparent in the findings. Very young children on the whole seem to enjoy performance. As they get older some pupils may be more aware of distractions from the performing environment, their own physiological reactions, and cognitions. At all age groups and levels of ability all pupils had some concerns about performing. ‘Mistakes’ was the number one concern in both age groups, with an increase in the percentage for
the older age group. ‘Mistakes’ was also mentioned in comments about hobbies (6.2.5). Results for both age groups with larger samples might differ. What is most significant is the range of individual differences, and that in some cases pupils’ responses could not have been predicted.

Table 6.8. Individual pupil profiles of performance concerns from Factor One (Performance distractors).

<table>
<thead>
<tr>
<th>Pupil codes</th>
<th>Mary P1</th>
<th>Mary yP2</th>
<th>Mary yP4</th>
<th>Mary yP5</th>
<th>Mary yP6</th>
<th>Mary yP7</th>
<th>Mary yP8</th>
<th>Mary P9</th>
<th>Mary P10</th>
<th>Jane tP5</th>
<th>Ange laP5</th>
<th>Lynn P14</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PERFORMANCE ENVIRONMENT</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Piano</td>
<td>2</td>
<td>7</td>
<td>8</td>
<td>5</td>
<td>7</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Venue size</td>
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<td>2</td>
<td>9</td>
<td>7</td>
<td>7</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>7</td>
<td>1</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Sounds in the room</td>
<td>1</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>5</td>
<td>2</td>
<td>7</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>Order of play</td>
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<td>4</td>
<td>7</td>
<td>7</td>
<td>6</td>
<td>3</td>
<td>1</td>
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<td>3</td>
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<td></td>
<td></td>
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<td></td>
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<tr>
<td>Being embarrassed/self conscious</td>
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<td>2</td>
<td>7</td>
<td>6</td>
<td>8</td>
<td>9</td>
<td>7</td>
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<td></td>
</tr>
<tr>
<td>Thinking about other things</td>
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<td>3</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>2</td>
<td>1</td>
<td>7</td>
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<td>3</td>
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<td><strong>PHYSIOLOGICAL SYMPTOMS</strong></td>
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<td>8</td>
<td>2</td>
<td>8</td>
<td>8</td>
<td>2</td>
<td>4</td>
<td>10</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Butterflies in tummy</td>
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<td>2</td>
<td>4</td>
<td>5</td>
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<td>8</td>
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<td>5</td>
<td>6</td>
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<td>Tension in body</td>
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<td>3</td>
<td>1</td>
<td>8</td>
<td>1</td>
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<td>7</td>
<td>5</td>
<td>1</td>
<td>5</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Getting tempo right</td>
<td>4</td>
<td>3</td>
<td>8</td>
<td>6</td>
<td>5</td>
<td>7</td>
<td>7</td>
<td>3</td>
<td>1</td>
<td>9</td>
<td>7</td>
<td>1</td>
</tr>
<tr>
<td>Remembering Phrasing and dynamics</td>
<td>10</td>
<td>8</td>
<td>8</td>
<td>7</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>1</td>
<td>9</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td><strong>PLEASING SELF</strong></td>
<td></td>
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<td></td>
<td></td>
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<td>10</td>
<td>10</td>
<td>3</td>
<td>1</td>
<td>8</td>
</tr>
<tr>
<td>Whether I like the music I’m playing</td>
<td>1</td>
<td>6</td>
<td>7</td>
<td>9</td>
<td>8</td>
<td>1</td>
<td>6</td>
<td>1</td>
<td>1</td>
<td>1</td>
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<td>8</td>
</tr>
<tr>
<td>Done enough practice</td>
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<td>7</td>
<td>3</td>
<td>6</td>
<td>3</td>
<td>8</td>
<td>8</td>
<td>5</td>
<td>8</td>
<td>7</td>
<td>1</td>
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<tr>
<td><strong>Total scores 8-10</strong></td>
<td>4</td>
<td>2</td>
<td>8</td>
<td>6</td>
<td>3</td>
<td>5</td>
<td>3</td>
<td>3</td>
<td>7</td>
<td>6</td>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
6.6. Theoretical and practical implications of the findings

The main theoretical implication of the data relating to the performance experience is that the framework for thinking about performance through the lens of ‘nerves’ does not explain the diversity of responses. The Factor Analysis suggests that the theory of attention could be more useful. Factor one was a diverse mix of concerns that could only be linked together as performance distractors. Sport psychology is already investigating theories of attentional control to better explain performance, where arousal and anxiety are viewed as part of a range of performance distractors (see Moran & Toner, 2017 pp.116 -120). This is a positive way to think about performance and the difficulties of performance.

Practical implications for teachers are that getting to know your pupils and their performance concerns individually is crucial. Understanding the pupil and how concerned they are about accuracy is important. Perhaps, most important of all is that teachers should not make assumptions before talking to their pupil; ‘your nerves’ are not ‘their nerves’.

These data also showed that all age groups of recreational pianist, including very young children are capable of learning performance coping strategies with and without expert help. This extends knowledge about the development of performance strategies. The contrast between the enjoyment of performance for younger and older pupils suggests that deliberate performance training might be more relevant for older pupils, and some younger ones.

There were some interesting and unexpected findings, which also have practical implications for the development and teaching of psychological skills. What I had not expected was that pupils as young as 8 years old were already developing strategies for performance without any specific teaching. This implies that teachers should discuss performance with even young pupils so they might build on strategies the pupil already uses.

Another unexpected finding was that intermediate standard teenagers were using mental rehearsal and that they learned and developed this skill by themselves. It is likely that mental rehearsal is a skill that requires well-developed cognitive ability, which might explain why younger children did not use it. It is also a skill that is perhaps more relevant to pupils learning more advanced music. Because mental
rehearsal is an imagery skill relating to the improvement to learn the music rather than directly improving performance I did not discuss this further with the teachers and we did not specifically teach this as a skill in the action cycles.

Implications for the teaching and learning of mental strategies for performance are that for many, who have not developed adequate performance strategies by themselves, the deliberate teaching of performance strategies could enhance the performance experience. The teachers had developed some coping strategies yet still did not enjoy performance. Some teachers, however, had developed ways to teach performance strategies based on instinctive understanding that comes from experience and common-sense. This teaching was haphazard and lacked a theoretical basis, but some of the strategies taught and learned seemed to have commonalities with mental strategies researched in sport psychology (2.1).

In some instances there was a mismatch between what the pupils said they had learned and what the teachers said they taught. The reasons for this were not clear. Some older pupils appeared to have more awareness of their psychological needs than their teachers. The teachers’ preoccupation was to reduce ‘nerves’, but the pupils wanted to improve confidence and concentration in addition to keeping calm. The findings in this chapter make a case that more can be done to help recreational pianists through structured training/teaching.

The data about pupils’ hobbies showed that piano was not always the most important part of a pupil’s life. The ABRSM Making Music Survey (2014) noted that ‘the primary reason why children and adults stop learning is lack of interest in playing as well as competing pressures from school work and other activities’. The practical implication is that if pupils are going to be engaged in learning to play the piano, teachers have to make it fun and perhaps more sociable.

6.7. Conclusion

The aim of this chapter was to put the next three chapters into context, by presenting demographic information for the sample, evidence of performance preparation from both teacher and pupil perspective, as well as offering insight into the performance experience for recreational piano pupils. The findings present new knowledge about recreational piano pupils and their teachers. The differences in the performance experience of children aged 11 years and under and pupils 12 years
and older, confirmed the teachers’ instinct that it is important to consider individual and developmental differences in the applicability of PST.

The findings about the teachers’ performing experience, their teaching of performance skills, and what the pupils used and were taught provides more evidence that instrumental teachers are not involved in the purposeful teaching of performance skills, (see also 1.1.4 and Chapter 4) and that musicians, pianists in particular, can and do develop strategies by themselves for performance. The findings also strengthen the argument that musicians would also benefit from being taught performance skills.

In the next two chapters I explore how the teachers responded to using PST as an approach to help piano pupils have positive performance experiences. It was hoped that an additional benefit of teaching performance strategies might be that pupils enjoy piano as much as, if not more than, other hobbies.
7 Teaching and learning mental strategies

In this chapter I examine the teaching of imagery, self-talk, relaxation, and performance routines and how they were implemented into regular one-to-one piano lessons. These are strategies that can be used at the performance as well as in preparation for performance. Although the teaching process was largely integrated I discuss the teaching of each strategy separately, in order to examine the approaches and the benefits for pupils more closely. Data sources for this chapter are teacher reflections, teacher plans, teacher and pupil diaries, performance evaluations and meeting transcripts (3.4.4). Where relevant I discuss how the findings confirm or extend previous research on individual strategies to improve psychological skills (2.2).

At the start of the project one of the main concerns the teachers expressed was that they would not have time for teaching ‘anything else’. I therefore examine the practicality and ease of teaching each strategy in 20/30- minute piano lessons. I reflect on what I learned as practitioner from this teaching in the action cycles, and as researcher highlight some of the factors that led to success in our teaching and the improvement in the performance experience for our pupils. The research question particular to this chapter is:

RQ10 How can piano teachers teach imagery, self-talk, relaxation and pre-performance routines to improve the performance experience for their pupils?

Data collection and analysis are described in 3.4.5 and 3.4.6. Recruitment of teachers and pupils for the project was discussed in 3.4.2. Recruitment of pupils for the questionnaire survey was discussed in the introduction to Chapter 6. In the following I explain recruitment of pupils for the action cycles.

7.1. Recruiting pupils for the action cycles

One of the purposes of the questionnaire survey was to provide each teacher with performance data about their own students. Teachers were asked to recruit pupils for the action cycles based on this data. I assumed that all the teachers would choose pupils who could continue for the two cycles so progression in the teaching could be
demonstrated. However, it became obvious at the first meeting that my recruitment plan had to be flexible. Most of the teachers chose pupils for a variety of reasons I had not anticipated.

One reason was practicality. Janet said she wanted to choose a small number so the research was manageable. In Cycle 1, her choice was two pupils who contrasted one another: one was confident, and the other not. In Cycle 2, her choice came about partly through circumstance, because she had three pupils all ready to take Grade 7 ABRSM the following term, and partly because she chose to use goal setting as a strategy. Yvonne thought about the practicality of the mental skill she would teach and at first prioritised *what* to teach rather than *who* to teach. She was also constrained by performance opportunities as well as wanting to teach pupils taking both examinations and playing in concerts. This led her to choose different pupils in each cycle.

It was not apparent in the data why Fiona chose her pupils, and she withdrew from the project after Cycle 1. Lynn based her choice for Cycle 1 on those who were ‘visibly nervous’. In Cycle 2 she chose a group of pupils aged 11 years and under in order to organise her own ‘mini-project’ where her teaching was focused on mistake management and encouraging ‘best possible performance’. Angela and I both chose pupils who needed help with confidence. I also chose two pupils who were confident performers but did not always give their best possible performance.

I allowed the teachers to create the best solution for their own circumstance, and had to accept that the research should fit in with their current teaching not vice versa. The disadvantage was that it was difficult to judge progression because the sample participating in both cycles was small. However, the way the teaching developed showed a variety of teaching styles that may not have been evident otherwise. I chose older pupils deliberately because I thought they would be able to articulate their performance experiences better than young children. Had I insisted that we all taught the same age group, I would have missed interesting data about children aged 11 years and under.
7.2. The pupil participants

Table 7.1 summarises the number of pupils chosen for each action cycle. 14/25 pupils who participated in Cycle 1 continued to Cycle 2 (9 were my pupils).

Table 7.1. Number of pupil participants in action cycles by teacher.

<table>
<thead>
<tr>
<th>Teachers</th>
<th>Janet</th>
<th>Fiona</th>
<th>Yvonne</th>
<th>Angela</th>
<th>Lynn</th>
<th>Mary</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cycle 1 only</td>
<td>1</td>
<td>2</td>
<td>4</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>11</td>
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<tr>
<td>Cycle 2 only</td>
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<td>2</td>
<td>0</td>
<td>5</td>
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<td>9</td>
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<td>Cycle 1 and 2</td>
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<td>0</td>
<td>2</td>
<td>2</td>
<td>9</td>
<td>14</td>
</tr>
</tbody>
</table>

Table 7.2 shows the 34 individual pupils and the codes by which they will be referenced. The type of performance given at the end of each cycle is also shown. The majority of pupils in each action cycle were young beginners and intermediate teenagers. There were no pupils under the age of 8 years, and no teenagers older than 16 years. A few adults were beginner or intermediate standard. Some teenagers and adults were at advanced standard. In Cycle 1 16% were male and 84% female. In Cycle 2 35% were male and 65% female.

Table 7.2. Pupil participants in the action cycles.

<table>
<thead>
<tr>
<th>PUPIL</th>
<th>GENDER</th>
<th>AGE</th>
<th>LEVEL</th>
<th>PERFORMANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CYCLE 1 ONLY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>JanetP2</td>
<td>Male</td>
<td>8-11</td>
<td>Intermediate</td>
<td>Examination</td>
</tr>
<tr>
<td>FionaP1</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
<td>Examination</td>
</tr>
<tr>
<td>FionaP12</td>
<td>Female</td>
<td>17-18</td>
<td>Advanced</td>
<td>Examination</td>
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<td>YvonneP20</td>
<td>Female</td>
<td>8-11</td>
<td>Beginner</td>
<td>Pupil Concert</td>
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<td>YvonneP7</td>
<td>Female</td>
<td>8-11</td>
<td>Beginner</td>
<td>Pupil Concert</td>
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<td>YvonneP14</td>
<td>Female</td>
<td>8-11</td>
<td>Beginner</td>
<td>Examination</td>
</tr>
<tr>
<td>YvonneP1</td>
<td>Female</td>
<td>8-11</td>
<td>Beginner</td>
<td>Pupil Concert</td>
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<tr>
<td>AngelaP12</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
<td>Pupil Concert</td>
</tr>
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<td>LynnP13</td>
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<td>12-16</td>
<td>Intermediate</td>
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<td>Gender</td>
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<td>Event</td>
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<td>Beginner</td>
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<td>Intermediate</td>
<td>Pupil Concert</td>
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<td><strong>CYCLE 2 ONLY</strong></td>
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<td>12-16</td>
<td>Advanced</td>
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<td>Intermediate</td>
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<tr>
<td>LynnP1</td>
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<td>8-11</td>
<td>Beginner</td>
<td>Pupil Concert</td>
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<td>LynnP8</td>
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<td>LynnP11</td>
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<td>8-11</td>
<td>Beginner</td>
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<td>6-7</td>
<td>Beginner</td>
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<td>Pupil Concert</td>
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<td>Beginner</td>
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<td>Adult</td>
<td>Beginner</td>
<td>Examination Pupil concert</td>
</tr>
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<td>Female</td>
<td>8-11</td>
<td>Beginner</td>
<td>Pupil Concerts</td>
</tr>
<tr>
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<td>Female</td>
<td>Adult</td>
<td>Intermediate</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP1</td>
<td>Male</td>
<td>12-16</td>
<td>Advanced</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP2</td>
<td>Male</td>
<td>12-16</td>
<td>Advanced</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP4</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
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</tr>
<tr>
<td>MaryP5</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP6</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP7</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP8</td>
<td>Female</td>
<td>12-16</td>
<td>Intermediate</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP9</td>
<td>Female</td>
<td>Adult</td>
<td>Advanced</td>
<td>Pupil Concerts</td>
</tr>
<tr>
<td>MaryP10</td>
<td>Female</td>
<td>Adult</td>
<td>Advanced</td>
<td>Pupil Concerts</td>
</tr>
</tbody>
</table>
7.3. Teaching performance strategies

The teachers were free to choose what to teach appropriate to their pupils. The strategies they each chose are shown in Table 7.3.

Table 7.3. Strategies taught in the action cycles.

<table>
<thead>
<tr>
<th>Strategy used</th>
<th>Cycle 1</th>
<th>Cycle 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagery</td>
<td>Fiona Lynn</td>
<td>Mary</td>
</tr>
<tr>
<td>Positive self-talk/positive thinking/behaviour</td>
<td>Janet Angela Mary</td>
<td>Yvonne Angela Lynn Mary</td>
</tr>
<tr>
<td>Relaxation</td>
<td>Angela Lynn</td>
<td>Angela Lynn</td>
</tr>
<tr>
<td>Goal setting</td>
<td>Janet</td>
<td>Mary</td>
</tr>
<tr>
<td>Pre-performance routine</td>
<td>All teachers</td>
<td>All teachers</td>
</tr>
<tr>
<td>Simulation Training</td>
<td>All teachers</td>
<td>All teachers</td>
</tr>
</tbody>
</table>

Every teacher taught performance routines and simulated performance practice. Angela and Lynn used more strategies in Cycle 2 than in Cycle 1. In the following I examine the teaching of imagery, self-talk, relaxation, and performance routines, and how this compares to their previous teaching described in 6.3.

7.3.1. Imagery

Janet, Fiona and Lynn said they used visualisation for themselves as performers (Table 6.3). Fiona described that she had used visualisation of ‘the situation’ when taking examinations. None of the teachers, including me, had taught imagery before. During the action cycles four teachers including me taught imagery to 12 pupils, as shown in Table 7.4. Seven pupils wrote in the questionnaire survey that they used imagery already. These pupils are marked with an asterisk. Five of these pupils wrote that they developed the strategy by themselves; the other two from other influences, including ‘pointers from their teacher’ (MaryP1).
Table 7.4. Teachers and pupils working on imagery in the action cycles.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Cycle</th>
<th>Pupil</th>
<th>Age</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiona</td>
<td>One</td>
<td>P1</td>
<td>Teenage</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Angela</td>
<td>One &amp; Two</td>
<td>P5 *</td>
<td>Adult</td>
<td>Beginner</td>
</tr>
<tr>
<td>Lynn</td>
<td>One</td>
<td>P12 *</td>
<td>Adult</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>P13*</td>
<td>11 years &amp; under</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1* P8* P10</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P11*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary</td>
<td>One</td>
<td>P7*</td>
<td>Teenager</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P9* P10</td>
<td>Adult</td>
<td>Advanced</td>
</tr>
</tbody>
</table>

Angela taught imagery in both cycles to the same pupil. Fiona and I only taught imagery in Cycle 1. Lynn taught imagery to one adult in Cycle 1 and four young pupils in Cycle 2. At the start of Cycle 2 she noted from her pupils’ questionnaire data that three young pupils already used imagery, and she decided to build on this in her teaching.

7.3.1.1. Image content

There were three images that pupils tried or were encouraged to develop. The first was visualizing the performance venue, which was used by Fiona P1 in Cycle 1, and all Lynn’s beginner pupils in Cycle 2. The second was visualizing oneself at the performance. My adult pupil P9 imagined ‘sitting at the concert waiting for my turn’ (Pupil Diary, Cycle 1). The third image was created to help with pupil concerns about the audience watching them. An image suggested by both Angela and I for these pupils was to imagine themselves in a bubble, as they sat down to play, which might help separate them from the audience. I had talked about using this as an image with Angela at our first individual meeting. One of my pupils, who did not participate in the action cycles, had used this image successfully at a pupil concert.

Evidence showed that images were not fixed. Fiona’s teenage pupil P1 was preparing for Grade 5 ABRSM examination and at first imagined herself at the venue.
because she had been there before. The date and the venue were changed, so, encouraged by her teacher, she changed her image to one where she was playing on a grand piano. Angela’s adult pupil P5 at first tried ‘imagine the audience as a blurred presence outside the bubble’. By week three however, she decided that she really wanted to engage with the audience. She sang in a barbershop group so she was used to this. She then changed to imagining a ‘friendly audience’ with no bubble.

7.3.1.2. Creating the images
Two teachers deliberately helped to create images by physical means. In one practice performance, Fiona did this by putting the music higher to replicate where it would be on the grand piano that P1 had to play in her examination. Lynn deliberately laid out her studio, as it would be several weeks ahead of the concert. She wrote in her week two diary in Cycle 1, ‘I am hoping this familiarity will help on the day – it will seem a less daunting layout and easier to imagine the people in the audience if you can see the chairs’.

My adult pupil P9 used a combination of things to develop her imagery. She wrote that she used imagery already before the project began. My role as teacher was to discuss how this might be integrated into her performance routine rather than advise her on the content and development of her images. The pupil herself wrote about resources she might use to help her with her imagery, ‘…books concerning this Inner Game, Tuning In, Mind over matter & audio’ (Pupil Diary, Cycle 1).

7.3.1.3. Did teaching and using imagery improve the performance experience?
The pupils used images in the action cycles to aid practice and improve the performance experience by improving psychological skills of confidence, concentration and control. The images could be categorised as Motivational General Mastery (MGM) and Motivational General Arousal (MGA) (see categories discussed in 2.2.1.3).

For two pupils the main function of the imagery was to keep them feeling calm and under control during practice for the performance (MGA).
I imagined playing at the exam a lot, which helped because it stopped me stressing about parts of the exam which I am not good at, eg sight reading (FionaP1, Pupil Diary, Cycle 1)

Imagery loosens the nerves... The fact I imagined myself playing well gave me a positive mindframe and so I actually did what I thought (MaryP2, Pupil Evaluation, Cycle 2).

In addition to helping to keep her calm MaryP8 wrote, ‘practising as if it was the concert helped me take my time...’. AngelaP5, an adult who had taken grade one examination in Cycle 1, and worked towards playing in a concert in Cycle 2, also developed her imagery ‘so the audience didn’t make me feel nervous’ because it affected concentration.

Data from pupil diaries and pupil performance evaluations showed that imagery was used mostly to pre-experience the performance. Whether this was an image of the venue, an image of the pupils themselves at the venue, or just the feeling of being at the performance, imagery led to confidence (MGM). There was agreement from several pupils that pre-experiencing the performance through imagery felt like the ‘real thing’ (AngelaP5). Lynn’s young pupils P10 and P11, and my teenage pupil P6 all wrote in the performance evaluation that imaging the concert venue helped them feel what the concert would be like. MaryP8 said that this type of image used in her practice built up her confidence ahead of the performance. Similarly, my adult pupil P9, who imagined herself waiting to play at the concert, wrote that she was associating the image ‘with feeling positive...’ (diary week three).

Fiona’s teenage pupil P1 wrote about imagery at length in her performance evaluation, in which she made a link between imagery, confidence and quality of performance.

I think this helped when I was actually in the exam, it was nearly the situation that I had imagined. However, as I did not know the venue... I could not imagine the room, but I imagined playing at a grand piano instead and that was quite effective. I think it improved my confidence which helped me to perform better because I tried to play it as I had imagined (Pupil Performance Evaluation, Cycle 1).
It was noticeable that all age groups and levels of performer used imagery to pre-experience the performance and build confidence.

Imagery did not always function as a skill on its own. Lynn's pupils P1, P8 and P12 all attributed their confidence in the performance to using imagery in combination with practice performances and/or other strategies.

7.3.1.4. Imagery ability and belief

Imagery did not work for a few pupils. MaryP7, a teenager, and two adults, LynnP12 and MaryP10, attempted imagery from suggestions made by the teacher. However, they all rejected the ideas after trying them out at home. MaryP7 said imagery was 'too hard', even though she wrote that she used imagery before the project began. I missed an opportunity to challenge her about this. MaryP10 simply said, 'imagine playing in front of people doesn't really seem to work'. Lynn's adult pupil P12 found that seeing the chairs laid out in lessons made her feel more nervous, and at home the teacher noted that this pupil was not really allowing herself to imagine the scene.

Belief also played a part in imagery use. From the first lesson, Lynn's pupil P12 was skeptical. She said she did not believe in imagery, as it is 'not the real thing... it's just pretend'. Lynn's other adult pupil P14 was also not convinced at the start of Cycle 1. However, by week three she wrote in her diary that she 'could completely reenact/imagine the performance' and she continued with this in Cycle 2. Interestingly both pupils wrote in their evaluations that they used imagery at their performances.

It was also notable that some pupils used imagery at the performance, who had not been taught. One such pupil, thought that imagery 'helps me to understand my thoughts and behaviour at the performance so I can prepare adequately' (JanetP5, Performance Evaluation).

7.3.1.5. Practising Imagery

There was some evidence from pupil diaries that pupils practised imagery at home. My pupil P9 wrote in her diary that she practised her entire routine, which began with her image of herself sitting waiting to perform. There was evidence in Cycle 2 week two and four that Angela's adult pupil P5 practised 'visualisation' of the
performance and a ‘friendly audience’ (Pupil Diary). Imagery seemed to take a few weeks of practise before pupils found it of value. In Cycle 2 it was clear that by week three Lynn’s pupil P1 was able to visualise the concert in practice and acknowledged this to the teacher (Teacher Diary). All pupils who were taught imagery, with the exception of MaryP7 and MaryP10 used imagery for their performances.

7.3.1.6. Discussion

Imagery research for musicians has focused on the use of imagery for learning and memorisation rather than performance (2.2.1.3). The possibility that teachers could play a role in the development of imagery was noted (2.2.1.5). This research shows that teachers can play a role in developing their pupils’ use of imagery for performance. The teacher played two roles; one was to help create and develop images for those with sufficient imagination, and the other to encourage pupils to practise these images. The teacher was able to extend the range of pupils’ images for performance; one way was to physically provide aspects of the performance venue for the pupil, which helped to create and secure the image.

Teaching came in the form of encouragement rather than deliberate teaching that can be learned and checked. It is difficult to check the learning of something that is in one’s imagination, because the teacher cannot really know if a suggestion can be, or is going to be, replicated by the pupil. This has already has been highlighted as a general problem in qualitative imagery research (Moran, 2004). However, there was some diary evidence that, through discussion, some pupils were taking up the suggestions of their teachers, and practised imagery at home.

The questionnaire findings that imagery is a skill that can be used and developed spontaneously without the help of teachers (6.4.1) was confirmed in the pupil performance evaluations. For example, I discussed the use of imagery with only three of my pupils, yet 8/9 pupils used imagery at their performances. This was true of pupils of other teachers.

Similar to research findings on specialist musicians’ imagery, the imagery of recreational pianists also showed individual differences in the type of images used as well as how the individual perceived its function. The functions of the images used in our teaching seemed to be MGA and MGM (2.2.1.3) similar to those found in studies of specialists (Clark & Williamon, 2011; Haddon, 2007; Partington, 1995).
Some images seemed to function to control arousal immediately prior to the performance, a finding expected by Gregg et al., (2008) but not confirmed. Pre-experiencing the performance, which was found useful for professionals (Partington, 1995) and also for young specialist musicians aged 14 – 18 years (MacNamara & Collins, 2009) was also shown to be useful for recreational piano pupils of all ages, and gave confidence by helping to conquer fear of the unknown.

It was not possible with such a small sample to show how age, skill level or gender affected imagery creation and use. What is new is that recreational pupils as young as 8 years old to pupils over 50 years, can and do use imagery for music performance. This perhaps does not support the finding in sport of Cumming and Hall (2002) that recreational athletes value imagery less than the professionals. Some pupils seemed to find creating images easier than others, and belief in imagery did play a part. There were two skeptical adults and one teenager. It may be that as we age, barriers are erected that prevent us from accessing our imagination so easily. It may be that being self-conscious is also a barrier to the imagination.

7.3.2. Teaching positive self-talk and other positive language strategies

All the teachers wrote that they used positive self-talk for performance themselves (Table 6.3). However, Fiona, Yvonne and Lynn gave examples of self-reassurance rather than instructional or motivational self-talk (2.2.2.2). Angela was the only one to use positive statements before a performance that seemed motivational. She said that she had read a book on ‘the power of positive thinking’ in order to cope with a performance she ‘had been dreading for weeks’. I had used positive self-talk as a tennis player but I was not aware that I used similar statements as a pianist (First Reflection).

In my teaching I had used statement cards with an advanced pupil before (1.1.3). Thought reframing and the deliberate use of cue words were new strategies for me to use with piano pupils, although I had used these techniques with tennis players. None of the other teachers had used these strategies before. Three teachers gave reassurance to their pupils through discussion, especially with regard to mistakes, and the audience. For example, ‘keep going and ignore mistakes’ (Fiona) ‘the audience are on your side’ (Lynn). Yvonne said that she discussed with pupils what to do ‘if something goes wrong’ and Lynn also reassured her pupils that ‘it
doesn’t matter on the day it is the journey that counts’. At the first group meeting Angela was most enthusiastic about self-talk. She started to compose positive statement cards before we met individually. Not all teachers were convinced about teaching self-talk as a strategy. Fiona thought that it seemed ‘a bit fake’.

7.3.2.1. Teaching positive self-talk in the action cycles

Table 7.5 shows that three teachers, including me, deliberately worked on positive language strategies and cue words with 10 pupils during the action cycles. 4/10 pupils already used self-talk for a performance and are shown with an asterisk (*). They all wrote that they learned this strategy by themselves.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Cycle</th>
<th>Pupil</th>
<th>Age</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angela</td>
<td>One &amp; Two</td>
<td>P3 *</td>
<td>11 years &amp; under</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P12</td>
<td>Adult</td>
<td>Beginner</td>
</tr>
<tr>
<td>Lynn</td>
<td>Two</td>
<td>All young pupils</td>
<td>11 years &amp; under</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1 P8* P10 P11*</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>P15 P16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary</td>
<td>Two</td>
<td>P1 P2 *</td>
<td>Teenager</td>
<td>Advanced</td>
</tr>
</tbody>
</table>

Angela was the only teacher to purposely use positive self-talk cards with her pupils in Cycle 1. Lynn and I were the only teachers to use cue words/symbols in Cycle 2.

7.3.2.2. Positive statement cards and their function

Angela introduced positive statements written on cards for two of her pupils as follows:

AngelaP3, an 8 year old boy

I can do it

Mistakes won’t matter – I will feel good if I complete my performance
AngelaP12 a teenage girl

Practising well in advance of my performance will give me security and confidence.
Good preparation will give me the chance to enjoy the music rather than worry about the notes.

P12, who Angela was nurturing back to performance after a long break, chose cards from the selection of statements that Angela had written. Two weeks before the concert she brought her chosen statements to the lesson. These cards were designed to help the pupil reframe negative thoughts rather than short motivational phrases that could be used at the performance. P12 acknowledged in her performance evaluation that ‘positive thinking cards helped me prepare for the performance’ but she did not say how.

P3, a young boy of 8 years, wrote in the questionnaire that he used self-talk already. Angela noted this and thought the cards could work because ‘he says he uses positive thinking to talk himself into not being afraid of monsters etc when lying in bed alone’ (Teacher Diary). According to Angela he used positive statements in both cycles to increase his confidence, although in the performance evaluation he was too young to articulate how self-talk had helped him.

Using positive statements was not suitable for all pupils. Angela suggested this may be a useful strategy for adult pupil P5, but the pupil herself wrote that she preferred to ‘internalise a positive feeling rather than use specific words or sentences’. However, she indicated in both performance evaluations that she had used self-talk. She did not write how it helped for the performance.

In Cycle 1, I encouraged some pupils to include positive statements as part of their routines (7.3.4.3). My pupil P4 used self-talk to calm herself while she was waiting to play, and pupil P7 said she said words to herself to keep calm as she walked out to play. It was evident that my adult pupils P9 and P10, with whom I was not deliberately teaching or discussing self-talk and positive thinking, also used self-talk for the performance spontaneously.

7.3.2.3. Positive thinking through positive language
We had discussed the importance of talking and thinking positively in lessons at the first group meeting, as well as the possibility that we could inadvertently be teaching ‘nerves’ through the use of negative language. I emailed the teachers a
paper published at this time on this topic (Patston, 2014). Both Janet and I discussed talking positively with pupils as a strategy. I wanted to encourage the teachers to notice any negative language in lessons particularly about performance. With the exception of Fiona, there was evidence that all the teachers deliberately used positive language as much as possible.

Janet wrote the same positive comments for weeks one to three in her planning:

1. have confidence in own ability – you are ready for the exam
2. ‘think positive’ before performance – practise this when playing to parents/ friends.

These statements were diary reminders about the language she would use in the lessons leading up to the examination. I had been taught about the importance of motivational language in tennis coaching. It was not clear if Janet had been taught about positive language. Her aim seemed to be to lead by example, expecting her pupils to ‘catch’ her positive thinking.

7.3.2.4. Positive Triggers

In sport, athletes use individual trigger or cue words to remind them of a positive feeling or to help them focus better on the performance (2.2.2.3). I gave the group examples of this at our first meeting. In Cycle 2 Lynn took the idea of triggers or cues and used stickers on the music to increase confidence while practising for 8 year old P16. Whenever P16 got through his piece without stopping in practice at home, Lynn asked him to put a smiley face on the book. The idea was that the more smiley faces he achieved, the more confident he would feel. P15, playing at her first concert, said she was ‘worried the audience will be looking at me and I’ll forget to look at the music’. Lynn used stickers placed on the music as reminders to concentrate on the music and not the audience.

I used cues in the form of words integrated into two pupils’ PPRs. Teenagers P1 and P2 were playing advanced pieces that began softly. I suggested they use the cue word ‘KEYBED’ as part of their routine to remind them how to achieve a soft sound. This was to act both as a technical reminder and also to bring their mind into focus before they began to play. Other pupils wrote down words like ‘TEMPO’ on
their music as technical reminders for when they were performing, but I also felt these cues would prevent attention being paid to distractions from symptoms of arousal or anxiety. P1 and P2 both practised using key words as part of their routines (7.3.4.3). However, neither of them mentioned this in their evaluations. In my evaluation of P1’s performance I noted that he ‘took his time at the start getting good soft tone, something we had worked on using a key word to help (Teacher evaluation MaryP1). However, P2 rushed at the start of his performance and played too loudly. It is possible he needed more practise for this to become part of the performance. There was no evidence that P1 or P2 practised the cue words at home.

7.3.2.5. Does positive self-talk and positive thinking improve the performance experience?

Very few pupils clearly articulated the benefits of positive thinking and positive self-talk for the performance experience. Most pupils and teachers simply wrote that it was beneficial. Some evidence suggested that positive self-talk could help in similar ways to imagery to manage symptoms of arousal and increase confidence. MaryP4 wrote that ‘saying positive things before playing helped control my nerves and not get too nervous’. For some pupils it was the combination of self-talk with relaxation techniques or other strategies that seemed to work. Janet’s teenage pupil P5 wrote, ‘Saying positive words and breathing exercises, usually helps as it calms me down which is imperative at a performance’ (Pupil Performance Evaluation). Two pupils, MaryP5 and LynnP14 wrote about the use of saying positive words to help ‘boost confidence’.

Self-talk was not helpful to everyone. LynnP13 tried it but reported that it did not work. As indicated in the teaching of imagery, belief seemed to be important. Fiona did not encourage the use of self-talk with her pupils because she did not believe in it herself. However, LynnP3 said in her performance evaluation that ‘telling myself no one is there’ really helped ‘because I believed it and I perform better when no one is there’. It is notable that 13 pupils who were not deliberately taught positive self-talk used this as a strategy for the performance, confirming evidence in 6.4.7 that self-talk can be developed spontaneously.
7.3.2.6. Discussion

Similar to teaching imagery, the teacher’s role in developing pupils’ self-talk seems to be suggestion and encouragement rather than deliberate ‘teaching’. Just as it is difficult to check the learning and practising of imagery it is difficult to check the learning and practise of self-talk. The nature of piano performance means self-talk used at the performance must be covert, so the researcher is reliant on performers recollections, which may not be accurate.

It was not clear if, and how often, pupils practised positive statements or the use of keywords and triggers. This was partly because the pupil diaries were either not very comprehensive or were incomplete. Just like imagery, it was difficult to know if a pupil had practised self-talk. Pupils could practise self-talk away from the piano, which may have gone unnoticed.

Whether teachers chose to teach self-talk showed that the teachers themselves had to believe in the strategies. Angela had some prior knowledge about self-talk from reading a book about positive thinking, which seemed to spark her interest in this as a technique. Fiona who knew little about self-talk was sceptical. However, all teachers agreed that using positive language in lessons was important and we could help prevent ‘nerves’ by not referring to them.

There is little known about the self-talk of musicians in the research literature (2.2.2) and what is known focuses on negative self-talk. The teaching in this study showed that recreational pupils of all ages and their teachers can and do use positive language to their advantage. The use of cards and cue words can help both prior to the performance and at the performance. There were examples of instructional and motivational self-talk, which teachers felt could improve the performance experience. The benefits of instructional talk, or cues were thought to act both as a musical reminder but also as a trigger to aid concentration. Simply using positive language seemed to benefit recreational pupils in similar ways to the specialist students in the interview study (5.3.4.3).

Findings in the questionnaire survey and the teaching confirm that piano pupils can develop and use self-talk instinctively. However, as seemed to be the case in the teaching of imagery, teachers can help in making self-talk more effective by suggesting positive words or statements pupils could use. Piano teachers also seem to play an important role in the development of positive thinking by their choice of
language. The influence of positive and negative language on young children from ‘significant others’ which includes teachers has been shown in previous research (2.2.2.3).

7.3.3. Relaxation Techniques

Angela and Lynn indicated in their first reflections that they used relaxation strategies for themselves as performers. Angela used yoga and Lynn used deep breathing. Prior to the research none of the teachers taught relaxation techniques. If a pupil seemed particularly tense or worked up about a performance I sometimes encouraged them to take deep breaths. This was simple advice rather than technical teaching as described by Grindea (1964, 2001). I had only used ‘deep breathing’ for pupils who were visibly tense when playing in lessons, or who were very ‘worked up’ at a practice performance. At the first group meeting we discussed ‘taught’ techniques such as meditation or yoga as well as deep breathing. I suggested that deep breathing might be more practical and could be included in a performance routine.

7.3.3.1. Teaching relaxation techniques

Table 7.6 shows that Angela and Lynn used relaxation techniques specifically with five pupils in the action cycles. One adult pupil (marked with an asterisk), had used relaxation as a strategy for performance before, and had learned this from ‘past experience’.

Table 7.6. Teachers and pupils working on relaxation in the action cycles.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Cycle</th>
<th>Pupil</th>
<th>Age</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Angela</td>
<td>One &amp; Two</td>
<td>P3</td>
<td>11 years &amp; under</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P5*</td>
<td>Adult</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P12</td>
<td>Teenager</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Lynn</td>
<td>One</td>
<td>P10</td>
<td>11 years &amp; under</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>P13</td>
<td>Teenage</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td>One &amp; two</td>
<td>P14</td>
<td>Adult</td>
<td>Intermediate</td>
</tr>
</tbody>
</table>
7.3.3.2. Deep breathing

The teaching of deep breathing as a technique appeared to be advice to take deep breaths rather than expert teaching of breath control integrated into lessons. Both teachers and pupils chose to teach or use deep breathing because they felt the function of this technique was to calm pupils either before or during the performance. Lynn worked on deep breathing integrated into the simulation of the performance in each lesson leading up to the performance for two pupils. Her aim was to help her pupils control their ‘nerves’ in Cycle 1 because she had chosen pupils who were ‘visibly nervous’.

Lynn wrote in week one of Cycle 1 that 9-year old P10 did not entirely understand what she was being asked to do but several diary entries completed by teacher and pupil together indicated that the pupil practised deep breathing. The teacher also noted that the exercises were helping. Lynn’s teenage pupil P13 wrote in her week one diary that she was ‘working through nerves by breathing’ to get into the optimum performance state. When Lynn realised P13 was working on breathing herself she encouraged her to practise this. She wrote in week 3 diary, ‘Relaxation before and during trying to improve controlling nerves under pressure’. P13 agreed to practise deep breathing at home but by week four the teacher diary revealed that P13 thought relaxation as a technique did not work. P13 wrote in her diary that this was because ‘there’s nobody listening so it doesn’t matter’, and ‘I only get worked up at the performance’. She did not use this strategy at the performance.

There were contrasting results in using deep breathing as a technique to use during the performance to help control shaky hands. Janet left P5 to develop her own strategies. As mentioned previously this pupil wrote that self-talk and relaxation combined helped keep her calm. In Cycle 2 she wrote ‘I think the breathing relaxation technique helps to keep me calm so that my hands don’t shake when I play so I can concentrate’. Adult pupil LynnP14, found the technique:

‘helped a great deal when I was feeling last minute nerves... I used four approaches in all but mainly focused on relaxation which I have done in the past ... overall they all helped me improve confidence (Pupil Performance Evaluation, Cycle 1)."
However, in the Cycle 2 performance, whilst she felt more relaxed before the performance, 'nerves got the better of me' (Performance Evaluation). They did not help control her shaky hands during the performance.

Deep breathing was integrated into the performance routine of AngelaP12, a teenage intermediate pupil who ‘was prone to the occasional panic attack’. Deep breathing was linked with better posture as part of the routine (7.3.4.3). By helping her to act confidently she hoped the pupil would start to feel more confident. It was not clear from P12’s scant diary whether she practised this strategy or not, and as noted in 7.3.2.2 she thought the positive thinking worked best.

7.3.3.3 Yoga

Yoga was a technique used by adult pupil AngelaP5. Both teacher and pupil had previous experience of yoga, from a course they had attended on this subject. Angela chose exercises from the course DVD (Penelope Roskell, n. d.) to help her pupil ‘improve posture, relieve tension and help concentration’. Angela and P5 worked on the yoga exercises together, either before or during lessons in the weeks leading up to the examination. ‘Arm swings’ in particular were integrated into part of a PPR before each of her mock performances. By week two the pupil had written positive comments about confidence for the performance due to yoga. Yoga also seemed to have a positive effect on piano practice by, 'creating a proper space for practicing the piano as opposed to snatching 20 mins here or there around my busy work/home life (Pupil Diary, Cycle 1, AngelaP5). Evidence from her diary shows that she practised yoga arm swings every week. She continued the yoga in Cycle 2 and began to practise this independently. In her performance evaluation P5 wrote that the arm swings/yoga ‘keeps me focused and ready to play’.

7.3.3.4 Other

Angela found an unusual way of working with pupil P3 to help him relax for both lessons and the performance as shown in the following:
RELAXING AND BUILDING CONFIDENCE

Angela P3 8 year old boy playing at a concert

Angela had noticed P3’s negative body language at lessons, and negative language in his questionnaire responses. Angela wanted to help P3 become more positive in both his lessons and performance. Inspired by the idea of controlling one’s chimp from ‘The Chimp Paradox’ (Peters, 2012) which I had mentioned at the first group meeting, Angela found a toy gorilla in her loft which she used as a prop to help P3 relax and build confidence before lessons as well as for the performance.

Angela began using the toy two months before the concert. At first she waited to see the response. The first time P3 met the gorilla, ‘he could not be parted from the toy! His brother took the first lesson, after which P3 was found upside down alongside an upside down gorilla! However, as soon as it was time for P3’s lesson he switched immediately into an alert and focused pupil’ (Week One, Teacher Diary.

Each week in Cycle 1 Angela gave P3 the toy to play with while he waited 30 minutes for his brother to have his lesson. P3 then got the toy to ‘relax’ outside while he had his lesson. He put the toy in a relaxed pose which became the start of his performance routine. On the day of the concert the teacher suggested taking the toy and they left it ‘relaxing in the car’.

The idea to use the toy chimp seemed to be a one off situation rather than a specific relaxation technique that might be copied by others. This pupil was too young to articulate any detail in his performance evaluation. He only wrote, ‘I was only a bit scared during the performance’ suggesting that he was becoming more used to the performance experience.

7.3.3.5. Discussion

Research on relaxation techniques for musicians is at an early stage (2.2.3) and taught techniques such as yoga, meditation, mindfulness or progressive muscle relaxation (PMR) seem to be beneficial for musicians. However, learning how to relax, even through deep breathing is quite technical. Breath control in learning to sing or play a wind or brass instrument, and breathing techniques taught in Yoga and Pilates can take many months to learn properly. Those pupils who found breathing did not work may not have developed their breathing technique well
enough, beyond being advised to take a few deep breaths. Two action cycles were possibly too short to develop this.

As found in the sport literature the physical technique of deep breathing, was associated with managing arousal, whilst yoga, more commonly described as a mental relaxation technique, seemed to help control arousal in practice and improve concentration for the performance.

Pupil evaluations of using deep breathing highlighted the difficulty of trying to recreate the level of arousal experienced in performance in practice. This was observed by (Moran & Toner, 2017) as a problem in research on relaxation (2.2.3.3.). Adult pupil Lynn P14 experienced this problem because her ‘shaky hands’ only manifested themselves at the performance not in practice. Not unlike the pupils who said they could not use imagery because it was not real, (7.3.1.4) teenage pupil LynnP13 found practising relaxation at home did not work for the same reason.

7.3.4. Teaching pre-performance routines

Prior to the research, Janet was the only one to write that she used a pre-performance routine (PPR) for herself. She described what her teachers taught her during the focus group (4.2.2.2), which seemed like routine behaviour but it was not clear if she did this at every performance. She also wrote that she used PPRs with pupils but she did not describe them in her reflections or diaries. Yvonne and Angela regularly taught routines, which they had described in the focus group discussion (4.2.3.4). PPRs were my main strategy at the start of the project. I taught routines to all my pupils for several weeks leading to a performance.

7.3.4.1 Teaching routines in the action cycles

Table 7.7 shows that all teachers taught PPRs in the action cycles to 27 pupils. Pupils who already used PPRs are shown with an asterisk. The few that said they used a routine or there was always something they did before each performance said they had developed this by themselves.
Table 7.7. Teachers and pupils working on performance routines in the action cycles.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Cycle</th>
<th>Pupil</th>
<th>Age</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiona</td>
<td>One</td>
<td>P12</td>
<td>Teenage</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yvonne</td>
<td>One</td>
<td>P1, P7, P14, P20</td>
<td>Young</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td>Two</td>
<td>P5, P12</td>
<td>Teenage</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Angela</td>
<td>One &amp; Two</td>
<td>P5 *</td>
<td>Adult</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P3</td>
<td>Young</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P12</td>
<td>Teenage</td>
<td>Intermediate</td>
</tr>
<tr>
<td>Lynn</td>
<td>Two</td>
<td>P12, P13</td>
<td>Adult</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P1, P8, <em>P10</em>, P11*</td>
<td>11 years &amp; under</td>
<td>Beginner</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P15, P16</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mary</td>
<td>One &amp; Two</td>
<td>P1, P2, P4, P5, P6, P7, P8</td>
<td>Teenager</td>
<td>Intermediate</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P9, P10</td>
<td>Adult</td>
<td>Advanced</td>
</tr>
</tbody>
</table>

Yvonne, Angela and I taught routines in both cycles. Yvonne taught different pupils, whereas Angela and I taught the same pupils. Lynn only began to teach routine behaviour to her young pupils in Cycle 2. Janet was the only teacher not to give evidence of teaching performance routines. Fiona allowed her pupil P12 to develop the routine herself, but allowed time for her pupil to practise it in lessons.

7.3.4.2. Content of routines

The routines taught were ‘self paced acts’ (see 2.2.5.1) developed as part of the performance. All routines began with simple suggestions. Each teacher described a similar basic routine, which included walking up to the piano, adjustment of the stool and ‘bowing afterwards’. Angela also deliberately taught bowing using an image she learned at a Festival.

...one adjudicator at a Festival taught them to take a ‘hot chocolate bow’ (.). That’s what we practise with my little ones now (.). They have to bow smiling and for long enough to think ‘hot chocolate’ that is if they like hot chocolate (.) rather than the little bob that they do (.) (First Group Meeting).
Routines were adapted to the performance context. Table 7.8 shows routines devised for two of Yvonne’s pupils: one for an examination and the other for a concert.

**Table 7.8. Performance routines taught by Yvonne.**

<table>
<thead>
<tr>
<th>ROUTINE FOR AN EXAMINATION</th>
<th>ROUTINE FOR A CONCERT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YvonneP14 Teacher diary</strong></td>
<td><strong>YvonneP1 Teacher diary</strong></td>
</tr>
<tr>
<td>Walk in</td>
<td>Walk up to piano</td>
</tr>
<tr>
<td>Adjust stool</td>
<td>Announce piece</td>
</tr>
<tr>
<td>Try out piano</td>
<td>Music on stand</td>
</tr>
<tr>
<td>Think of notes of scale or first phrase</td>
<td>Adjust stool</td>
</tr>
<tr>
<td>Wait for the examiner to tell you to begin.</td>
<td>Check pedal</td>
</tr>
<tr>
<td></td>
<td>Think 1st phrase.</td>
</tr>
<tr>
<td></td>
<td>Count in</td>
</tr>
<tr>
<td></td>
<td>Play</td>
</tr>
<tr>
<td></td>
<td>Wait for applause</td>
</tr>
<tr>
<td></td>
<td>Repeat for second piece</td>
</tr>
<tr>
<td></td>
<td>Bow</td>
</tr>
<tr>
<td></td>
<td>Return to seat</td>
</tr>
</tbody>
</table>

In Cycle 2, besides teaching P12 a routine at the start of the examination, Yvonne devised what she described as a ‘cut down version of the PPR’ for P12 to help him ‘prepare for the next piece in the exam room’. This ‘cut down’ routine included positive thinking. Angela also included a routine for P5’s examination in Cycle 2.

It took some time for the teachers to understand that what they were doing was teaching a performance routine. For example, Lynn did not embrace the idea of routine behaviour until Cycle 2, when she asked all her young pupils to ‘Announce their piece – perform – bow’ (Teacher diary, Cycle 2). For P15 Lynn added in a sticker as a trigger (7.3.2.4) to help the pupil remain focused. Lynn and her pupil wrote as a reminder, ‘Practise – introducing myself, play pieces without stopping, look at stickers to remind myself to think about the notes and not the audience – take a curtsey’ (Shared Teacher/Pupil Diary, Cycle 2).

**7.3.4.3. Creating and developing routines**

The content of most routines was devised initially by the teacher and then developed by pupil and teacher working together. Younger pupils seemed happy to be directed by the teacher. For example, after discussion with her young pupils
Yvonne wrote similarly in their diaries ‘there is nothing he/ she wants to add to the PPR’. Teenage and adult pupils were more involved in personalizing the routines. Yvonne and teenage pupil P12 in Cycle 2 developed the routine for the examination together. Angela’s adult pupil P5 in Cycle 1 was very much involved in the development of her own routine over the four weeks.

Developing the content of routines with the teacher was through ‘trial and error’ because what might work for one pupil did not necessarily work for another. In Cycle 2 I found my pupils added more musical considerations, using cue words in their routines to act as reminders about the tempo and/or dynamics. Most routines began at the point when the pupil walked out to play. Some pupils developed routines for concerts that began while they were sitting waiting, during the piece that was being played prior to their own performance.

Strategies that pupils had been developing, for example, imagery, relaxation, positive self-talk and cue words were integrated into their routines either at the suggestion of their teacher or independently. Angela helped her pupils integrate all the strategies she had been teaching and discussing with her three pupils in Cycle 1 into their pre performance behaviour; P3 included the toy chimp (7.3.3.4). P5 began with yoga swings (7.3.3.3) and P12 walked out to the piano using positive thoughts and behaviour (7.3.2.2). I also asked my pupil P8 to adopt positive posture in her routine. She did not like performing a solo in front of an audience because ‘she does not like to be the centre of attention’. We discussed acting confident to feel confident. With this in mind she added walk ‘with head held high’ into her routine.

For my older pupils the routines I developed with them included other mental strategies such as ‘key words’ to aid confidence or concentration at the performance, and deep breaths to keep relaxed. I also included instructional cue words for some pupils (7.3.2.4). I taught routines for duettists as well as soloists. In the term before Cycle 1, P4 and P5 had not performed their best at a local Music Festival duet class. They were both anxious, and through discussion understood they had made each other worse by their behaviour and comments at the venue. This had a negative impact on the performance. Consequently they worked together on what to say and do while waiting to play at the performance. This also included how they would walk out, who was going to count in and who was going to be in charge of bringing them off together at the end, and how they would bow.
7.3.4.4. Teaching routines

Unlike the teaching of imagery or self-talk, teaching routines was a strategy that could be explicitly taught and the learning checked. Yvonne, who chose routines as a main strategy, and who had already taught routines, gave considerable thought to her teaching. She checked the learning of the routines for all pupils in Cycle 1 week two, where each pupil had to describe the routine out loud in words from memory. In Cycle 2 I asked my pupils to record how they had developed their routines for the next performance. I then used what they had written in their notebooks to check the learning in practice performances during lessons.

7.3.4.5. Practising routines in and out of lessons

The aim was that performance routines become an embedded part of the performance through practice. There was a variety of problems with practice in and out of lessons. Angela P3, who took an examination in Cycle 2, was not able to practise a routine every week because he needed to work on the weaker elements of the examination in weeks 1 and 2. Only in weeks 3 and 4 did he practise the routine. Yvonne noted that P12 had difficulty remembering the PPR in the lesson because he did not practise it at home. She had to recap the PPR in each lesson leading up to the exam. She wrote, ‘although he is forgetting actively to use the PPR at home I think it still had an important influence in the lesson... (Teacher Diary, Cycle 2).

Yvonne, Angela, Lynn and I practised the routines regularly in lessons and found that pupils did not always remember to practise them at home, even when we gave them reminders. When Angela found her adult pupil P5 had forgotten to practise the PPR as agreed, she wrote ‘perhaps I hadn’t made it clear enough to her that the new PPR should be practised regularly at home’ (Teacher Diary, Cycle 2). It was only by week four that P5 wrote, ‘Discussion of PPR, visualisation of friendly audience, positive confident feeling then walk to the piano (Pupil diary). By week five Angela recorded, ‘taken PPR on board and is using it consistently’ (Teacher Diary, Cycle 2).

Both Angela and I had to engage with parents to help remind pupils about practising their routine. When AngelaP12 was ill, Angela liaised with her mother:
I emphasised that practicing to perform needed to be part of the practice routine ie performing in front of someone else, including walking up to piano settling the posture thinking through the music then playing and bowing at the end. Remind P12 about cards. (Teacher Diary, Cycle 1)

I made assumptions about my adult pupils and the practise of routines. Both pupils P9 and P10 had worked regularly on their routines in Cycle 1. I thought they would do the same in Cycle 2 without as much input from me. I noted in P10’s diary that she did not practise her routine at home. I noted in my diary that we only practised the PPR in week 4 in Cycle 2 so it was perhaps not surprising that she kept forgetting to practise her routine at home. In contrast, TFP9 was keen to practise the ‘psychology’ she had practised in Cycle 1. She put reminders to herself in the last two weeks diaries to remember to practise her routine at home. However, she still forgot her routine when she arranged a practice performance at home in front of an audience of friends.

7.3.4.6. *Did routines enhance the performance experience?*
Routines seemed to work in two main ways to help the performance experience by improving psychological skills. They helped pupils:

- achieve full concentration for performing the music
- keep calm and achieve their optimal performance state

Routines particularly helped pupils be able to start well, at the correct tempo and dynamic level. In Cycle 2 I noted that teenager P1, ‘took longer than usual and did not let any noises in the audience interfere with his concentration’ (Teacher Performance Evaluation, Cycle 2). It was interesting to find that P1 did not write that he used a PPR or acknowledge any benefit from composing himself at the start of his piece. In Cycle 1 another teenage pupil MaryP2, did not practise the routine he would use between pieces. He wrote, ...should have taken more time between pieces as second piece was a bit ragged in places (Pupil Performance Evaluation, Cycle 1).

Six pupils wrote that their performance routine helped to keep them calm. Keeping calm seemed to mean keeping control of their physiological symptoms of arousal, and for two pupils they specifically meant ‘shaking’ hands that they wanted...
to control. By keeping pupils calm the routine helped them either think more clearly, and achieve better focus or helped them forget their fears mainly of the audience. For example:

I think that having a pre-performance routine helped me calm down and think about the music, hand position and dynamics. I think this made my performance better (Pupil Evaluation, Cycle 1, Mary P4).

PPR made me less nervous in the exam and made me feel like I was ready to play the first note (Pupil Evaluation, Cycle 2, Yvonne P12).

MaryP10 and LynnP12 both noted that their routines helped them to not be worried about the audience. For LynnP12 this led to a more confident performance. She added, ‘...and I didn’t have shaking hands during the performance (Pupil Evaluation, Cycle 1).

Pupils developed routines for their own specific purposes, which were sometimes different for each cycle. For example, my pupil P7 adapted the basic routine to include ‘getting the pedal ready’ in Cycle 1. In Cycle 2 she added positive self-talk; ‘what to say whilst walking on to keep calm.’ (Pupil Diary, Week Two and Three).

7.3.4.7. Discussion
In one sense these routines could be considered learning stage presence but they were more functional than merely showing a pupil how to walk on and off stage to appear professional to the audience. Similar to the findings discussed in section 2.2.5.3 the routines for these recreational pianists were individual and served the purpose intended by that individual. Routines were adapted to help achieve better focus, to keep calm and controlled, and aid confidence or a combination of purposes. The routines were not necessarily the same from one cycle to the next.

The process of developing routines was one of integration. There was evidence that other strategies such as relaxation, positive self-talk and imagery were integrated into pupils’ routines spontaneously or through discussion with the teacher. During the research pupils seemed to develop and learn routines when given regular help by their teachers. Yvonne’s teaching in particular showed how the
routine could be learned, developed and checked in lessons. The routine could be rehearsed each week as part of performance practice. A PPR did not seem to be a strategy that could be developed easily for oneself.

Evidence from the questionnaires suggested that PPRs were the least used strategy prior to the research (6.4), yet almost all the teachers thought they were teaching routines already. The evidence about the teaching of routines showed up a lack of consistency in our language in both communicating with one another and with our pupils. For example, it was baffling to Janet, Angela and me to find that none of our pupils indicated that they used a PPR in the questionnaire survey prior to the teaching. I had been teaching the pupils in the project for between 2-8 years and had taught them routines for every performance. Janet and Angela also thought they had been teaching routines. Having noticed the way Yvonne was teaching routines I realised that my teaching was not explicit enough. Yvonne and her pupils all used the term PPR and were quite clear about what they were learning and practising. I realised I was sometimes teaching a routine without calling it anything. In Cycle 2 I began to use the term more explicitly in lessons.

Inconsistencies in language may have come about because the teachers did not always use or possibly understand my terminology. For example, Angela did not write in her planning sheets that she was going to teach PPRs, yet she consistently practised routines in lessons integrating her teaching of mental strategies into these routines. Janet wrote that she used routines for herself as a performer, yet there was no evidence in her diaries of how she taught routines and neither was there evidence in the pupil diaries of routines being practised. Janet wrote that pupils had learned routines from other hobbies such as drama, but she did not give any details. It is possible that both Angela and Janet did not write about routines because they were already a regular part of their teaching, which had not yet been conceptualised as a mental strategy.

7.4. General discussion

The teachers were worried about taking part in the project because they thought teaching mental strategies would take up too much lesson time. The teaching in the action cycles showed that imagery and self-talk, including the use of positive
statement cards, cue words and encouraging positive language was not time consuming in lessons. Imagery and self-talk were mostly built into PPRs, which were also easy to fit into lessons. Yvonne taught some pupils for only 20 minutes yet managed to include specific teaching for routines every week.

Teaching relaxation techniques was the only strategy that is probably not practical for most teachers in 20-30 minute piano lessons. Teaching relaxation properly requires expertise, as well as time and patience on the part of the teacher, as suggested by Grindea (1964, p.1). Angela and her pupil P5 were only able to use yoga because they had attended a specialist course. Angela spent a considerable amount of time outside the piano lessons developing P5’s yoga techniques. Not every piano teacher would have the time or desire to do this. Simple breath training could be more practical (2.2.3.1).

Reflecting as critical practitioner on my own teaching, I continued to teach routines during the action cycles, which I had done prior to the research. However, through participation in this research I also taught imagery and self-talk more deliberately. I noticed in my pupils’ questionnaire responses that many of them used these strategies either spontaneously encouraged by a family member or from experience in another hobby. This was a helpful finding and I was able to use this knowledge to develop their existing skills, which could then be integrated into their routines.

One of the experiences of professional development is that you learn not only from the person running the course but also from the other teachers on the course. This was true for me. I learned much about teaching performance routines from Yvonne, whose teaching was more deliberate than my own. In Cycle 2 I began to be more systematic. I asked all my pupils to write down their routine, so it could be checked each week in the lesson, and also so they could be practised at home. This has improved my teaching of routines.

Reflecting as critical researcher I noted that the teaching of imagery, self-talk, relaxation and performance routines revealed several factors important to the success in improving psychological skills of our pupils and thereby the performance experience. They are:
• Belief of both teacher and pupil
• Pupil-centred approach
• Mental skills need practise
• Importance of being positive
• Support of family

In the findings there was evidence of scepticism from both teachers and pupils about the benefits of some of the techniques. Teachers did not want to teach anything they felt embarrassed to teach. Similarly pupils did not want to use a strategy if they felt it did not work. Belief was linked to lack of education. If the teacher or pupil did not really understand what they were being asked to do they would not do it.

The fact that our pupils already had coping strategies for performance, revealed in the questionnaire findings (6.4), demonstrates the importance of teacher and pupil discussion about performance. For a number of pupils, the PPRs were developed through basic suggestions from the teacher into which their own coping strategies were integrated through practice and discussion. This highlights the necessity of a pupil-centred approach in PST.

The findings also showed that practice of performance strategies was needed in order for them to become familiar and embedded into the performance. It was not clear how often or how much imagery and self-talk needed practising. Yoga and deep breathing notably needed regular practice. In 7.3.4.5 the importance of practising routines in and out of lessons was shown.

Talking about positive self-talk as a strategy and thinking about being positive in our language in lessons was thought to be important in giving pupils confidence for performance. Angela and I both talked to our pupils about walking out confidently and acting confidently in order to become confident. Research has already suggested there is a power in acting confident to feel confident (TedTalk, 2012; Carney, Cuddy & Yap, 2010).

Only Angela and I engaged parents in helping with teenage pupils. Previous research has shown that family is an important factor in successful practising (Hallam, 1997). My research is suggesting that family can also play a role in helping pupils become better performers by encouraging them to learn routines and practise them.
7.5. Conclusion

My research question was:

RQ10 How can piano teachers use imagery, self-talk, relaxation and pre-performance routines to improve the performance experience for their pupils?

The evidence in this chapter showed that piano teachers can teach the mental strategies of imagery, self-talk, relaxation and PPRs to their pupils, mainly through the integration of imagery, self-talk and relaxation into routines. PPRs were something constructive that could be taught and checked in lessons. The teaching of PPRs, practised in mock performances, was easy to fit into already busy piano lessons.

The benefits perceived by the pupils were that the performance experience was improved through developing psychological skills such as confidence, concentration, and control, but the strategies did not seem to work in the same way for every pupil. There was an element of belief needed for the training to work, and the purpose of the strategy appeared to be the one chosen by the pupil, similar to the finding about routines in sport (2.2.5.6). For most, the strategies helped them pre-experience the performance or helped at the performance. For some pupils, imagery, self-talk and relaxation strategies also helped them practise more effectively, confirming evidence in the literature that PST can improve performance and practice (2.3.6).

These findings show the applicability of these techniques to recreational piano pupils and their teachers, and extend knowledge about the delivery of PST to young children and recreational learners in a ‘real world’ setting. The next chapter continues to focus on how piano teachers can develop their teaching to include strategies from PST programmes to improve the performance experience for recreational piano pupils.
8 Planning and Practice

I continue to examine the teaching and learning in the action cycles in this chapter. The focus is the implementation of goal-setting strategy and simulation training into piano lessons for recreational pupils: strategies that are used for performance preparation. I explain the differing approaches used by the teachers, the perceived benefits for the pupils, and also discuss the applicability of these strategies for recreational piano pupils. Finally I consider the general benefits of using PST as an approach to improve the performance experience, as demonstrated by the findings in this chapter and the previous one.

The data sources for this chapter are teacher and pupil diaries, teacher plans, teacher and pupil performance evaluations and transcripts of teacher meetings (3.4.4). In this chapter I answer the research question:

RQ11 How can piano teachers use goal setting and simulated practice to improve the performance experience for their pupils?

I also answer a further question by considering findings from both this chapter and the previous one.

RQ12 How did using a PST approach from sport in piano lessons benefit teachers and pupils?

8.1 Introducing goal-setting strategy

Goal-setting strategy in sport is used to motivate and give confidence to performers through the achievement of long term goals via a specifically planned programme using SMART or SMARTER principles (2.2.4.1). The purpose of goal-setting strategy is to improve motivation and commitment to training and performance. Before the project began the teachers received information about goal setting (Appendix 4C). I knew from learning about goal setting as a tennis coach that this strategy was complicated, and required a substantial investment of time to learn to use it effectively. I did not expect the group to use this strategy, so I did not ask the
teachers in the first reflection or pupils in the questionnaire survey about goal setting. In Cycle 1 no one chose to teach goal-setting strategy.

I revisited goal setting in the planning for Cycle 2. During the preliminary analysis of Cycle 1 data I looked for ways we could improve our teaching. In Cycle 1 most of the teachers had concentrated on the HOW of teaching mental strategies rather than the WHY. In order to help the group think about ways to help their pupils psychologically for the performance and to help them discuss performance concerns with their pupils I introduced a framework for thinking and performance profiling at the second group meeting.

The Four Cs framework from sport psychology was used to show teachers the purpose of PST and what they might be able to help their pupils improve for the next performance. The teachers worked in pairs at the meeting to discuss the Four C skills (2.1):

- Concentration
- Control
- Confidence
- Commitment (Sellars, 1996)

In order that we all set appropriate shared goals for Cycle 2 I introduced two types of performance profile. Profiling is used in sport as a way of collecting information about performances (Butterworth, O'Donoghue, & Cropley, 2013) and is perceived to be useful to athletes in a variety of ways (Weston, Greenlees, & Thelwell, 2011) including a way to raise self-awareness, a way to monitor and evaluate performance, as well as a way to motivate athletes to improve.

The first profile I used was a general one (Appendix 4R) modeled on profiles I had used in my tennis coaching. The second was a dartboard profile that could be used in lessons (Appendix 4S). The general profile was to include the data from the questionnaire and Cycle 1, plus any other relevant information. Once the teachers had developed a profile they could discuss it with their pupil. The shared information would then be used to ‘diagnose’ what the pupil needed to work on psychologically for the Cycle 2 performances. Shared aims could be created and the teachers would have a better focus on which strategies to teach and why. I also
hoped I could persuade everyone to share the aims of their pupils for the Cycle 2 performance through more detailed discussion of the SMART principles of goal setting and the essentials of working towards long-term targets, through the setting of short and medium term goals (Appendix 4N). Following the performance the teachers would then be able to give constructive feedback related to shared aims, which would inform future performances.

The performance evaluation forms were altered in Cycle 2 to accommodate these changes (Appendix 4J). Teacher and pupil were asked to write shared aims for the performance, which they had to evaluate separately following the performance. The teacher was also asked to write down the feedback they would give their pupil at the next lesson.

8.2. Using goal-setting strategy in action cycle 2

Table 8.1 shows that Janet and I chose to use goal setting in action Cycle 2 with three pupils each.

Table 8.1. Teachers and pupils working on goal setting in the action cycles.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Cycle</th>
<th>Pupil</th>
<th>Age</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet</td>
<td>Two</td>
<td>P3 P4 P5</td>
<td>Teenager</td>
<td>Advanced</td>
</tr>
<tr>
<td>Mary</td>
<td>Two</td>
<td>P1 P2</td>
<td>Teenager</td>
<td>Advanced</td>
</tr>
<tr>
<td></td>
<td></td>
<td>P8</td>
<td></td>
<td>Intermediate</td>
</tr>
</tbody>
</table>

None of these pupils wrote that they had used goal-setting strategy previously. Our interpretations of goal setting as a strategy differed. I firstly examine my approach to goal setting followed by the approaches of the other teacher. I compare interpretations, and also discuss aspects of goal setting that proved beneficial to our pupils.
8.2.1. My application of goal-setting strategy

In Cycle 2, goal setting was the obvious strategy for three of my pupils, identified in Table 8.1. All three pupils wrote in their planning sheets for Cycle 2 that they needed to improve their commitment and motivation to practise and perform. P1 and P2 were teenage boys just starting their last two years of school. P8 was a teenage girl in her final year. They were vague about their ambitions for piano, and had busy lives in and out of school. As piano was becoming less of a priority I suggested they either stopped lessons during their final years at school to focus on school examinations, or they should consider having a specific piano goal to work towards. I suggested this could be to pass a piano examination, which would be advantageous in their university applications.

I met all three pupils individually, with their parents, at the end of Cycle 1 to discuss this. The pupils agreed to the long-term examination goals, which were Grade 8 (P1, P2) and Grade 5 (P8) piano examinations. Together we made a two-year plan for the boys and a one-year plan for the girl (see Appendix 4T for the plan for P1), which included practice performances of pieces at a concert and a Festival by certain dates, and a series of mock examinations with dates (medium-term goals). I suggested short-term goals for lessons during the school term in which Cycle 2 took place. The pupils modified the plans in the light of their other commitments.

Short-term goals were constantly changing due to:

- lack of focus in practice
- motivation to only practise what they liked to practise (P1 and P2)
- pressure of school work
- not prioritizing piano over other extra-curricular commitments

They all met one short-term goal, to perform an examination piece at the pupil concert held at the end of Cycle 2. Only P2 met all his targets.

All three pupils made realistic aims for the performance, which we were able to evaluate. The two boys were confident performers so their aims were all musical. In addition to musical aims, the girl P8 also aimed to ‘play on’ if she made a mistake. In their performance evaluations P1 and P2 both indicated that they used goal-
setting strategy. P8 did not. Only P2 referred specifically to how goal setting helped him in his performance evaluation: ‘the realistic goal setting meant I did not put myself under pressure’. At the lesson following the performance, where I gave him my feedback, he said that achieving his targets during the research cycle helped to motivate him. He had had so many things to do that term that he was surprised he had reached his targets. Having something in writing made it more evident that he had achieved his goals that term.

Using goal setting as a strategy took time and effort. I needed to involve the parents of all these pupils for support, which took extra time outside lessons. However, this was worthwhile because the parents could see the recorded progress.

For the two pupils, who had not achieved their short-term goals in Cycle 2, the parents became more involved in helping them achieve their goals the following term. Short-term and medium-term goals were reviewed in the light of progress at that stage. We continued with goal setting after the research ended.

Although the pupils did not practise as much as I would have liked, they completed the programme of medium term concert and examination performances. These vital practice performances enabled them to give their best possible performance at the final examination. They all achieved the long-term target of passing the examination. This use of goal-setting strategy helped the pupils and me to be both committed and motivated.

8.2.2. The other teachers’ application of goal-setting principles

Although Janet was the only teacher to plan to use goal setting (Table 8.1) the other teachers all used aspects of goal-setting strategy in their teaching in Cycle 2. The term goal setting has been confused in the music literature with planning and setting targets for practice (2.2.4.2). This confusion was also evident in the teaching in action Cycle 2.

Janet was the most organised teacher in the group, and examinations seemed to drive the learning (see 6.2.3). When we discussed goal setting in Cycle 1 she said she used this strategy already:

I am not using that acronym but I am doing it I can tick boxes (.) But why am I doing it? One because they need to own their own learning and two because it makes my
She routinely made plans for all her pupils towards them taking the next examination, which followed SMART principles of goal-setting strategy:

**Specific Measurable Accepted Realistic Time-phased**

Whilst pieces were always included in all lessons, the other examination elements were rotated systematically. She showed me her paperwork for setting goals and tracking progress for sight-reading, aural and technical work. This was very specific and timed, four weeks in advance, and was written in the pupils’ notebook. She also discussed and set specific dates by which each piece should be ready in relation to the examination date. She discussed the timing of music examinations with older advanced pupils to accommodate school examinations or other commitments. It was not clear if she did this for younger pupils. Janet’s usual use of goal setting was to improve commitment and motivation to learn the music.

In Cycle 2, Janet included a change to her usual approach and introduced a performance goal. This was a ‘stepping stone’ concert (a medium-term goal) for three pupils towards the long-term goal of taking Grade 7 ABRSM in the school term following Cycle 2. Her plans for Cycle 2 are shown in Appendix 4T, where she has performances in weeks 3 and 4, and a note to discuss error management. Janet made feedback an integral part of this ‘informal’ concert. At the concert, which took place at Janet’s home, each pupil performed two examination pieces to Janet and to one other. Following the performance, the pupils gave each other constructive feedback and chatted informally over refreshments.

One of the points I wanted to put across to the teachers was the importance of sharing goals in goal-setting strategy. Whilst the long-term goal to take the examination was shared by both Janet and her pupils, the goals for the performance were not. At the concert she had not planned shared feedback. Following each performance of two examination pieces the pupils gave each other feedback. Janet wrote her feedback at or after the concert, which she was to deliver individually at their next lesson. The feedback was all about improvements they could make to the
playing of the music, and did not include any discussion of psychological skills. This was interesting because at the performance all three pupils wrote that they used PPRs, and the two girl pupils (P4 and P5) both used imagery and a combination of self-talk, and deep breathing. In their written evaluations the two girls expressed the benefits of these strategies for confidence (P4) and for keeping calm and focused (P5). None of the pupils wrote about goal setting as a strategy.

It was perhaps not surprising that Janet and her pupils did not share aims or discuss psychology because Janet had not found the profiling or the Four Cs framework useful:

...I agree confidence, control, commitment and concentration are the things we need to look for in a performer. I wasn’t criticizing the Four Cs but its not the way I think (.) I didn’t really find the performance profiling useful or the questionnaires. I spent a lot of time looking at both questionnaires and I wasn’t any the wiser when I had finished as when I started I’m sorry about that... (Final Reflection).

Janet’s use of goal setting fitted in with her beliefs (see also 9.2.3) about solid preparation giving confidence for performance.

Yvonne and Angela did not claim to use goal setting with specific pupils in Cycle 2. They both said at meetings that they used goal setting already but just did not realise it. Yvonne used some SMART goal-setting principles in that she Recorded and Reviewed (2.2.4.1) ways she would assess progress, test the learning of both examination elements and PPRs to give vital feedback in action Cycle 2 for pupils P5 and P12. Yvonne adopted shared aims for the performance. The three goals, which were the same for two pupils taking examinations, were of differing types and Specific. They were predominantly about assessing learning, but this learning also included the PPR:

Aim One   To pass the examination [Outcome goal]
Aim Two   To improve the playing eg dynamics or expressiveness [Process goal]
Aim Three To remember the PPR [Performance goal]
(Teacher and Pupil Evaluations).
Yvonne was able to evaluate shared aims in the pupil feedback at their next lesson. For both pupils she wrote that she would discuss using performance strategies with them in the future.

Both pupils evaluated that aim three was fulfilled and the use of the PPR had helped the examination experience. P12 wrote that it made him ‘feel less nervous’ and P5 felt the routine helped his concentration. One parent clearly thought Yvonne had been goal oriented.

P12’s father rated the project highly and said it had suited his learning style in terms of clear goals and processes and ticking boxes…’
(Teacher Reflection following the performance).

Angela’s interpretation of goal setting was planning in the short term. During Cycle 2 Angela reflected on the planning she already did.

I do discuss with pupils at the start of the term with the pupil e.g. you need to have this done by the [exam] entry date in order to have the confidence and after the entry date we will be working on this (Second Group Meeting).

Previously Angela had entered advanced pupils for Festivals prior to an examination to give them valuable performance experience for the examination pieces (4.2.3.2). The organisation of a ‘stepping stone’ concert in Cycle 2 for a young pupil was a new departure. She arranged for 8 year-old P3 to perform his pieces in a concert a week before the examination so he could practise performing them in ‘a pressure situation’.

She set specific targets in lessons for P3 leading up to his examination, which she Reviewed and changed accordingly. She had planned to do a mock examination in every lesson leading up to the examination, but her diary showed that her plans had to be flexible. In his mock examination five weeks before the performance P3 only just passed with 101 (pass 100). Angela felt it ‘more important to address some of the problems that had arisen’ in weeks 1 and 2 of the action cycle rather than do more ‘mocks’.

Angela allowed P3 to write his aims by himself, which were only two:
Aim One To pass the exam
Aim Two To please my parents
(Pupil Evaluation, Cycle 2).

It was difficult for Angela to give any meaningful feedback for future performance related to these aims. The first aim was an outcome goal and the second was not about performance.

Despite this, Angela felt that her teaching and planning during the project had included several new things. She had organised more mock performances than usual, using random testing for scales using scale cards, and she focused on teaching mistake management (See 8.2.2). She also felt that the mock examinations and the stepping stone concert were ‘essential’ to building P3’s confidence...’. P3 was too young to articulate how the planning had helped him.

Lynn did not claim to use goal setting, but her teaching particularly in Cycle 2 demonstrated the use of constructive feedback both in lessons and after performances that was appropriate for young children. Throughout this cycle, Lynn discussed everything with her young pupils and wrote a shared diary. She devised a simple way to assess confidence in lessons, which gave vital feedback to teacher and pupil prior to, and for, the concert. Each week leading up to the concert she asked:

on a scale of 1 – 10 how much are you looking forward to the concert?
(10 = I am looking forward to it very much).

By asking this question each week Lynn could gauge the effects of the teaching on pupil confidence, and plan accordingly. For P11 she wrote ‘the plan arose following discussion with the pupil about the forthcoming concert’. For P11 and young pupils P1, P8, P15 and P16 the scores went from 6 or 7/10 in week one up to 9 or 10/10 in week 4. The scores acted as positive feedback for these pupils during lessons.

For the performances Lynn evaluated shared aims for all pupils. For each pupil, one aim related to the work they had been doing on reframing attitudes to mistakes, or mistake management, or making less mistakes. Other aims were very specific and related to aspects of playing that young children might forget, for example,
‘remember to count in at the beginning’. Shared aims facilitated helpful feedback for future performances.

8.2.3 Summary and discussion of goal setting as a strategy

In answer to RQ11 regarding goal setting to improve the performance experience, it was evident that despite not fully understanding goal-setting strategy all four teachers used some SMART principles in Cycle 2, which enhanced their teaching through effective planning and feedback. Two teachers, Janet and Angela, introduced performance goals into their examination preparation. The ‘stepping-stone’ concerts as medium-term goals gave pupils extra performance practice, which was beneficial. Thinking about goal setting helped two teachers share aims with their pupils for performance, which in turn helped them to give relevant feedback. Yvonne set shared goals of differing types with her pupils therefore she could give useful feedback about learning and performance. Lynn improved her feedback by devising a way to assess confidence.

The findings highlighted, for me as researcher, the need for better and more detailed education about goal-setting strategy than I was able to give in two action cycles. Goal setting was the most complicated and least understood of all the strategies. The teachers in this project were not used to the term ‘feedback’ and they did not fully understand how to give constructive and specific feedback in relation to shared aims for the performance. They were used to giving feedback when preparing for examinations using examination board criteria as a guide. It was not usual to discuss or give deliberate feedback about how well the pupil coped with the performance experience following a practice examination or concert performance. However, Lynn did find a good way to provide feedback about confidence for the performance. Just as I had learned how to be more specific in my teaching of PPRs from Yvonne (7.4), I integrated this idea into my teaching in the action cycles and continue to do so with all ages and levels of pupil.

The idea of arranging more performances as short or medium term goals on the way to a long-term performance was taken up by Angela and Janet. I understood that these performances increased performance frequency and therefore performance practice, and also provided opportunities to discuss performance concerns. However, Janet viewed the ‘stepping-stone’ concert as another way to
monitor progress. In the UK Cathcart (2013) found that 25% of teachers used the examination system to provide goals to monitor progress, and that piano teachers used performances as goals to help monitor pupils’ progress. Performances ‘included concerts, masterclasses or simply finishing a tutor book’ (p. 263). This thinking perhaps explains why goal-setting strategy as used in sport and business was difficult for the teachers in my group to understand.

My experience of using goal setting with three older students made me question the suitability of goal setting for use as a teaching strategy for piano teachers of recreational pianists. Firstly, the constant reviewing and reporting is a time-consuming process. Because goal-setting strategy requires considerable effort from the teacher it is likely that many teachers would not wish to spend time using this strategy. This is especially likely because regular reporting is not something most piano teachers do. In our group, Janet gave her pupils reports every term, but Yvonne said:

...I don’t want to be that formal. I do a newsletter at the end of the summer term and I might put a personal comment on that. I give the exam results through the year to motivate... (Second Individual Meeting).

Unlike schoolteachers in the UK, instrumental teachers are left to their own devices regarding lesson planning and teaching approaches, and without being accountable to an inspectorate, private piano teachers can do as much or as little planning and reporting as they wish. Janet’s rigorous use of goal setting to ensure solid examination preparation did not seem to be the norm. Cathcart (2013) in a survey of 595 UK piano teachers found that only 36 did any kind of formal lesson planning.

My second reservation about goal-setting strategy for recreational pianists was that pupils need maturity and ambition for it to be effective. During the research young pupils found it hard to articulate how they felt about performance in their diaries, and in discussion. Shared goal setting therefore can only be used with older pupils who can understand the concept. My former pupil for whom goal setting was a success (see 1.1.3) had a mature attitude to schoolwork and piano practice, which the three in the AR lacked. My former pupil also had an ultimate dream to be a composer. The short, medium and long-term targets were set to further this
ambition. The pupils I taught in Cycle 2 did not have an ultimate long-term piano dream and they had also not reached the level of performance at the same age as my former pupil. It may be shown in future research that goal-setting strategy is most effective with highly skilled and motivated students on an elite pathway to becoming a musician.

8.3. Practising the performance

Prior to the action cycles all the teachers but Yvonne said they used simulation training as a strategy for themselves as performers. All teachers but Lynn wrote in their reflections that they organised practice performances for their pupils. All teachers planned to organise practice performances for their pupils in the action cycles (Appendix 4W).

As the research progressed there was evidence that all teachers organised practice performances or mock examinations to test the learning of the music before a performance (6.3). It was therefore puzzling that only 69% of the 100 pupils who completed the questionnaire indicated that they did practice performances as a strategy for performance. It may have been because practising the performance is something you do to prepare rather than a strategy you might use at the performance. Another possibility could be that pupils who performed in examinations did not class this as a performance. In the beginning, the teachers themselves were not clear if an examination was performance or not. Whatever the reason, there was a mismatch between what the teachers described as regular use of practice performances as a strategy for all their pupils and their pupils’ recognition of this.

The teachers arranged performance practice mainly as a way to assess learning. They did not refer to what they were doing as simulation training in their diaries, yet like the PC (5.4.3.7) they were creative in finding ways to replicate performance pressures in practice. As discussed in 2.2.6 simulated practice is a way of practising the pressures and distractions of live performance.

8.3.1. Practising external pressures through simulated practice

Each teacher recreated the performance environment using some, but not necessarily all, of the following external distractors:
The instrument and the venue
The audience
Other distractions in the performance environment

I discuss these in the following.

8.3.1.1. The instrument and the venue

Pianists usually perform on an instrument that is not their own. Some teachers were aware that the unfamiliar appearance of a grand piano, or just the different feel of the piano action and different sound could be a distraction. During the research, Fiona and Angela taught pupils who had to perform on a grand piano. In lessons they simulated the unfamiliar aspects of this type of piano. Fiona helped P1 with the practicalities of looking at music that would be higher than on an upright piano by putting it higher in the lesson. This helped create an image to pre-experience the performance (7.3.1.2). Angela, who taught on a grand piano, ensured that P12 practised from memory playing with the music stand flat as it would be on the day of the performance. On the day, Angela suggested that P12 arrive at the venue early ‘before people were watching’ to familiarise herself further with the piano.

Prior to the research Yvonne, Lynn and I all simulated the performance by arranging for our pupils to practise their performance at the concert venue. Like Angela, I usually asked pupils to arrive early for a performance so they could try out the piano. In Cycle 1 I organised a practice performance the week before the concert for adult pupil P10 who was particularly concerned about playing a solo after many years of only performing duets. She was worried about the size of the performance venue (a large town centre parish church) as well as the grand piano, which she did not like. After this rehearsal, during the parishioners coffee morning, P10 said she was much more relaxed about performing the solo.

Following the beneficial experience of P10 in Cycle 1, I arranged a practice at the church for all pupils the week before the concert in Cycle 2. My teenage and adult pupils took up this offer. They all wrote that it helped them feel more confident about the performance. At this rehearsal we discussed the different feel of the grand piano and how best to project the sound into the large space. Both P10 and teenager
P7 reported that this was the most beneficial strategy of all for their performance confidence.

Lynn’s adult pupil P14, in Cycle 1 also found practise at the local church gave her confidence for the performance. This rehearsal motivated her to practise performance strategies for the concert, and prompted Lynn to suggest P14 brought gloves to wear while she waited to perform in the cold church.

In Cycle 1, Yvonne and Lynn held concerts at their place of work. The pupils were therefore familiar with the piano but not the appearance of the room as it would be on the day of the concert. Yvonne held her concert in the school hall. Lynn held her concert at home. Two weeks before the performance both teachers laid out chairs and positioned the piano so their pupils could get used to the performance space. The performance space at school was much bigger than the pupils’ practice space at home. At practice performances in lessons Yvonne discussed the way pupils needed to project their playing into a large space. P20, a young beginner also worked on projection for announcing the pieces. For adult pupil P12 the laying out of the chairs in week 2 had the effect of making her ‘nervous’ in lessons. By week 4 Lynn noted in her diary that P12 was no longer ‘phased’ by the chair layout.

The main benefit of these practice performances at the concert venue reported by the pupils, was increased confidence. Interestingly none of the pupils mentioned the value of practising on an unfamiliar piano, but a few wrote that creating the performance space ahead of the concert helped with imagery (7.3.1.2). Imagery allowed them to pre-experience the performance and seemed to improve control as well as confidence.

8.3.1.2. Finding an audience for practice in and out of lessons

Prior to the project, all the teachers except Lynn provided an audience for performance practice in lessons. In the Focus Grp2 discussion Janet, Yvonne and Angela spoke about this, and their use of role-play in mock examinations (4.2.3.3). Fiona also encouraged pupils to practise in front of other pupils or family, and she always did mock examinations and part ‘mocks’ leading up to examinations. I reflected that, like Janet, Yvonne and Angela, I used role-play for both concert and examination performances, where I acted as an audience member/examiner. To add pressure I sat on my sofa away from the piano. I always wrote a critique of the performance to discuss with the pupil at the end of the performance. This feedback
might be about inaccurate learning of the music, or forgetting musical details such as
dynamics, but it was also about how they coped with the performance itself and how
they would cope on the day of the performance. The other three teachers used
examination criteria to assess pupils and to provide feedback but they did not do
this for concert performances. Yvonne was the only teacher to audio-record her
pupils’ performance practice, which was used to analyse the quality of the
performance together with her pupils.

During the project, the teachers continued with their strategies to find
audiences, and use role-play. During mock examinations in the action cycles both
Janet and Angela deliberately played the role of examiner in the final lesson before
the examinations of their pupils. They sat in a different place in the teaching room
and made notes like an examiner to replicate the performance conditions. The pupil
had to leave the room and wait to be called in as they would on the day. In Cycle 2
Angela played the examiner for P3’s mock examination, She also added a role for
P3’s brother who played the exam steward by showing P3 into the room.

A new departure for Janet, Angela and Lynn was that they used role-play by
acting as an audience member for concert performances. We agreed that simply
changing your position in the teaching space to simulate the audience was effective
in adding pressure to the performance for the pupil. I did this as usual for pupils. In
addition I sang while pupil P8 practised accompanying the audience singing a
Christmas carol. In weeks 3 and 4 once her playing was secure, I deliberately
changed speed as I sang to simulate what it might be like if she played the
introduction one tempo and the audience sang at another.

All teachers organised pupils to perform to other pupils at the start and end
of lessons. I also asked parents who were collecting their child to stay and be part of
an audience for another pupil. Janet mentioned she did this for younger pupils (First
group meeting). During the action cycles, only pupils who were playing in concerts
at the end of each action cycle practised the performance in front of such an
audience.

There was evidence in the diaries that pupils from each teacher practised
performing at home to audiences of mainly family members such as parents and
grandparents. Lynn’s young pupil P1 practised in front of ‘her teddies’ in week one
and for her parents (7 times) in week two. Three of my pupils also performed to
friends at school. It was interesting to note that whilst teachers practised the examination in lessons and replicated the pressure of the examiner, none of the pupils wrote in their diaries that they replicated examinations at home by having family members play the role of the examiner. Practice performances for examinations were performances of the pieces only, and not the other tests in the examination.

Eight pupils noted in their performance evaluation that arranging practice performances in front of different audiences improved the performance experience. For example, Lynn P3 wrote that the practice performance ‘helped me by giving me the experience of performing, so I knew how it was going to feel’. Five pupils wrote that practising in front of family or family and friends gave them confidence for the real performance. Two pupils said it helped them to ‘pre-experience the performance’, and ‘manage expectations’ (Angela P5). Angela P5 also wrote that practising in front of family also showed her areas of the music that needed recapping (Cycle 1) and helped her concentration (Cycle 2).

8.3.1.3. Distraction practice
At our second meeting I talked to the group about athletes deliberately practising with external distractions as a strategy. Being easily distracted by noises in the performance environment was identified as a problem for some pupils in the questionnaires. In week one of Cycle 2, Lynn suggested that adult P14, who had identified that she was easily distracted in performance, should practise her performance with deliberate distractions such as ‘children running about, radio, talking singing’. P14 wrote that this type of practice helped her concentration for the performance. Lynn was the only teacher to suggest this strategy. P14 wrote in her evaluation that she ‘had practised with distractions previously, and this helped a lot with my concentration’.

8.3.2. Simulating internal pressures
Performance concerns described in 6.2.5 and 6.5, included a variety of internal pressures ranging from symptoms of arousal, feelings of embarrassment, and for very young children a strange mixture of worries you could not predict. A few pupils were interested in using simulated performance at home specifically to help them overcome symptoms of arousal. This proved difficult because the practice situation
was ‘not real’, that is, they wrote that they had difficulty in recreating the state of arousal and anxiety in practice that they experienced in performance. For example, MaryP7 thought that rehearsing in front of an audience would help her to feel calm at the performance. However, they did not recreate the symptoms of arousal she felt at the performance. She wrote that the ‘practice performances were not that helpful because I knew the audience’ (Cycle 1 Pupil Evaluation). In Cycle 2 we discussed her symptoms of arousal, and I tried to help her to have a more facilitative view of them. This had a beneficial effect for the next performance. She did not get rid of the symptoms but she was confident because she realised that the symptoms went away as she started to play and therefore did not affect the quality of her performance.

The main concern for adult pupil LynnP14 was that her hands shook when she performed, and she felt that this ruined the performance as well as the experience. Lynn reported that she managed to play and keep going, but it was not as good as she had been in practice. P14 tried a variety of strategies in practice including deep breathing, which she expected would keep her calm. However, like MaryP7 her symptoms did not happen in practice, so the strategies did not help.

What proved more successful in helping pupils feel in control of their performance was discussion and education about their arousal and anxiety. In the information sent to the teachers prior to the first meeting I included details about the ‘fight or flight’ response of the autonomic system (Appendix 4C) I suggested that we might want to explain to pupils why they might experience physiological symptoms of arousal prior to and/or during performance because on the whole it is a normal response to pressure. I was the only teacher to use this as a strategy with two of my pupils who found it gave them confidence that they could perform despite their symptoms. Yvonne said at our meeting that she did not feel confident to teach pupils about ‘flight or fight’ because she did not know enough about it.

Lynn in particular was aware of the internal pressures her young pupils were facing when performing, and simply gave her pupils the chance to discuss these during lessons proved effective. Lynn and her pupil P12 shared this observation:

recognising it and finding ways to deal with it together, rather than pupil just managing it on their own has been helpful’ (Shared Evaluation Cycle 1).
Young children in particular seemed to need reassurances about ‘fears of the unknown’. Very young pupil LynnP16, new in Cycle 2 wrote in the shared diary that practising the performance and discussing his fears helped ‘boost his self esteem’ Lynn noted that the pupil said it made him realise playing in front of people ‘was the same as the lesson’.

8.3.3. Practising the performance to manage mistakes

The questionnaire showed that ‘mistakes’ was the number one concern for the overall sample of pupils. This concern included making mistakes, worrying about the audience hearing mistakes, and not being able to manage mistakes. It was therefore imperative that we thought how best to deal with this in our teaching. I reported the findings about mistakes at the group second meeting, and how there were different interpretations to the term. Some pupils had internal fears about making mistakes, and fears about their reactions to them. Other pressure came from not having a clear strategy about what to do about mistakes other than to stop and start again, and some pupils did not want the audience to hear their errors. I encouraged the group to think about how to teach mistake management.

Performance practice provided the essential opportunity to practise management of rather than reaction to mistakes.

Lynn particularly responded to the questionnaire findings about mistakes and worked on this as a ‘mini project’ with six young beginner pupils in Cycle 2. She worked on developing realistic attitudes to mistakes, as well as helping pupils identify mistakes, which revealed weak areas of their pieces that needed more ‘practice to improve’. Lynn wrote statements in the diary of female beginner P11 at the start of Cycle 2:

1 mistakes don’t matter
2 probably won’t make any mistakes
3 identify mistakes in practice to help you learn which part of the music to focus on in practice sessions.

Lynn asked her pupil to note and count the mistakes made in practice. At the start of week two P11 reflected with her teacher that her confidence improved by:
SEEING the number of mistakes (how few) actually made...

I have learned making a mistake is not that bad and to carry on if I make a mistake.

(Teacher/Pupil Shared Diary, Cycle 2)

Lynn and I worked more deliberately on mistake management than the other teachers.

My pupils were teenagers and adults yet I still had to help them develop a realistic attitude to mistakes. We discussed the difference between a slip and a mistake. I defined a slip as a type of mistake that appeared unexpectedly when they performed and a mistake was recurrent probably due to incorrect learning. Like Lynn we concluded that regular mistakes had to be addressed through more 'practice to improve' but we also discussed and practised what to do if slips appeared in a performance. If the slip was minor they should try and carry on. If the slip was major and the performance broke down, we talked about places in their pieces where it would be easy to restart. We practised starting the pieces in differing places over several lessons, so that this would become familiar.

Reframing negative thoughts into positive ones is a technique used by the coach in the interview study (5.3.4.3). In this study both Lynn and I used discussion to help pupils reframe their negative thoughts specifically about mistakes. A common concern was that pupils were worried that the audience would notice their mistakes. This worry alone could lead to mistakes. Lynn explained to her pupil P8 that the audience often do not notice the mistakes noticed by the performer because the audience do not know the pieces. Lynn and P8 wrote as early as week one:

...improved my confidence because I've been simulating a performance – my heartbeats been racing – but I know the songs, but most of the audience probably wouldn't so this helps. Confidence gone from 5/10 to 8/10 (Teacher Pupil Shared Diary).

I had discussions with five of my pupils who had negative thoughts about the audience, which made it difficult for them to accept mistakes in their performances. In week 4 when P5 came to P4’s lesson to rehearse their duet they were panicking
about the audience hearing their errors. We discussed the fact that the audience at the pupil concert was in fact relatives and friends who were there to wish them well not to judge them. I had a similar discussion with P7 and P10 and they introduced positive talk into their routine to help overcome this concern.

I found that simply taking time to discuss concerns about mistakes was helpful over the four weeks of teaching and helped pupils develop realistic attitudes to performance. P10, an advanced adult pianist, who had not given solo performances for a long time had unrealistic expectations about mistakes and performing in general. I pointed out that she had not performed as a soloist since she was at school (over ten years ago). She needed to understand she was a learner in terms of musicianship and also a ‘learner performer’. Both adult pupils P9 and P10 found this concept helpful to reduce the pressure they put on themselves to be excellent in performance. Pupils also found it helpful to discover that I too made mistakes at the concerts, which they did not notice because I was good at managing them.

Angela worked on mistake management particularly in duet playing with a mother and daughter partnership. When playing a duet the performer has to carry on through their mistakes and also listen for their partner’s mistakes. Angela noticed that P5, the mother, could be ‘sympathetic to slight hesitations’ whereas the daughter could not. She helped them practise listening to each other ‘letting one player carry on if the other was lost then the other rejoin at a later point in the piece’ (Teacher Diary, Cycle 2).

Another strategy used by Angela, Lynn and I to prevent mistakes happening was to have pupils play well-known music. Both Angela and I had pupils who were performing pieces at the end of a cycle that they had performed before in another context. AngelaP3 performed at a concert prior to his examination and my pupils P4 and P5 had performed both their solos and duets at the local music Festival in the term before the Cycle 1 concert. Practising performing pieces in more than one performance setting, which was also additional performance practice, was thought to be beneficial because it allowed pupils time to focus on performance coping strategies because they already knew the music very well. In Cycle 2 Lynn decided that her pupils should perform already familiar pieces for the same reason.
Pupils reported that mistake management helped to build performance confidence and helped with control at the performance. Discussing mistake management in Cycle 1 for a solo and duet performance resulted in my pupil P5 learning not to react to mistakes in performance:

Performance of Solo
I feel it (PST) helped me realise that I was focusing on the little things like mistakes when I should focus on the performance and dynamics to make it sound better to the audience (Performance Evaluation, MaryP5).

Performance of duet
I think my practice performances helped as I was used to the slips and mistakes, so I wasn’t as nervous about making them because sometimes they can’t be prevented (Performance Evaluation, MaryP5).

MaryP10 was enabled to reframe her attitude to mistakes so she could accept that a good performance might include slips that go unnoticed by the audience. This led to confidence. Lynn also noticed that confidence improved for P12 who found that ‘simulated practice and lots of opportunities to perform were effective, because before pupil reacted to mistakes, therefore the audience became aware. Now she plays through mistakes...’ (Teacher Evaluation Cycle 1).

8.3.4. Summary
In answer to RQ11, the teachers used a variety of ways to simulate and practice the performance. Practising the performance was a strategy already used by the teachers prior to the research, although it was not necessarily recognised as such. There was no question that teachers could not or would not be able to fit performance practice into their lessons. The action cycles showed the group that there were two important functions of simulated practice:

- To practise the internal and external pressures associated with live performance from the performance environment and context
- To practise mistake management
Before the research began the teachers used performance practice as a test of the musical learning and had only an instinctive understanding that mock examinations and concert rehearsals were an opportunity to ‘practise the pressure’ (see 5.3.4.7).

Prior to the research the teachers practiced the performance only once or twice. During the action cycles the teachers organised more practice performances than was usual, with and without a variety of simulations. It was the pupils rather than the teachers who wrote that practice performances could improve psychological skills such as confidence, control and concentration.

More frequent practice performances allowed the teachers time to teach mental strategies and for the pupils to practise them. The pupils also had more time to discuss performance concerns with their teacher, reframe thoughts about mistakes and learn the vital skill of mistake management for the performance. Discussion and education proved more beneficial to improve control of symptoms of arousal and anxiety than simulation or other techniques.

The teachers increased both the amount of performance practice and performance opportunity during the project. In the beginning Lynn thought that providing ‘more opportunities to perform will be more effective than the strategies themselves’. By the end of Cycle 1, her young pupil, P3 wrote in Cycle 1 that ‘the more performances I do the easier it becomes, because I am getting more used to it’. It is hard to say if the improvements noted by the pupils came from simulated practice, discussion and thought reframing, more frequent performance practice, or perhaps all these strategies. Until there are studies that examine the effects of simulated practice and other strategies versus performance frequency one can only assume that all these were factors that contributed to improvements in the performance experience.

8.4. Benefits of PST as a teaching approach

Findings about the implementation of performance strategies reported in this chapter and Chapter 7 show that the performance experience of recreational piano pupils can be improved through deliberate teaching, that is, teaching with understanding. In answer to RQ12 using PST from sport as a teaching approach was beneficial in several ways. It gave the teachers:
• A set of teaching tools
• A shared language
• New concepts for teaching performance skills

I discuss these in turn.

8.4.1. The tools in the kit

The strategies of imagery, self-talk, relaxation, goal setting, performance routines and simulated practice, which are commonly used in PST programmes, gave the teachers valuable tools. Like the PC who worked in the conservatoire (5.3.4.1) education about arousal and thought reframing were additional tools for some teachers. Imagery, self-talk, PPRs and simulated practice were found to improve the performance experience for our pupils by increasing confidence, and/or improving concentration or control. Imagery, self-talk and some relaxation techniques were integrated into performance routines and practised in simulated practice in and out of lessons. The organization of more practice performances during the action cycles led to more time to talk to pupils about performance, which in itself was valuable.

Goal-setting strategy was not totally understood by all teachers, and although I used this with some success in Cycle 2, it seems to have limited applicability for recreational piano pupils. Aspects of goal setting were however useful to some teachers to improve practice, as was found in studies in 2.3.6, and also helped to increase performance opportunity and frequency. Relaxation techniques were also found to have limited applicability, as there is no time in regular lessons to learn techniques like yoga. Teaching breath control through deep breathing is a simpler tool. To be more effective the teachers needed more education about PST and in particular, goal setting, relaxation techniques, thought reframing and the physiology and psychology of arousal and anxiety.

8.4.2. Shared language

The focus group study revealed the common language through which to discuss performance was 'nerves'. As a framework this was very limited (see Chapter 4). PST from sport provided the teachers in the AR with a more structured and meaningful shared language through which performance could be discussed. At first
the teachers had to become familiar with the new terms, but gradually this familiarity enabled us to discuss performance skills with more shared understanding.

Lack of a common language seemed to contribute to pupils as well as teachers at first not recognizing performance strategies as such. Both Angela and I were surprised that our pupils did not acknowledge our teaching of routines in the questionnaire survey:

I was quite offended when some of my pupils filled the form in because I had gone to quite a lot of trouble to teach them some mental skills for the performance ...and then (.) they put my grandad helped or my parents no mention of the teacher (.) so maybe it was done subtly enough for them not to realise I don’t know(.) (Angela, Second Group Meeting).

It was Yvonne’s explicit teaching of PPRs that demonstrated to me and other teachers that our language was not specific enough.

As the project progressed it was evident that teachers were beginning to recognise that some of the things that they did instinctively were strategies that had a name. This shared language enabled better communication between teachers, and between teacher and pupil. For example, Janet, at first, noticed the pupils’ lack of consistent language:

...asked if they used performance strategies they all answered no but then when I asked them they said oh hang on they always had a mock exam and we always play in the concert before we do the exam (.) I think the older ones have got them and don’t know how to talk about them (.) (First Individual Meeting).

Janet later noted that pupils began to reflect back the language that the teacher used.

...over these two or three terms one or two things that I kept saying like PPR and people start reflecting that language back to you so its been worth it (.) (Final Reflection).
Our discussion about the use of positive language in general and encouraging pupils to use positive self-talk also gave teachers a way to begin to change their ‘nerves’ mindset. Even Fiona, who did not like self-talk, began to notice that she often used the word ‘nerves’. She decided to change to talking about improving confidence. Besides the use of positive language, Angela went a step further and began to notice how using good posture and body language were also important, and might work together to improve confidence.

8.4.3. New concepts

The benefits of using PST as an approach led to two concepts that can benefit both practitioners and researchers:

- The introduction to performance should be ‘graded’
- The term practice should distinguish between practice to improve and practice to perform

8.4.3.1. ‘Grading of exposure’ to performance

There is evidence in the literature that using ‘graded exposure’ to gradually accustom musicians to pressures associated with performance can benefit the performer (2.2.6.3). The exact benefits of graded exposure per se were not clear in these studies but the training appeared to help participants develop strategies to reduce or restructure cognitive anxiety. I was not familiar with the term at the beginning of this project so did not introduce this specifically to the teachers. However, I realised when reflecting during the project that I already introduced pupils, in particular young children, to performance in a graded way. I was deliberately sensitising pupils to performance, rather than desensitising them to more fearful performance situations. Angela also did this. She and other teachers discussed different types of performance ranging from informal to formal in the focus group discussion (4.2.3.2). In Cycle 2 I decided we should consider the way we introduced their pupils to performance as a group.

I asked the teachers to think about the amount of pressure given by the performance context and to write about this in the activity sheets (Appendix 4F) I was aware, for example, that examinations might be more fearful than performing at a pupil concert and the literature suggests that the pressure associated with
differing performance contexts might not be the same for everyone (2.2.6.3). Janet made a comprehensive list graded from:

- Play to next/previous pupil
- Play to friends and family
- Group session for several pupils at same level
- Informal concert
- Formal concert
- Competition
- Festival etc (Worksheet, see Appendix 4F)

Lynn felt that ‘playing to teddies at home was the least stressful and an examination was most stressful’. Angela already used a type of graded exposure for grade 8 pupils, by organizing for pupils to perform at a concert and/or a Festival before they took an examination (4.2.3.2). We discussed that playing at a Festival for some might be worse than an examination. Following these discussions, both Angela and Janet organised ‘stepping stone’ concerts leading to examinations in Cycle 2.

Although not conceived as graded exposure, it is easy to see that given more training the idea of performance stepping stones could be a useful notion for teachers. Had we continued for a third cycle I would have introduced the term ‘grading of exposure’ as a useful concept. Introducing recreational pupils to performance in a graded way should prevent the teacher from putting pupils under too much pressure by placing them in unsuitable performance situations for their age and experience. Future research may be able to demonstrate this.

8.4.3.2. Differentiating performance practice from practise to improve the learning

In music the term practice covers any type of practice, with no distinction between practising to learn the music and practice to perform. Differentiating practice into ‘practice to improve and practice to perform’ proved to be the most helpful concept of the whole project for both teachers and pupils.

This concept came about through my discovering a performance consultant with experience of working with top athletes and musicians, who made some observations about the differences in training between athletes and musicians. The first observation was:
For the most part, athletes are players who practice while musicians are practicers who play... The vast majority of a musicians life is spent preparing to perform...Most competitive athletes will have dozens of performance repetitions over the course of six months, while musicians may have one or two. This fact has huge implications for how, and what, musicians practice in order to play their best when it really counts (Moore, 2011, p. 22).

This made me think about how important it is for musicians to practice the performance, especially if they do not perform regularly. The second observation distinguished between the two types of practice:

From a psychological perspective, practicing to perform is not the same as practicing to improve. In other words, the mental skills needed to be a great practicer are not the same mental skills needed to be a great performer (Moore, 2011, p. 22).

I presented these two observations to the teachers at the first meeting to help think about performance as a separate skill to learning music. I emphasised the differences in the types of practice by linking them to mistakes:

- Practice to perform - pupils learn to manage their mistakes
- Practice to improve - pupils stop to correct their mistakes and improve accuracy

The teachers began to use this distinction immediately in Cycle 1.

From the outset Yvonne planned to teach the difference between the two types of practice (Appendix 4W) and she explained this distinction to all four pupils in week one of Cycle 1. She wrote:

This lesson went well and helped me to be clearer on the differences between practicing to perform or improve, and how this needs to be put over to pupils (Pupil Diary, YvonneP7).

Janet also found this useful. By week 3 in Cycle 1 she reflected that pupil P5 was ‘clearer about the difference’ and for herself:
pleased I am differentiating these two things not just in my teaching but also, more specifically when speaking about the practicing which is required in the coming week (Teacher Diary).

Fiona, Angela and Lynn did not make the distinction clear in their diaries in Cycle 1, but all their pupils made this distinction in their practice diaries. I deliberately included this distinction in the Cycle 2 pupil diaries (Appendix 4H). Thinking about 'practice to perform' enabled the teachers to consider more clearly the functions of regular performance practice. Several pupils wrote in their diaries that thinking about practising to improve and practising to perform improved the efficiency and purpose in their daily practice. Reconceptualising practice into two types of practice proved vital in influencing the teachers in the AR project to think more about performance and the teaching of performance skills.

When teaching my adults P9 and P10 I found myself using the concept of the 'learner performer' to help them have more realistic expectations about their performances. I also used this concept with younger pupils. I did not discuss this with the other teachers as I only realised I was using this notion during Cycle 2. It is interesting that pupils see themselves as learners of music, but when it comes to performance they were not allowing themselves to think about what they might learn from their performance. This concept is worthy of future discussion and research.

8.5 Conclusion

The findings in this chapter provide answers to RQ11 and RQ12, and further highlight factors for the success of PST as an approach presented in 7.4. The findings show that teachers need more specific education, particularly about goal setting and the functions of performance practice. The most appropriate teaching style is pupil-centred to allow the teacher to discuss and understand performance from the pupil’s perspective. Previous research has demonstrated the importance of error management in the training of specialist musicians (Kruse-Weber & Parncutt, 2014) and this research shows that performance practice is crucial to learn the vital skill of mistake management for recreational musicians.
The teaching approaches to goal setting and simulated practice, like the teaching of strategies discussed in Chapter 7 were very individual, and the benefits to the pupils also showed individual differences. Goal-setting strategy probably has limited applicability for recreational pupils, but using SMART principles from goal setting can give teachers ways to think about improving practice and performance preparation. Simulated practice was shown to be beneficial to help pupils cope with external pressures from the performance environment, and thereby improve the performance experience. Education and discussion were more useful to help pupils cope with internal performance pressure than strategies like relaxation. Practice performances were opportunities to learn mistake management, practise mental strategies for the performance, and to simply familiarise pupils with performing and the pressures of live performance.

The findings about goal setting provide new knowledge about using this as a strategy for recreational pianists, and findings about simulated practice extend knowledge about simulation training to recreational musicians. Using PST as an approach was beneficial in providing teachers with strategies to teach, a shared language, and new concepts that can be useful to other practitioners. The findings suggest that overall our teaching was successful in improving the performance experience for the majority of our pupils. However the true test of success was to judge whether the teachers had really changed their approach to teaching performance skills and whether change was sustainable. The subject of the next chapter therefore is change, and influences on change.
9 Evidence of change

The purposes of AR stated by McNiff & Whitehead (2011, p. 15), are to improve understanding of a problem, to develop learning, and to influence the learning of others. These purposes are demonstrated in this chapter. I firstly discuss my role as facilitator of change for the participant teachers new to psychological skills training (PST). I assess the extent of change, and whether change was sustainable. Throughout I also reflect on change in my own learning and understanding of PST. The chapter concludes with an examination of AR as the choice of methodology, and the limitations of this particular project.

My research questions were:

RQ13 How can teaching change through using PST as an approach to teaching performance skills?

RQ14 Is this teaching sustainable?

Change is demonstrated through data collected in three teacher reflections, planning sheets for the action cycles and contributions at teacher meetings (3.4.4.).

9.1. Facilitating change

The teachers agreed to participate in this research as part of their continuing professional development (CPD). In order to understand change I reflected on ways in which I, as group leader, was facilitator of change. These were to:

• Provide educational workshops
• Present research findings half way through the project
• Present my own practical experience

9.1.1. Workshops and resources

The teachers had to learn about PST before they could properly influence their students. I introduced the strategies from sport psychology in the manner of a professional development workshop similar in style and atmosphere to our usual
workshops. EPTA professional development comprises a varied programme of events carried out nationally but mostly regionally. An expert on a particular topic leads each course, and teachers take from the workshop or lecture whatever they consider relevant to their own work. In two action cycles, I organised two one-hour workshops (three for those who participated in the focus groups), where I introduced the strategies of imagery, self-talk, relaxation, goal setting, PPRs and simulated practice. I provided background information, follow-up resources and worksheets (Appendix 4F and 4N). It was the teacher’s choice whether they educated themselves further.

In Cycle 2 I introduced the Four Cs framework and performance profiling to help the teachers think about their pupils’ psychological needs with more clarity (8.1). I also asked the teachers to complete worksheets designed to help them think in more depth about teaching performance skills (Appendix 4F).

We met individually after each group meeting. These meetings were important for facilitating change because I was able to gain trust through getting to know the teachers better. I deliberately tried to create an atmosphere where they felt comfortable to express their concerns, and felt confident to contribute their own ideas to the research. These meetings gave me valuable insight into their different approaches to teaching the piano.

9.1.2. Research findings

The teachers collected data about their own students from the questionnaire survey. In the second group meeting the teachers learned more specifically about the performance experience of the sample of piano pupils as a whole from the preliminary analysis of the questionnaires and the Cycle 1 data (Appendix 4M). A consequence of this analysis was that as researcher I made observations and suggestions for Cycle 2 related to shared aims for performance, and why we were teaching mental strategies.

9.1.3 Presentation of my own practical knowledge and experience

I presented my own practical knowledge developed from ten years of teaching using ideas from sport psychology. I did this for the first time at the focus group workshop, which Janet, Yvonne and Angela attended. During the AR project I spoke to the
teachers about my use of PST more informally and anecdotally. Some of the information the teachers received prior to, and during, the project was also based on my experience (Appendices 4C, 4F, 4N).

9.2. Evidence of change

According to Guskey (2002, p. 382) teachers engage in professional development to become a ‘better teacher’, and this happens through change. It is generally agreed that change is judged through learning outcomes for students and through benefits to the teachers of learning new ‘practical ideas’ that will contribute to their regular teaching and generally ‘enhance effectiveness with their students’. In addition, change to attitudes and beliefs are also an aim of CPD. However, Guskey (2002) notes that if the main focus of CPD is change to attitudes and beliefs change is unlikely. Guskey (2002) argues that change usually happens in a particular order and this is reflected in his model of change shown in Figure 9.1.

![Figure 9.1. A model of teachers change (Guskey, 2002, p. 383).](image)

Guskey (2002) argues that for teachers undertaking professional development ‘significant change in beliefs and attitudes occurs primarily after they gain evidence of improvements in student learning. These improvements typically result from changes that teachers have made in their classroom practices’ (p139). I assess the extent and process of change for the teachers in my project through the examining the stages of change in the order presented in this model.

9.2.1. Evidence of changes to working practice

In this section I discuss the first stage of Guskey’s model of change (Figure 9.1). In order to study changes to working practice, I first reflected on how my own teaching
had changed through using a PST approach for over 10 years. The main areas of change are as follows:

- To think of performance as a skill separate to learning music
- To prepare the music at least four weeks earlier than previously to allow time to teach performance skills
- To treat examinations as another type of performance
- To organise more and more frequent performance practice
- To allow pupils to perform the same pieces more than once in differing contexts eg perform examination pieces at a concert prior to the examination.
- To eliminate the word 'nerves' from my vocabulary to talk positively about improving performance
- To understand performance from the pupils' viewpoint

In the following, I use these as indicators to describe changes to working practice for the teachers.

9.2.1.1. Thinking about performance as a skill

It was only during the research that I came across Moore (2011), who made observations about practice and performance in sport and music. These observations led me to conceptualise practice into practice to improve and practice to perform. The introduction of this concept of practice during the first group meeting (8.4.3.2) was most influential in teacher change as it helped us all think about performance as a separate skill to learning the music. It helped me as researcher to educate the teachers about performance practice, and helped me as a teacher to educate my pupils more clearly about practice as they prepared for performance in the action cycles.

Angela was the only teacher to have the ‘existing idea’ that performance was something that needed to be taught as a skill. The other three teachers said they found the distinction between practice to improve and practice to perform helpful for teaching in lessons, and it was easy to discuss with pupils. This distinction made in Cycle 2 diaries (Appendix 4H) helped the pupils to use this language in lessons and in their practice at home.
Differentiating the two types of practice was a concept that Janet and Yvonne said they would continue to use in the future. Janet said that one of the benefits of her participation in the project was:

it has made me focus on why rather than what a bit more and it made me realise though I’m pretty good at teaching to practice I don’t always teach to perform quite sufficiently (.) Certainly thinking of those things separately – very very useful (.)(Final Meeting).

In her last email Janet wrote that she had made a permanent change to her teaching ‘in training pupils from the earliest lessons to differentiate between the two types of practising (to improve/to perform) (Email 19.9.17). Yvonne wrote that she had not really distinguished between practising to improve and practising to perform ‘before when talking to a pupil…’. She had also not thought about performance ‘in it own right before at all levels of pupil. Think it is useful and ties in with what they learn in school’ (Final Reflection). She added that in the future, ‘... I will use the concept of the different types of practice again for exam and concert preparation’ (Final Reflection).

Although Lynn did not specifically refer to differentiating practice as an influence, she did change her thinking about performance. She thought that teaching performance skills was a ‘valuable use of lesson time’ and that although she thought it was important before:

now I feel it's much more important (.) so now I feel it’s something I would definitely dedicate the time to and although I was skeptical about the amount of time it would take in the lesson its definitely worth that payoff like you said increasingly you talk about it less and less cos it takes a while at the beginning because its new to everybody... well for me it became very easy to make it part of the lessons so yes I think its definitely an important skill to teach (.) (Final Meeting).

9.2.1.2. Preparing the music earlier to allow for teaching performance skills
In order to allow time for the teaching of performance skills I had to choose an amount of time that we should devote to this during the action cycles. Four weeks seemed to be the average time I spent on performance practice leading up to a
concert performance so I used this as a guide. The idea of practising performance skills for four weeks particularly in preparation for examinations was met with resistance:

Many of them won’t be ready 4 weeks before and if I examine them then it might destroy their confidence (Angela, First Group Meeting).

Some teachers had to prioritise improving technical or musical aspects of the pieces, or in the case of examinations other elements such as scales or sight-reading during the four-week cycles. They had not yet fully understood how much sooner this learning needed to be completed, and that musical learning would hinder the learning of performance strategies.

Besides a lack of understanding on the part of the teachers as to why they should prepare so early there were also problems inherent to teaching recreational piano pupils. There was disruption to lessons due to school excursions and illness. During the action cycles, pressures from schoolwork, important examinations and extracurricular activities in particular affected teenagers. These pressures reduced practice hours and in some cases the regularity of lessons.

Other things that prevented early preparation were musical. For some pupils playing the piano was not easy, and there were a number of difficulties for young beginners, for example:

- Difficulty in not being able to hear mistakes in rhythm/notes in one’s own playing. This was easier to hear on the recording or when teacher modeled the mistake (YvonneP20 and P14).
- Difficulty in making a realistic assessment of one’s own performance because the pupil’s assessment is based on mistakes (YvonneP14).
- Remembering more than one thing at once (AngelaP3).

Problems also arose through inherent difficulties in the music. The examination system takes pupils through a progression of musical development where pupils, who consistently progress from one examination to the next, perform repertoire that challenges their capabilities. This was particularly true for pupils taking
examinations in the action cycles, although there was evidence in teacher and pupil diaries of technical and musical struggles in the last few weeks leading up to concert performances. It was noted that it is not always possible to know exactly how long a particular pupil will take to grasp a new musical concept. Ensuring the music is well learned within a certain time frame is therefore a fine balance.

Musical preference also affected practice. Pupils played and practised the pieces they preferred the most. This was particularly evident for examination pieces where often the most 'jazzy' piece was the most appealing and therefore became better through more frequent practice. For concerts, pupils were allowed more choice and it was evident from the planning sheets (Appendix 4W) that these pieces were better prepared at the five-week stage. In Cycle 2 Lynn made sure pupils played well-known pieces so that they would learn more about performing. There was no evidence that other teachers had understood that choosing enjoyable repertoire, already mastered, would allow space to learn and practice relevant mental skills for performance.

Despite the everyday problems of teaching recreational piano pupils, the teachers taught performance skills but not necessarily every week of the four weeks. However they did have opinions on whether in future the emphasis on teaching performance skills should be for four weeks or not, and there was evidence of change. In their final reflections both Yvonne and Angela expressed that four weeks was 'about right'. Yvonne wrote, 'I think I’d use the preparation for performance in a more structured way than I have done in the past and spend more weeks on it'. Angela wrote that 'in future going to start PPR with pupils, who I feel need it, 4 weeks before the performance'. They did not give any reasons, whereas Janet, who also thought that 4 weeks before a performance was appropriate added a proviso that 'There should be no major technical issues at this point', and that you ‘must build on previous work on mental skills’. She specifically noted that:

Pupils have benefitted from the goal setting for a four week period in their notebook and on my weekly planning sheet which I had done anyway it reinforced how important it was...  (Final Meeting).

The new concept of differentiating practice meant that teachers began to
understand that teaching performance skills was not the same as teaching musical skills. Their ‘learning mindset’ rather than ‘performance mindset’ restricted understanding of why the musical learning should be ready so early. Some teachers were late in their preparation because they had not built in extra time to cope with some of the problems highlighted when teaching recreational learners.

By the end of the research I felt four weeks was a good guide to the amount of time needed for teaching performance skills leading up to a performance. Any less and there is no chance to practice and reinforce the learning of mental strategies. Participating in this research made it clear how important this is, especially when the findings showed that recreational pupils may not practise as much as their teacher would like, and miss lessons for all sorts of reasons. My participation in the project also made me confident that I was right not to always be pushing pupils on to learn more, and study more complex music, which is what happened in the past when examinations drove my teaching and learning.

9.2.1.3. More frequent performance practice: performing the same pieces in different contexts

During the action cycles, the teachers were expected to change from their usual performance preparation, which might include one or two performance practices prior to a concert or examination. Instead I asked them to emphasise performance practice for the whole of each four-week cycle. Fiona was resistant to this, ‘I wouldn’t normally do more than one mock’ (Fiona, Individual Meeting). However, changes were evident and by Cycle 2 all the teachers were planning more practice performances in their lessons than usual, which was an essential start to change. By Cycle 2 the teachers were more committed to extra performance practice. Janet wrote:

Having a mock exam 5 weeks before the performance as well as the week before again everybody benefitted from that so I shall carry with that (Final Reflection).

Yvonne had always done mock exams ‘but not for 4 weeks’. By Cycle 2 she organised mock examinations or tests for both pupils for the four-week cycle.
Prior to the research only Angela spoke about the importance of trying out pieces in different performance contexts. In the Focus Grp2 discussion she said she organised for pupils taking advanced examinations to try out the pieces first at a Music Festival (4.2.3.2). In Cycle 2 Angela and Janet organised students to try out examination pieces ahead of their examinations in 'stepping-stone' concerts. This was a change for Angela:

I normally would have done a mock exam anyway but I gave him two mock exams. And I used the concert as another stepping stone to his exam. He played two pieces at that concert and the other one at the EPTA concert last Summer. So he had performed in public all his pieces before he took his exam. (Final Meeting).

In the future she said:

I will try to plan more mini-steps to a performance or an exam (Final Reflection).

Janet also thought that her 'stepping-stone' concert, which was an extra performance leading to the examination the following term was valuable. She declared she would do this again if she had older more advanced pupils at the same level.

I had used the idea of low-pressure performances as 'stepping stones' to high-pressure performances such as an examination or Music Festival before the research began. I also only enter pupils for their first examination after they had performed at several pupil concerts. What I learned during the research was that I could conceptualise these strategies, as 'graded exposure, and a 'grading of exposure’ to performance. I did not use these terms during the action cycles but it is a useful concept to share with teachers in future (8.4.3). Having terms to use for the introduction of performance to beginner pupils, and terms for a way to practise leading up to important performances for advanced pupils, improves communication in one’s teaching.

9.2.1.4. Examinations as a type of performance
At first some of the teachers queried whether they could participate in the research because their pupils were already committed to examinations, which they did not
regard as a performance. Change meant understanding an examination as a type of performance including differing pressures from each test. These were not necessarily the same as the pressures perceived about a concert performance. Between the cycles I asked teachers to think about the pressures associated with the different parts of the test through activity sheets (Appendix 4F), which we discussed in meeting two.

Only Angela specifically referred to the way her thinking about examinations had changed. She started to realise that there were things she could do to allay pupils’ fears about the examination and the examiner. When working with adult P5 she had written that there were ‘things that I hadn’t realised needed explaining’ (Teacher Diary). Because of this new understanding Angela decided to prepare her pupils earlier ‘if they needed it’ in order to allow time for the teaching of specific performance strategies for examinations.

Sharing and discussing examination pressures with the other teachers made me confident about my approach to think of examinations as a particular type of performance. Before the research began I already ensured that pupils did a series of three or four full mock examinations to get used to the examination experience. I used role-play and constructive feedback. By the time pupils enter the examination room they knew exactly what to expect. It was beneficial to me to have to explain why I did this to the group, and to write worksheets to enable us to think more about examinations. I was made more aware of the pressures of each test in the examination, and how important it is to practise each test as it will be at the examination. I became certain that more than one mock examination is required in order to learn how to cope with the differing pressures of each part of the examination.

9.2.1.5. Abandoning ‘nerves’ to teach performance skills

One way to judge whether the teachers were changing their thinking about performance as a skill was to see if, and how, they used the word ‘nerves’. The focus group discussions revealed the ‘nerves’ repertoire through which both groups were used to talking about performance (Chapter 4). Another way to judge whether the teachers were improving their learning and changing their thinking about ‘nerves’ was in their commitment to trying out performance strategies. I therefore looked for
evidence of change to the teachers' choice of language in their planning and preparation, as well as for evidence that they were trying out new strategies.

Following the first group and individual meetings the teachers wrote a reflection in which I asked if they had made any changes to their teaching already (Appendix 4K). I also asked them to voice their concerns, because concerns were a potential barrier to change. Concerns and changes made to their teaching are shown in Table 9.1.

It is apparent in the changes section that they are not writing about ‘nerves’ but ways to prepare for performance. The word ‘nerves’ was not totally avoided in the concerns section. Three out of the five teachers were concerned that the strategies I was asking them to try out might draw attention to ‘nerves’, which could make pupils worse.

The teacher plans written for Cycles One and Two also showed some change in language (Appendix 4W). In Cycle 1 a few teachers used the word ‘nerves’ but in Cycle 2 this was absent. In the final reflection and during the final meeting the word ‘nerves’ was noticeable by its absence. Yvonne used the word ‘nerves’ once when referring to how the teaching had reduced ‘nerves’ and enabled ‘polished performance’. Lynn referred to ‘nerves’ to show how she had at first chosen pupils to participate in the research if they were ‘visibly nervous’ but by Cycle 2 she chose any pupil because she was focusing instead on ‘best possible performance’. She said the benefit of the way she devised her pupils’ psychological readiness (8.1.2) for the upcoming performance was that:

it made me discuss the issue with them and instead of using the word nerves () I just said so how much are you looking forward to this concert on a scale of 0 to 10 where would you put yourself [...] That was a nice positive way and it didn't give them any ideas either ... (Final Meeting).
# Table 9.1. Teacher change and concerns before the start of Cycle 1.

## TEACHER CHANGE

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Change and Concerns</th>
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</table>
| Janet   | Begun to think more clearly about the performance aspect of examinations.  
'Begun to work out why some of the things I have done instinctively work well'.  
Already discussed PPRs with some pupils, and 'found some were familiar with this from sport or theatre training'.  
More overt when goal setting before an exam ie 'previously only discussed goals now have written it into notebook for easy reference'. |
| Fiona   | Already discussed preparation for performance techniques in lessons.  
Become aware of the language in discussion. eg talk about the strategies in terms of 'ways to increase confidence and perform better rather than ways to stop being nervous'. |
| Yvonne  | Become more aware of ways of helping performance and 'have held my first ever pupil concert for home students'. |
| Angela  | 'Made some positive thinking cards eg "I can do it" and "the audience is on my side"'. 'Have got pupils to set own goals by preparing a programme for the Musicathon'. |
| Lynn    | 'Not yet, but I am aiming to address actual performing aspect in more detail rather than just technical side. I might introduce more role play to regular lessons'. |

## TEACHER CONCERNS

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Concerns</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet</td>
<td>'Putting these ideas into practice will be too time-consuming'.</td>
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</tbody>
</table>
| Fiona   | Felt overwhelmed with the paperwork and concerned pupils will feel like this as well.  
It gives them another thing to do besides practise.  
‘Worried about making their nerves worse by focusing on them too much’. |
| Yvonne  | ‘Worried that I won’t find time to complete the planning etc that will be necessary’  
Concerned ‘that the idea of nerves might be introduced where it did not exist before’. |
| Angela  | ‘I don’t want to draw attention to the possibility of nerves in pupils who aren’t particularly nervous’.  
Has a concern about having to ‘nag pupils’ to fill in diaries or spend lesson time getting them to write it up. |
| Lynn    | Concerned that:  
‘techniques are not able to be measured as successful or otherwise’. Teaching too time consuming.  
That ‘more opportunities to perform will be more effective than the strategies themselves’. |
During the action part of both cycles the teachers mostly followed their plans, and all teachers introduced new ideas or strategies into their teaching (Appendix 4W).

Table 9.2 shows a summary of these new ideas by teacher.

Table 9.2. New teaching strategies introduced during the action cycles.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Cycle 1</th>
<th>Cycle 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet</td>
<td>More mock examinations</td>
<td>A stepping stone concert towards an examination.</td>
</tr>
<tr>
<td>Yvonne</td>
<td>Simulation of performance conditions.</td>
<td>Goal setting</td>
</tr>
<tr>
<td></td>
<td>PPR</td>
<td>How to keep going and ignore mistakes</td>
</tr>
<tr>
<td></td>
<td>Differentiate between practice to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>perform and practice to improve.</td>
<td></td>
</tr>
<tr>
<td>Angela</td>
<td>Use of yoga, positive thinking cards,</td>
<td>More mock examinations and a concert</td>
</tr>
<tr>
<td></td>
<td>toy prop</td>
<td>as exam preparation</td>
</tr>
<tr>
<td>Lynn</td>
<td>Experimented with positive triggers</td>
<td>Project on mistakes for young pupils</td>
</tr>
<tr>
<td></td>
<td>and positive self talk</td>
<td>PPR including announcing pieces and</td>
</tr>
<tr>
<td></td>
<td>Relaxation – deep breathing</td>
<td>bowing</td>
</tr>
<tr>
<td></td>
<td>Imagery</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PPR</td>
<td></td>
</tr>
</tbody>
</table>

Table 9.2 shows that the strategies used by the four teachers who participated in both cycles that they were more experimental in Cycle 1 and more specific in Cycle 2. They mostly used strategies they had used before but there was more understanding of why they did what did, and therefore more confidence to include these strategies in their teaching. Janet said:

One thing I did do (.) you know at the very beginning you asked us to do a teacher reflection (.) the very very beginning (.) So what I did I looked at what I’d written there and commented on how I felt at the beginning (.) how I am interested but now I feel that I’ve achieved understanding of how I teach how I do and in particular why I teach performance how I do (Final Meeting).
By the final meeting all the teachers thought that simulated practice with role-play or mock performances and PPRs were easy to integrate into their lessons. Even Fiona, despite her own insecurities about performance, her apparent lack of confidence to teach mental skills, and short participation in the project, her later email showed that she had found a type of routine useful (9.4).

Yvonne who already used routines taught them in a more methodical way for longer during the action cycles than previously. In her most recent email she wrote how her teaching had changed:

> I think the main difference for me is that I now schedule in a four-week programme of PPR etc. before any concert. This seems to be successful in building confidence and reducing stress (Email 10.10.17).

Angela wrote similarly, 'In future going to start PPR (.) with pupils who I feel need it 4 weeks before the performance (Final Reflection).

She was also going to include good posture and body language in her routines because she had become more aware during the project of the need to teach this ‘before and during performance’ (Final Reflection).

I felt that I had already abandoned the ‘nerves’ repertoire before the research began. In my Final Reflection I wrote that participation in the project had 'helped me be more positive in my choice of language to discuss performance'. Like Angela I noticed the importance of positive body language through working with a pupil on this in her PPR. I have continued to encourage positive language and behaviour in PPRs.

One of the experiences of professional development is that you can learn from other teachers on the course, as well as from the expert organizing the course. During the project, I made several improvements to my teaching by using ideas from other teachers. I learned to be more systematic in my teaching of routines from Yvonne, and I introduced Lynn’s simple assessment of performance confidence (8.2.2 ) into my work. I began to make these improvements in Cycle 2 and have continued to use them.
9.2.1.7. Understanding the pupil’s viewpoint

Much of the teaching of performance was teacher-directed which limited the teachers’ understanding of their pupils’ performance needs. It was interesting that when I asked the teachers to use their pupils’ questionnaire data to help them choose pupils for the action cycles they preferred to use their own experiential knowledge. Only Angela and I referred to the questionnaire data in our choices for Cycle 1; Yvonne and Lynn used their data for choices in Cycle 2. Only Lynn referred to learning more about the psychological experience of her pupils:

...one of the biggest things I’ve learned from it is to not pre-judge anybody and not to pre-judge why they might be nervous or anxious about anything (.) talk to them about it first and hear what they have to say listen to what they’ve got to say and react from that. (Final Reflection).

Performance profiling and the Four Cs were introduced in Cycle 2 to help the teachers understand their pupils’ psychological needs. The reactions to the Four Cs seemed to be linked to teaching style. Neither Janet (8.1.2) nor Yvonne, who were more teacher-directed in style, and both focused on the examination syllabus to drive their teaching and learning, found the Four C diagrams helpful:

this sort of analysis does not fit in with my teaching style. I don't think my pupils were old enough to show much interest in this type of analysis... they seemed a bit baffled by it. But that might be because I didn’t explain it properly (Yvonne, Final Reflection).

Angela was more positive about the Four Cs, because they:

provided a new way of thinking about things for second cycle. (might have got stale after Summer term) Four Cs draws attention to balance of all elements for a pupil ideally. In some pupils there’s an imbalance there (Final Reflection).

Lynn, who was the most pupil-centred, was the most positive:
How beneficial were the four Cs. I was sceptical about this at first I felt it was a bit American a bit gimmicky I dunno (.)...but now having used it on the children and the students I did I found it really useful...it made it easier to categorise it (.) I think all the talking about it can go anywhere whereas this kind of focused your attention on particular aspects and the adults were gosh yeah you can see that my (.) this aspect well confidence basically is really low (.) (Final Meeting).

In her final written reflection she wrote that her use of Four Cs ‘was not systematic enough because it took time but would use again’.

The profiling met with more opposition. Angela did not have time to complete her performance profiles and was dismissive, when she read ones I prepared for her: ‘most of it was in my head already... it was paperwork for the sake of it’. Janet was more apologetic:

I didn’t really find the performance profiling useful or the questionnaires. I spent a lot of time looking at both questionnaires and I wasn't any the wiser when I had finished as when I started I’m sorry about that... (Final Reflection)

Yvonne and Lynn said that the profiling was not helpful to them because of the lack of continuity of pupils participating in both cycles. However, Yvonne wrote in the final reflection, ‘I think it could be useful to give a snapshot of where we are now and what might be the ideal. I might use that more in the future’. Lynn questioned the validity of the profile because in discussion pupil’s views changed. She had not yet understood that profiles are ongoing.

I found that the profiling and use of the Four Cs was a helpful way to assess my teenage and adult pupils psychologically. I had learned about performance profiling as a tennis coach but had not thought about it for piano pupils until part way through this research. Through discussion, and observation of my pupil data, I was better able to integrate known strategies for all pupils into their routines, and made my teaching in Cycle 2 more specific. Even though many of the pupil diaries were sparse I was given a window into my pupils’ performance experience that I had not had before.
If I had been asked about my teaching style regarding performance at the start of the project I would have said it was pupil-centred. However, on reflection I realised I was not totally pupil-centred with all ages and abilities. I noted that the strategies used with younger pupils were less proactive than those for older pupils. I was ‘doing their psychology for them’ (compare 5.3.2). My approach becomes more pupil-centred as they become older, more experienced and able to articulate their concerns.

I noticed from the questionnaire data that several of my young pupils already had coping strategies for performance. I learned from Lynn that some young pupils may need more help and want more conversation about performance than I was currently giving. In order to uncover existing strategies and to make sure I was not assuming that all young pupils enjoy performance, I found that Lynn’s performance assessment gave me the relevant tool to help me improve my teaching.

9.2.1.8. Change to working practice – a gradual process

It was ambitious expecting change in such a short time, but by the end of the project all the teachers had made some changes to their working practice, or had better understanding about some aspect of their teaching. The changes made were comfortable rather than radical. The teachers mostly built on what they normally did and only tried new ideas that they felt safe teaching. For example, Yvonne said in the final meeting that she ‘liked the structured PPR. I’d always done that sort of thing and mock exams but not for 4 weeks’. The following exchange in the first group meeting about teaching self-talk by using positive statement cards at home shows teacher differences:

**Fiona:** I think is it hard to convince that positive self-talk is not fake. I can imagine certain people thinking, I can’t imagine that’s gonna work if they are not going to believe it.

**Angela:** I like the idea of the putting it by the bed. How simple is that. You can say just try it for a week, put it by the side and just see how it makes you feel just try it.
Fiona thought that teaching mental strategies would not be authentic because she struggled with performance herself. Angela had prior knowledge about positive thinking (7.3.2) and could see the value in self-talk.

The group avoided teaching anything that was perceived as embarrassing or silly. Yvonne said ‘I found the bit of positive thinking and words to repeat I found quite embarrassing because that’s not me (First Individual Meeting). Janet and Angela also pointed out, that pupils also could also feel embarrassed, particularly teenagers, about using strategies that made them uncomfortable. Janet said that at her annual concert:

I announce pieces for younger ones but then older ones announce what they are going to play (.) literally two sentences (.) and I found it made them more nervous so I gave up on it (.)(First Group Meeting).

Changing the mindset to include ‘something else to teach’ in ‘already busy lessons’ was a challenge for some. Angela said that she did not always have time to focus on mental skills because pupils had other more pressing problems like sight-reading. Lynn thought that teaching mental strategies to adults was most time consuming but that it became easier as time went on:

‘(.) we could discuss endlessly what the problems were and how to overcome them and half an hour later you know lets get to piano lets stop talking about it and get on playing but overall generally in the lesson time discussing it became easier and easier (Final Meeting).

She summarised:

This teaching is time consuming but I feel now it is time well spent. Each term the time you spend gets less because you are building on what you did previously (Final Reflection).

In summary, all the teachers made changes to their working practice, the first requirement to initiate permanent change suggested in the model by Guskey (2002).
The teachers did this mostly by improving already familiar strategies. The training I devised provided the teachers with some new skills, or at the very least new understanding of their teaching in relation to performance. This also applied to my own teaching. My teaching improved by using ideas from other teachers and, as a consequence of being researcher and educator for the group, I developed better conceptual understanding of things I had been doing instinctively.

9.2 2. Evidence of change in pupil learning outcomes

The second stage in the process of change through professional development for teachers, identified by Guskey (2002) in Figure 9.1, is change in observable outcomes for pupils. It is successful implementation of the new skills learned through professional development seen as observable pupil outcomes that ultimately changes attitudes and beliefs (Guskey, 2000, p. 138). In this section I discuss evidence of change in pupil outcomes.

There was no consensus in the group about the benefits of PST. Assessing change in pupil outcomes was difficult because many pupils only participated in one action cycle. We were all working on differing strategies with a variety of pupils, so it was not possible to undertake an assessment of pupil outcomes against a common list. Table 9.3 summarises the learning outcomes for the pupils perceived by their teachers in their final reflections.

Several comments in Table 9.3 refer to how the strategies and the concept of practice to improve and to perform improved pupils’ practice. Performance success, meaning performance quality, rather than the performance experience was also mentioned as a benefit from the teaching. However, two teachers wrote about improvements in mistake management, and there were a few references to improvements in psychological skills such as confidence and control. No teachers mentioned strategies improving concentration, even though some pupils had written this as an outcome for themselves in their performance evaluation.

Comparing the teacher comments to my findings in Chapters 7 and 8 it is possible to see that the teachers were not totally engaged in teaching towards improving psychological outcomes for their pupils. The pupils themselves wrote that imagery, self-talk, relaxation, PPRs and simulated practice improved the performance experience through developing psychological skills such as confidence,
concentration, and control, and in many cases the pupils themselves had more psychological awareness of their performance concerns than their teachers.

**Table 9.3. Teacher observation of learning outcomes for their pupils.**

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Benefits for pupils</th>
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</thead>
</table>
| Janet   | Written goals for the 4 weeks leading to the performance, as well as weekly goals was useful.  
Referring to practice to improve and practice to perform useful concept to improve practice.  
Extra simulation training eg mock exam 5 weeks before exam gave extra performance opportunity.  
Focussing on performance skills led to pupil confidence.  
Pupils were ‘excited to be part of real research’. |
| Yvonne  | Structured PPR helpful for ALL PUPILS not just those in the project.  
Focussed practice and clear target setting benefitted the boy pupils in particular.  
‘I think it did reduce nerves and helped produce more polished performances’ |
| Angela  | Benefits were varied eg confidence and motivation.  
Techniques also used with MANY OTHER PUPILS one of whom better managed mistakes and overcame self-consciousness.  
Exam and festival successes. |
| Lynn    | Made performance seem more ordinary by practising the performing side a lot at home.  
Made pupils practise more because of thinking about the concert in advance, ‘and realised how much they needed to prepare’.  
‘Gave them a chance to practise playing through mistakes well before the concert and not just on the day itself’.  
Practice to improve and practice to perform has improved pupils’ practise  
Helped pupils focus practice on difficult bars that needed attention, ‘instead of repeatedly playing the whole piece over and over’.  
Built confidence because they felt better prepared before the concert  
Helped pupils to realise their fears were not accurate. |
There was a problem in assessing pupil outcomes for very young children because they were not able to articulate how they felt. This perhaps shows that piano teachers, and particularly those who used a teacher-directed style of teaching, are used to basing their evaluation of learning on observation and experience rather than what pupils tell them. These observations of learning outcomes were also based on personal theories about performance that the teachers had developed. In the beginning both Yvonne and Angela were committed to the theory that pushing pupils to perform when they were not ready and using PST could lead to ‘nerves’ in children who were not ‘nervous’. This exemplified an ‘ideological dilemma’ (3.2.4), because the outcomes for their pupils were in opposition to this theory. A boy pupil of Angela’s improved his confidence and had passed an exam with distinction as well as won a Music Festival class. A girl pupil had overcome her self-consciousness, and had learned to manage mistakes. Yvonne said:

I did use the PPR with all the pupils not just those in the project for all those doing concerts and exams and it was effective for all of them except one (Final Meeting).

The teachers also had theories about the suitability of PST for different age groups. Angela thought that young pupils ‘just did the job’ of performing and did not need much teaching, therefore she was disappointed in the amount of confidence her young pupil P3 developed in Cycle 2. Lynn thought that the learning outcomes were better for the younger children than her adult pupils who were ‘hard nuts to crack’. However, she cautioned that, even though young children:

might not necessarily show nerves (.) or be able to say yes I feel nerves beforehand (.) they do still have worries and concerns about it so it helps you address it and helps them more become a better experience for them (.) I think they did perform better as a result of their PPR and standing up and introducing themselves and being aware of it themselves (.) (Final Meeting).

She thought her concert in Cycle 2 was much more relaxed and fun than previous concert experiences. In the final meeting she also gave examples of how discussions with her young pupils helped to overcome their fears, which were very individual.
I had deliberately chosen teenagers and adults to participate in this research because I felt they needed most help with performance confidence, and also because they would be able to articulate their concerns better than younger children. I was made aware at the end of Cycle 1 that confidence, which I had judged needed improving through observation alone rather than discussion, was not the only psychological skill my pupils desired to improve. The Four Cs framework (see 2.1) helped me understand desired outcomes from my pupils’ perspective. In Cycle 2 I noted improvements for all pupils in psychological skills for performance from the performance evaluations, which made me more certain that PST was beneficial as an approach.

The assessment of change to pupil outcomes showed that the teachers were not all agreed about the benefits of PST for their pupils. Therefore not all teachers reached the second stage of change in the model in Figure 9.1. Two action cycles were probably not enough for all teachers to articulate or realize their changes to working practice which might then lead to observable pupil outcomes. Furthermore in two action cycles it may not have been possible for all teachers to develop their understanding of PST sufficiently to affect change.

9.2.3. Evidence of change to existing beliefs and attitudes

I have shown thus far that there was some evidence of change in working practice and a realisation that there were some positive learning outcomes for the pupils. Not all teachers understood that their teaching could be aimed specifically at improving their pupils’ performance experience. There was evidence that some beliefs were rooted in the myths about practice being the best form of performance preparation, and that ‘nerves’ were inevitable and harmful to performance. For real change to occur the teachers needed to change these beliefs, which is shown as the last stage in change in the model of change by Guskey (2002).

Only Lynn reached the third stage of change by completely changing her perspective on performance training during her participation. At first she used ‘nerves’ as the frame of reference. She thought the word was a good starting point for the conversation the teacher and pupil needed to have about performance. By the final reflection she showed how her framework had changed from that of ‘nerves’ to ‘performance enhancement’.
I chose children who from that first questionnaires who said they were nervous about performing anyway and the second lot I chose everyone basically who hadn’t necessarily shown they were nervous... I was trying to make them to focus before the performance so that they gave their best performance (Final Reflection).

Lynn had many ‘conversations’ that facilitated her teaching to create individual solutions for her pupils to enhance their performance experience.

The other four did not significantly change their perspectives. Angela kept to her philosophy that you should teach to each individual, and only teach them certain things ‘when they are ready’. By the end she said:

I think the project has reinforced my existing idea that if a pupil is to perform performance needs to be taught as a skill. Mental skills are important for adults and self conscious older children and teenagers...I don’t think its so important to teach them to a pupil who is already confident (...) my ideal is to be so absorbed in the music itself that other coping strategies are less necessary (Final Meeting).

She was still not convinced that young children might also need to be taught performance skills, even after she heard Yvonne and Lynn talking about the success of their teaching with young children.

Yvonne’s cautious approach did not change. She said:

I think mental skills are important but I am a bit wary there is a danger of setting up tension where it didn’t exist before if you are putting too much emphasis on it (Final Reflection).

She was also not convinced ‘about placing too much emphasis on performance, which is only one part, and not a compulsory part, of learning music’ (Final Meeting).

She expressed that she would continue to develop her thinking once the project was over and she could think about it in her own way. She found an additional benefit to teaching mental skills was that she was able to use the skills to enhance her own confidence in performance. She said she had already performed a piano duet at a local ‘piano circle’. 
Janet was the least convinced by PST. Her basic assumptions did not change:

And how important do I think mental skills are ... I think they are important (said very slowly) but when I started I was maybe of the opinion that they were *caught* not *taught* and I think I agree with that (Final Reflection).

In Cycle 2 Janet firmly expressed in her planning the belief that confidence will come from ‘successful playing’ and through ‘reminders to think positive’. It was noticeable that the things she found most useful helped her to plan her teaching better so her pupils could perfect their playing technically and musically:

Actually having to *write* a response to the examiners response report was very useful and I compared the actual mock exam with the results as well... I found that (tick boxes for practice and motivation) a very useful little window into what they were doing. That’s much better and much more focused (Second Group Meeting).

Her main considerations at the end of the research were still about learning and practise. Improvements to performance quality came as a consequence.

Fiona only participated in Cycle 1 so there was no opportunity to judge if her beliefs changed. She was sceptical about performance training from the beginning, which may have been linked to a lack of confidence in her own performing skills:

so I feel I haven't mastered it at all so I feel a bit of a fake teaching it. I have complete empathy with them, which is the good side of it but trying to help them that is a bit fake because I need to work on it myself (First Group Meeting).

Despite her own insecurities about performance, her apparent lack of confidence to teach mental skills, and short participation in the project, her later email showed that she had found some things useful:
For me, the main thing that has changed in my teaching, is that I get pupils to practise walking in to the performance situation, say hello to examiner etc. Before I would mention these things, but not practise them. Also, I have always suggested that pupils practise performing in front of visitors or teddies or parents, but now I insist on it as a definite performance preparation exercise and feel more validated in doing it because of what you taught us (Email, 20.9.17).

My participation in this research did not change my belief that PST from sport was applicable and useful for teaching recreational pianists to enjoy performance. What changed was my confidence about my teaching and theoretical understanding. I wrote:

...I felt confident at the end of Cycle 2 that the psychological skills training approach provides a positive framework for teaching developing pupils to give their best possible performance (Final Reflection).

Through having to read widely and educate other teachers I developed better theoretical understanding of PST. I felt that teaching mental skills, and recording in detail what I did, helped to clarify the purpose of my teaching. ‘It helped me to think about the importance of performance for sharing music with others’ (Final Reflection). Like Yvonne, an interesting consequence of my involvement in the project was that during the research period I began to take more opportunities to perform myself and I have used mental strategies successfully to improve my own psychological skills for performance.

9.3. The extent of change

If change was going to occur it was most likely to happen with a group of experienced teachers who were enthusiastic to learn. As a group, the teachers undertook regular professional development and they were well educated (6.1). It was understandable that change was different for everyone, as we did not have a common piano teaching education (6.1). The main change that occurred was to working practice (stage one of Guskey’s model, 2002). There was possibly not enough time in two cycles to embrace more change. Prevalent teaching style, which for most was teacher-directed linked to a use of the examination system to guide
learning seemed to be a barrier to change. The teacher who was the most teacher-directed in approach appeared to change the least (Janet) and the teacher who was the most pupil-centred appeared to change the most (Lynn).

The answer to RQ13:

**How can teaching change through using PST as an approach to teaching performance skills?**

is that change can happen. We all made various adjustments to our working practice and all said there were ideas or strategies that we would continue to use in their regular teaching. The idea that performance was a skill in itself was gradually percolating through the group as the project continued. Change came from using new ideas in working practice but mainly from new conceptual understanding about differing types of practice ie to improve and to perform.

RQ14 asked if teaching which included psychological preparation for performance for piano pupils in regular piano lessons could be sustainable. The answer is only if teachers are educated in performance psychology. They need to be convinced about the value of using PST as an approach, which needs delivery through pupil-centred teaching. All teachers took ideas from the research, which they said they would use in future, but it was not a wholesale adoption of PST as a total teaching approach. Aspects of piano teaching culture were apparent, which present barriers to change. These are:

- A learning culture based on instinct and experience and the sharing of stories, rather than education and training
- A reliance on teacher-directed learning (Cathcart, p. 263)
- A culture that relies on ‘nerves’ as the main means of communication about performance
- A culture that values teaching music and undervalues teaching performance skills

For some of the teachers, a reliance on the examination system itself perhaps encouraged them to stick with their tried and tested approaches, which limited their engagement with an innovative teaching method. There was a concern at the start that piano teachers already had too much to teach, which perhaps stems from the
demands of teaching a range of musical skills required for examinations. Allayed to a perception that examinations were not performances led most of the teachers to conclude that there was no time for performance psychology. Examination driven instrumental learning is also a barrier to change.

Change theory (see Hayes, 2018) shows there are various stages of change and that individuals have to have awareness, knowledge, desire, and ability to change. They also need to be ready for change. Expecting change in my AR project over only one year was ambitious, but it was rewarding for me as both teacher/researcher to see that there was evidence of, and some influence on, change for all the teachers including myself.

9.4. Action Research as methodology

AR as the choice of methodology allowed me the freedom to explore and improve my own working practice, as well as examine how other teachers might be influenced to use PST as part of their teaching approach. Through the cyclical and reflective nature of AR (3.1.1) it was possible to see how both the teachers, pupils and I, as teacher researcher, responded to the teaching of mental strategies to see how we improved, reflected and changed our working practices. The method allowed us to seek ‘new beginnings’ (McNiff & Whitehead, 2011, p. 36) rather the achievement of a definitive outcome. In general, the design was a success as an exploration of using PST framework for piano teachers. However, there were limitations and improvements I would make if I were to repeat such a project.

9.4.1. Limitations and future improvements

9.4.1.1. Too much data

A drawback of not having a precedent to follow in the design of this project was that copious amounts of data were produced. This presented particular challenges in the analysis and reporting. It also meant that the teachers did not complete all the tasks I set. This was due to time, other commitments or lack of interest. Yvonne described the paperwork as ‘onerous’ and Fiona said it was ‘a bit overwhelming’. In another project I would introduce fewer concepts more slowly and reduce the paperwork. There was a delicate balance between my desire to collect enough meaningful data and the amount of time teachers were willing to devote to this research.
9.4.1.2. Too little data

The most unsatisfactory part of the data collection was the lack of data produced by the pupils. I designed the diaries with older pupils in mind (Appendix 4H). It is not therefore surprising that the young children needed help understanding what to write and/or needed help in writing their diaries:

I had a young girl 9 or 10 who just couldn’t articulate anything about the psychological thing (Lynn, Second Group Meeting).

Some teenagers produced interesting data but the majority only wrote the ‘bare minimum’ (Angela), that is, one or two sentences in both their diaries and performance evaluations. Qualitative data written at the performance evaluations was brief, and the performance experience was not well explained by many pupils.

We discussed the idea of interviewing pupils immediately after a performance and/or during the teaching process at the first group meeting. This was rejected due to confidentiality, and because there was reluctance on the part of some teachers, at that time, for me to be so intrusive. We discussed using technology such as iPhone and iPad in the future to motivate teenagers. However, a fundamental problem was that pupils, like their teachers (Chapter 4) were not used to expressing and articulating performance concerns. It may also be because the pupils were not able to be co-researchers and involved in their own learning that they felt less obliged to complete the data. Had I had direct contact with pupils and set them tasks their data may have been more productive. Cain & Burnard, (2012) discuss the pupil as researcher in classroom music education, and how involving ‘pupils as co-researchers providing valuable insights into their own personal experiences, their correlations and meanings’ (p. 238) can create new and possibly ‘transformative’ knowledge. This should be considered in a future project in the instrumental teachers studio.

9.4.1.3. Was the data ‘Real’?

Besides a lack of data from the pupils the teachers wondered about the accuracy of pupil diaries and evaluations. Pupils did not always fill them in until the end of the week, or parents might help and write ‘what they thought you wanted to hear’
(Yvonne). I know that some of my teenage pupils exaggerated the amount of time they practised so they may have exaggerated about other things they wrote.

Diary problems were also applicable to the teachers with regard to accurate recollection, and several teachers were new to reflective writing. Yvonne said:

I did the OU (Open University) diploma of music a few years ago and had to do reflection at the end of each essay, well I just learned to write what he wanted to hear. The one week I was honest and said I had done it before I got a lower mark... (Second Individual Meeting).

Angela noticed that being absorbed in teaching during the lesson meant it ‘was a bit hard to write everything down’. Lynn also found she was not always certain what was wanted in each section of the diary. She found she was repeating herself, so she wrote a shared diary with her young pupils in Cycle 2, which was brief and to the point. I found it impossible to record all the details of the lessons while you were teaching and had to rely on recollection of what happened. This may not provide totally accurate data but is in fact typical of what piano teachers do on a daily basis where we make assumptions for our teaching based on what we think happened. In that sense the data were ‘real’.

9.4.1.4. Quantitative data collection
The questionnaire survey was a good way to assess the performance experience of recreational pupils. The results revealed much of interest about regarding these pupils. However, the results from Question 13 on Questionnaire One and Question 14 in Questionnaire Two about aims for performance are not reported due to inconsistencies in the answers, which prevented me from analyzing the data in a meaningful way.

The performance concern scale holds promise for the future and needs testing on a larger sample. The Cronbach’s Alpha test scores were high on almost all the items, indicating good reliability (Appendix 4L). With an emphasis on broader performance concerns rather than just MPA this could prove useful as a practical tool for teachers and researchers.

The most unsatisfactory part of this research was that I was not able to conduct a meaningful statistical analysis from a comparison between the
performance concerns in the questionnaire and the two performance evaluations as planned. This was because the sample, which participated in both action cycles, was too small. 14 pupils participated in both cycles. Two were young children who completed the wrong forms for one cycle, leaving only 12. Nine of these pupils were mine. The sample of 12 was therefore too small and not representative enough to examine relationships through cross tabulations.

The evaluation of performance was also not satisfactory partly because I did not have continuity of pupils from Cycle 1 to Cycle 2, and partly because the performance evaluation forms were changed in Cycle 2 to reflect the new aims in our teaching (8.1). The teacher evaluation in Cycle 1 was also not satisfactory because I had asked the teachers to judge their teaching through observation of pupils at the performance. It became clear at the performance that for example, knowing if a pupil was using imagery was impossible to judge.

The only data that could be consistently compared from the questionnaire survey through the two cycles were about performance concerns. However, Lynn pointed out that the questionnaire survey was a recollection of a performance when feelings of arousal and anxiety might not be so strong, whereas the performance evaluations were completed on the morning of the performance when arousal and anxiety would be more obvious. She felt it was therefore not a fair comparison. Confidence was assessed in both cycles but the sample was too small to analyse statistically. Comparisons between performance concerns and confidence could be made by each teacher to study their own pupils individually. A quantitative approach in a future project would work better for a bigger sample of pupils who participate in all action cycles, and work on the same psychological skills for all performances.

9.4.1.5. Other improvements

When I was writing my reflection of how my teaching had improved or changed as a result of my participation in my own research I noted two things I had learned from other teachers and that I now implemented in my work (9.2.1). It could have been informative to ask the other teachers what they had learned from each other, as this is one of the opportunities that CPD offers. I would include this in another project.
At the end of the project I felt the teachers had given their utmost, and therefore did not ask them for any further contributions apart from one email communication (Sept 2017). It may have been informative to ask the teachers about my interpretations during the data analysis to ensure they were correct.

It is easy to see improvements that can be made in hindsight. The nature of AR is that actions can change because that is the reality of teaching. Despite these limitations the five out of six teachers continued to the end of the project and I collected data from which I could create interesting and meaningful findings about the potential of PST for recreational pianists. AR, a new approach to the study of PST, and rarely used as part of a multi-method design, offered the opportunity to study piano teachers in practice, and also to gain valuable information about recreational pianists and their performance experience; both hitherto unexplored. Despite the limitations of some of the quantitative analysis I would use a mix of methods in future AR, as it offers a breadth of perspective not possible from using one method alone.

9.5. Conclusion

The AR project was an exploration into the possibility that using an approach with a positive framework through which to teach, learn and discuss performance skills could benefit recreational piano pupils. The questionnaire survey revealed individual and developmental differences in the performance experience for recreational piano pupils. The results of the teaching using PST as an approach showed individual differences. The majority gained from their participation in the project through improving their psychological and/or musical skills for the performance. The teachers also gained new knowledge about teaching performance skills. They responded in different ways to the project but all learned something from their participation. The most successful teaching style was pupil-centred, where existing strategies were first understood and then combined with other techniques facilitated by the teacher.

Knowledge produced was both practical and theoretical as is usual in AR (3.1.1); this research extends theoretical knowledge about PST for musicians, and introduces new practical knowledge about the delivery of PST one-to-one for recreational piano pupils. PST probably has wider applicability for teachers and
pupils of other instruments. The findings are therefore of interest to all teachers and recreational learners. The concepts of differentiating practice, and grading performance exposure are helpful and give positive ways to reframe thinking so that performance can be seen as a skill separate from learning music. The reframing of ‘nerves’ as performance concerns is a healthier, more positive way to start the discussion about performance and as a consequence the idea of performance training. Sport psychology offers both practical tools and a common language through which researchers and practitioners can discuss the teaching of performance skills. This AR project was challenging but the reward was rich data, and a glimpse into a future where performance might be taught as a skill in the piano teachers studio.
10 Conclusion: consolidating the findings

In this chapter the findings of all three studies in this multi-method research are brought together to show the potential of PST for both specialist and recreational musicians. Firstly I discuss how my research extends previous knowledge about how musicians develop psychological skills and explains why teachers are not usually credited in this development. Next I examine the potential of one-to-one PST through drawing comparisons between the application and relevance of PST for musicians in both the conservatoire and the piano teachers’ studio. I discuss how findings in both main studies illustrate the process and benefits of PST. All three studies gave insight into wider aspects of music culture related to performance. I consider how my research challenges popular myths surrounding musical performance preparation, which, together with an unregulated system of instrumental teacher/coach education, have acted as barriers to the development of structured performance training for musicians. In conclusion, I reflect upon multi-method research, future research questions and my learning as researcher and teacher.

10.1. Developing psychological skills without expert help

Findings in the literature review and all three studies in this thesis demonstrate that musicians can learn and develop psychological skills without expert help. Participants in the focus group study (4.1) and the teachers who joined me in the AR (6.1) discussed their performance coping strategies, which with only two exceptions were developed without expert help. Specialist musicians can, and do, use and develop imagery and self-talk by themselves (2.2.1 and 2.2.2). This finding was extended to recreational pianists from evidence in the questionnaire survey (6.4) that illustrated that many pupils, including children as young as 7 years old, used self-talk and imagery to help them with performance prior to the teaching in the action cycles. Thus, musicians of all ages, specialist and non-specialist, can spontaneously develop their own ways of coping with the pressures of performance.

The evidence that musicians can develop strategies for performance by themselves might explain why, professional musicians (1.1.4), focus group
participants (4.1) and recreational pupils of all ages and standards (6.4.7), give little
credit to their teachers for helping them develop these skills. However, the five
young specialist musicians aspiring to be professional musicians (5.3.2) gave credit
to both teachers and parents in arranging regular performance opportunities, and
giving encouragement and support for practice. In the AR there was also evidence
that parents were enlisted to help motivate pupils to practise. The help of parents
was most evident in contributing to the success of goal-setting strategy (8.1.1).
These findings are similar to those of MacNamara & Collins (2009), who studied
young musicians’ development leading to specialist music education, (1.1.4). This
evidence is also supported by Lehmann and Kristensen (2014) who note the
importance of ‘persons in the shadows’ (parents, teachers, peers and mentors: a
concept first coined by Gruber, Lehtinen, Palonen and Degner, 2008), in the
development of excellence in classical music and sport. These ‘persons’ are
influential particularly with regard to motivation to train/practice and keep going
on the testing journey to long-term goals and ambitions. If teachers are persons ‘in
the shadows’ offering only advice and support, rather than deliberately teaching,
this might explain why they are not given credit for helping pupils develop
psychological skills.

This explanation proved too simplistic. Some teachers were teaching
performance skills but it was not being recognised by the student for various
reasons, which I now explore. The focus groups participants at first did not
acknowledge that their teachers helped them with performance, but by the end of
the discussion some participants began to realize that their teacher had given them
specific help (4.2.4.2). This recognition was not immediate because firstly the
limited conceptual framework of ‘nerves’ did not provide the accuracy or depth of
language, and secondly, participants were not used to discussing performance
issues. Teachers in the AR, including me, thought we were teaching performance
skills, and we were frustrated that our teaching was not being recognised by our
pupils (6.4.8). It became apparent during the project that our teaching was not
deliberate or pupil-centred enough (9.2.1.7). A similar point has been illustrated in a
study by Bathgate, Sims-Knight and Schunn (2012) in which the learning and
performance of two groups of adolescent novice music students was compared. One
group was taught using a ‘metacognitive focus’ and the other ‘existing practice
teaching conditions’. Some teachers in the non-metacognitive focus group thought that they already used metacognitive instruction. However, it was only when the teaching became ‘regularly explicit’ (p. 408), and the students were involved in their own learning, that they were able recognize the tuition they were being given.

Together these findings suggest strongly that teachers would be more effective if they had training, which is a sentiment echoed by MacNamara & Collins (2009), who noticed the lack of involvement of teachers in the development of PCDEs:

... music teachers should not only be concerned with developing musical ability, their behaviour and interactions should also promote the PCDEs that allow developing performers make the most of their dispositional tendencies (p. 391).

10.2. Developing psychological skills with expert help

Little is known about the process of PST, and the benefits of one-to-one training delivered by practitioners. In previous research on PST for musicians the emphasis was on group training, and the general benefits of this training (2.3). Although there have been recommendations in the literature (2.2) that imagery, self-talk, relaxation, goal setting and routines should be taught to, and practised by, musicians there has been little research into how these strategies might be taught or the particular relevance of the individual techniques to both specialist and recreational musician. In the following I discuss ways in which my research extends current knowledge.

10.2.1. The psychological process

Although the training was delivered one-to-one in my research, similar to the findings in the PST intervention studies (2.3.6) it was not possible to discover if a specific outcome might be achieved by teaching/coaching a particular mental strategy or combination of strategies (see Chapters 5, 7 and 8). There were individual differences, particularly in the type of images, self-talk, and the content of routines, as well as in the perceived functions of these strategies for both specialist and recreational pianists. The outcomes for the individual appeared to be what the individual desired them to be. Practically it seems to be more crucial to understand
the individual and how PST works for them rather than understanding how each mental strategy works alone or in combination.

The process of teaching/coaching strategies to develop psychological skills for performance was one of both integration and facilitation. There was evidence in the AR that even very young children could express and discuss performance concerns, and that they could benefit from using performance strategies. Talking through performance concerns and finding solutions was crucial to the process of PST, for all age groups and levels of musician. Hallam (2001) has already noted developmental differences in the use of metacognition by professionals and novices in practice and planning for performance. Future research using the theory of metacognition (Flavell, 1979), suggested as a framework to further understand PST in sport (MacIntyre, Igou, Moran, Campbell and Matthews, 2014), may further understanding of PST for both specialist and recreational musicians of all ages, and how they ‘learn to learn’ performance skills.

10.2.2. One-to-one delivery

The one-to-one training delivered by the coach in the conservatoire setting, and delivered by educated piano teachers of recreational pupils accommodated the variety of individual differences apparent in the findings. For some students in the conservatoire and for some teenagers in the AR their performance issues were personal and sensitive. In such circumstances, one-to-one sessions are more appropriate than groups sessions. Any kind of group teaching is a compromise. The facilitation of the metacognitive processes of musicians with very different performance experiences and concerns would be difficult to deliver successfully in group training.

Although one-to-one training may be the ideal, this may not be feasible or financially viable for all in the conservatoire setting. Some aspects of the training such as education about performance psychology and general guidelines on practice could be delivered as part of group training, although the PC noted how little practice was discussed and how the existing group training was only relevant to a very few students. However, some kind of compulsory generic PST for all conservatoire students would ensure that every student had the chance to benefit. A
qualified PC or sport psychologist would be the ideal person to advise on and help organize such training (Pecen et al., 2016, p. 19).

The majority of piano teachers of recreational pupils teach one-to-one, although group lessons are a feature of Suzuki method (Suzuki, 1983). However, education about physiological symptoms of arousal, and the importance of the two types of practice (8.4.3.2) delivered as a group to pupils and parents might be beneficial. If PST were to be applied more widely to teachers of other instruments, there are some situations, for example in schools where group training might be the only option. PST might be applicable also for delivery by leaders of bands and orchestras, where one-to-one input is not always possible. Future research could explore best delivery of PST in a variety of contexts.

10.2.3. **Psychological techniques**

One of the main benefits of using PST from sport as an approach was that it gives the practitioner a set of tools to use (8.3.1). A comparison of the use of these techniques in the conservatoire and piano teachers’ studio reveals that goal setting and more complex relaxation techniques like yoga are more applicable to specialist training. These techniques take time, and the practitioner requires particular expertise to deliver them well. The differences between the practice and musical preparation of the specialist and recreational learners were also a factor in the relevance of the techniques. The conservatoire students were ambitious, loved music and were studying the piano because they wanted to become experts (5.3.2). The recreational pianists were not ambitious in the same way about learning to play the piano and were learning as a leisure activity alongside other hobbies and interests (6.2.5). These differences in ambition and general motivation to practise, together with lack of expertise and time constraints for recreational piano teachers were factors in contributing to the applicability and relevance of these more complex techniques.

Self-talk, imagery, routines and simulated practice were applicable in both contexts. In addition, more tools than the traditional strategies from PST in sport (2.2.3) were needed and applicable. The PC, for example, used a wide variety of techniques from counselling and life coaching (5.3.4.6). Researchers in sport psychology have already begun to recognize this, which has prompted research in psychosocial interventions commonly used in ‘counselling, psychotherapy and
behaviour modification’ (Brown & Fletcher, 2017, p. 25). In the PST programmes for adolescent musicians a cognitive-behavioural intervention called ‘Unleash Your Potential’ (Braden et al., 2015; Osborne, 2013) was used (2.3). In these programmes there are strong suggestions that helping young performers to be more aware of their own arousal and helping some performers to make changes to negative interpretations of that arousal is beneficial. My conversations with the PC and several of her clients, as well as my work with several pupils in the AR also demonstrated the importance of educating students about arousal. In summary, evidence from my research and the PST programmes reviewed in Chapter 2 suggest that specialist and recreational musicians can benefit from using techniques researched in sport as well as other ‘talking strategies’. Some strategies are more applicable than others. Future studies could explore the applicability of these techniques individually, whilst controlling for the variables of gender, age group and standard of musician.

10.2.4. The importance of solid musical preparation and belief

In order for PST to be successful for both the specialist and recreational musician it was evident that solid musical preparation and belief in the training was required. If the pupil/student had not prepared their music well enough then this would undoubtedly affect their psychological skills. Despite differences in ambition and motivation to practise for the two types of students it was evident that unpleasant performance experiences could happen at any level, due to poor musical preparation rather than poor psychological preparation.

In both settings the practitioner needed to advise on practice to ensure solid musical learning. As shown in previous research, music students do not always know how to practice (Pitts, Davidson & McPherson, 2000), and teachers are lacking in knowing how to instruct their students about practice (Barry & Hallam, 2002). Some clients in my research were not aware of the best ways to practise once in the competitive environment of the conservatoire (5.3.4.5), and some did not practise enough because they did not understand the high expectations. The risk of injury due to over-practising was highlighted. In contrast, many recreational pianists did not practice or perform frequently enough (6.2) and there were a variety of problems (9.2.1.2) that arose from learning the piano as a leisure interest. The
problem of under, rather than over, practice for recreational pupils was the main concern for the teachers in the AR project.

Belief that the training would work was another factor for the success of PST both inside and outside the conservatoire. Some clients and some piano pupils needed to try out strategies in practice and in performance before they were totally convinced they might work. In the piano teachers studio, belief of the teacher was also a factor (9.2.3). What seemed to change beliefs in both settings was better understanding of PST through education and practical experience. Belief and the quality of the preparation of the music itself were not examined as factors in the PST programmes reviewed in Chapter 2. My findings suggest that in future research these variables should be considered when judging the success of PST through improvements in performance quality.

10.2.5. Transition periods

Common to both studies was the identification of transition periods in musical development when the performance experience can change. Other researchers have indicated a number of problems that arise in transition periods for the specialist (5.3.3.2). In my research the practitioner needed extra skills to help some students negotiate their way through these periods, which were:

- On entry to the competitive environment of higher music education for the specialist
- The journey through adolescence for the recreational learner

The PC’s work included wider issues besides helping with performance and onstage concerns at this time of transition and this was mirrored by some of the AR teachers’ efforts to coax teenage pupils to practise and to perform. All the teachers instinctively thought that teenagers needed the most help with performance because this is a time when some are most vulnerable (6.3.1) and this is borne out in the literature (Blakemore, 2018). Practitioners need to be aware of transition periods, which may affect the students’ ability to perform well. This can only come through education and training. It may be shown in future research that these stages are when PST techniques are most needed. Researchers could examine changes in
attitude to performance as musicians develop, as well as the particular relevance of PST in identified times of transition. This could be done using a model of long term development, which at present is lacking for musicians (Clark & Lisboa, 2013).

10.2.6. Summary

Comparing and contrasting findings in this thesis show important similarities and differences between the use of PST for specialist and recreational musicians, and that PST may be particularly useful in times of transition. The psychological process of PST seems to be the similar at all ages and levels. Practitioners in the two environments require similar skills, but the skill level, ambition, motivation and purpose of learning for the student made a difference to the relevance of some of the techniques.

I observed the wider applicability of performance coaching for all musicians at the conservatoire (5.8). It is likely that PST is applicable to all recreational musicians. However, there are barriers to PST, which were uncovered in all three studies, preventing the music world from embracing a structured approach to performance training. These barriers come in the form of popular myths and lack of teacher training which I discussed in my introduction (1.1.2), and now discuss in light of my research.

10.3. Cultural barriers to psychological skills training

10.3.1. Myth number one

Myth number one is that:

\[
\text{Practice is the best form of performance preparation, and anything that is not practice is a valuable waste of practice time.}
\]

Instead of refuting this myth, evidence from my research suggests that practice is possibly the most important form of preparation. However, there needs to be a clear distinction between types of practice: practice to learn music from practice to perform music, as they are two distinct skills with separate functions. This concept is helpful both practically and theoretically.
There are however barriers to cross. Firstly, the narrow view that practice to learn the music is the only type of practice. It has been observed in previous research that performance artists do not wish to get involved in performance training because it is ‘a waste of valuable practice time’ (Hays & Brown, 2004); a view replicated by one of the clients in the interview study (5.5.1). Secondly there is a language barrier. There is some evidence that some specialist musicians do simulate the performance in practice, or change their ways of practising in the weeks leading up to the performance (Partington, 1995, p. 88), but they do not describe this as such. Unlike in sport where the word practice suggests the repetition of a skill in order to improve, and the word training suggests the athlete is preparing to perform, in music the one word, ‘practice’ has had to cover all types of practice and training.

What is shown in the literature on virtual training and graded exposure (2.2.6) as well as in the two main studies of this thesis, is that practising the performance, that is, playing the music as it would be at the performance without stopping, fulfils more functions than simply testing the learning or memory. I did not discuss this in the interview with the PC because I had not yet thought about it conceptually until I had to educate the teachers in the AR.

Reconceptualising practice into two types proved vital in influencing the teachers to think more about performance and the teaching of performance skills. Figure 10.1 presents a model, which can help both teachers and researchers think more clearly about practice and the psychological functions of differing types of practice. As the performance nears, the emphasis of practice should be on performance and finding solutions to performance concerns. However, there may always be a need to return to practise to improve if there are problems in the learning or memory. The arrow indicates this in the model in Figure 10.1.
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PRACTICE

• To manage internal and external distractions
• To learn mistake management
• To test the musical learning and memory for the performance

TO IMPROVE

TO PERFORM

Figure 10.1. A model of practice
As well as providing the opportunity for the musician to learn performance skills, a number of performance practice sessions provides the opportunity for the coach/teacher to:

- Discuss performance concerns
- Establish clear goals leading to the performance, both psychological and musical
- Give constructive feedback about psychological and/or musical learning

Two action cycles was not enough to demonstrate the use of feedback, which would include learning from the performance itself. Dogantan-Dack, a professional pianist and musicologist, has studied what performers learn through, and during, live performance where ‘positive qualitative transformations’ that can only happen in this context can be described (Dogantan-Dack, 2012). Her work demonstrates how, despite preparing a piece of music thoroughly both technically and artistically, changes to the performance can continue in performance. Such change can impact the performer and future performance.

Whilst this research is applicable to high-level performers it suggests that learning does not stop at the end of performance preparation. For all levels of musician learning about performance continues during the performance itself and subsequently during constructive feedback with the teacher. With developing skill and experience it is likely that both specialist and recreational performers become able to analyse their own learning in performance. Had my project continued to a third cycle, my aim was to show how feedback and discussion with the pupil would lead into constructive future performance planning and learning.

The model of practice opens up many new avenues for research. There are many questions, for example:

- What are the psychological consequences of performing music that is either under or over-prepared?
- What is the ideal ratio between practice to improve and practice to perform for the specialist musician (for the recreational musician)?
- What is the effect of more frequent performance practice and opportunity for recreational pianists? Is this as effective as PST to improve psychological skills for performance?
• How much practice do performance routines (or other strategies) need before they become embedded in a performance?
• How do musicians learn to manage mistakes? What is the best way to teach and practise mistake management?
• How do musicians perceive different performance contexts, evaluative and non-evaluative? How does this information improve practice and planning for graded exposure conditions?

The effects of gender, age, experience and ambition are all variables that could be included in the above questions.

My research reveals exciting possibilities for additional investigation of the value and function of practising the performance for different types of musician, as well as musicians of different ages and ability. The discussion about, and research into, practice should be wider than the current themes discussed in (1.1.2). Using a model of performance preparation that includes practising the performance could help researchers explore practice as preparation for performance in a new and more thorough way. More theoretical and practical knowledge about performance preparation to become the best possible performer as well as the best possible musician is needed.

10.3.2. Myth number two

Myth number two is that:

Nerves are an inevitable part of performance, affect performance and therefore need removing or treating.

I examine the component parts of the myth in turn. The first part says that ‘nerves’ are inevitable. ‘Nerves’ undoubtedly exist, but as a research model or practical framework for teaching about performance the word ‘nerves’ lacks clarity. It is not possible to say that for all musicians ‘nerves’ are an inevitable part of performance, without clearly understanding what ‘nerves’ means. The discourse using the term ‘nerves’ was shown to be problematic in the ‘real world’ (4.2.1 and 6.3). The discourse in MPA research (2.5.1) is also problematic because MPA is not always
clearly defined or described as a construct, and parameters of normal MPA are not clear. Sport psychology research would suggest that it depends on the perceptions of the performance situation and the individual’s anxiety responses as to whether the individual is experiencing ‘nerves’. Reframing the components of MPA as part of a list of performance concerns in the AR enabled discussion about a breadth of concerns that could not be described as anxiety without more clarification. For example, a concern about social approval from parents in the audience might be interpreted as anxiety if the pupil feared disapproval. However, if they were concerned about ‘showing off’ to their parents this would not be anxiety. Furthermore, there is no study specifically showing that ‘nerves’ are an inevitable part of performance, therefore the first part of the myth must be refuted.

The second part of the myth is that ‘nerves’ affect performance adversely. In the literature reviews of MPA research the same papers are often cited describing how MPA is debilitating for a significant percentage of musicians. However, there are consistent findings in sport psychology (see 2.5.1.2) that the interpretation of ‘nerves’ is the key to whether the performance is affected or not. In the AR symptoms of arousal and negative cognitions existed but were not necessarily a major concern to all (6.5). In all three studies there was little evidence that musicians were not able to perform, despite perceived high levels of arousal/anxiety. There was only one client in the conservatoire, who literally could not perform and ran off stage. One pupil in the AR did not wish to perform again due to the unpleasant performance experience, although she gave a ‘good’ performance. Another wanted to continue performing and improving performance skills despite the unpleasant experience. Thus ‘nerves’ do not necessarily adversely affect performance for everyone. This part of the myth must be refuted.

The third part of the myth is that ‘nerves’ need to be treated, and there are a number of studies that have focused on interventions to treat or reduce MPA (2.2 and 2.3). If ‘nerves’ are not inevitable or at least do not affect performance for all, this questions who needs treatment. In music research PST was first thought to have potential as a treatment for MPA (2.3). The practical use of PST as an approach for musicians demonstrated in my research shows that it is possible to focus on prevention rather than cure through discussion and education, and that PST is wider
than a system of strategies to reduce anxiety. PST also improved the psychological skills of confidence, concentration and commitment.

The research focus on PST to reduce or treat anxiety is preventing researchers from asking wider questions about musicians and performance training. MPA researchers have not yet delved into the complexities of the relationships between anxiety, arousal and performance, and by emphasising anxiety intensity, the dimensions of control and direction have been neglected. (2.4.1.2). There are important questions that need asking about anxiety and arousal, for example:

- What does anxiety/arousal mean to the individual?
- Does the individual need to reduce or increase arousal prior to performance? Might this be different for different type of instrumentalist or singer, and might this be different for differing types of music?
- Can anxiety/arousal be replicated in training? How can this be measured?

In addition, there are other performance concerns that might not be defined as arousal or anxiety yet could potentially affect the performance. It was apparent in my research that some recreational pupils, young and old, and one specialist student (5.5.1), were confident to perform but lack of practice, rather than ‘nerves’, was one of the main contributors to underperformance. In sport the model of attention rather than anxiety is used to explain poor performance (2.4.1.2). Using this model, ‘nerves’ becomes just one of many distractors to performance, such as an unfamiliar piano or unexpected noises from the audience, all of which might affect the quality of the performance.

Patston (2014) argues that teachers may be inadvertently facilitating performance anxiety because performance psychology is missing from their training. One of the benefits of using PST as an approach to performance training was that it gave practitioner and student a positive and meaningful shared language. This language enabled better communication both between coach and client, (Chapter 5) between teachers, and between teacher and pupil (Chapter 7 and 8). Pupils in the AR reflected positive language in their discussions and evaluations, which seemed to demonstrate the effect of this strategy. Both PC and teachers deliberately chose to always talk to clients/pupils in a positive way (5.3.4.2 and
7.3.2) demonstrating that it was possible to learn about performance and avoid the word ‘nerves’ and its negative connotations.

Nerves’ do exist but are more complicated than presently understood by practitioners or researchers. My research has shown that the experience of ‘nerves’ is not universal, and that ‘nerves’ do not necessarily affect performance adversely. Discussing performance and attempting to improve performance through the framework of ‘nerves’ is not only negative but too narrow and unreliable to lead to helpful solutions for practitioners. By taking PST from sport simply as a means to reduce anxiety is ignoring the purpose of PST, which is to enhance performance. In summary, my research refutes the myth about MPA by offering PST from sport as an approach that can guide practitioners to think positively about how best musicians can be trained to perform.

10.3.3. Lack of education and training

The biggest barrier to progress in the development of structured performance training for musicians is the lack of teacher and coach education. PST can only be effective provided practitioners and educators are open and educated to understand its potential. My research suggests that performance psychology should be an integral part of teacher training, and also as essential to the training of specialist music students as it is for elite athletes. Other practitioners and researchers advocate the inclusion of physiology (Grindea, 2001, p. 5), and issues of Health and Wellbeing into the conservatoire curriculum (Atkins, 2009; Norton, 2016). Future teacher training should include these topics especially when research has shown that teachers are often the first port of call for a student seeking information on health issues (Williamon & Thompson, 2006). It is difficult to see how PST or any other form of performance training will become commonplace for musicians in the UK without a regulated, structured system of instrumental teacher training (1.1.2).

The ‘Report on Music in England’ (Henley, 2011) made a recommendation, that a new qualification, the ‘Qualified Music Educator Award’, should be available to peripatetic teachers as well as professional musicians working as teachers, and that all conservatoire graduates should leave higher education with this qualification. The report suggests that the responsibility of structured instrumental teacher training should come from the conservatoires. However, until this recommendation
is enforced, current ways to train are limited. In the UK examination boards offer teaching diplomas (ABRSM, 2018; Trinity College London, 2018), and at present EPTA offer a more specific Piano Teachers Course (The Piano Teachers Course UK, 2018). However examination boards have a vested interest in perpetuating examination driven learning, so are perhaps not the best institutions to develop a broad system of instrumental teacher education. The EPTA course is only for piano teachers not instrumental teachers in general.

If conservatoires take responsibility for instrumental teacher training the design of future qualifications could follow a model from sport. The Lawn Tennis Association coaching structure (“LTA British Tennis Coaching Qualifications Pathway”, n. d.) offers a variety of qualifications and differing pathways for coaches who wish to teach predominantly recreational or elite players. Adopting this model would ensure that teachers had training appropriate to their own teaching ambitions and those of their students. In the present climate of music education cuts in the public sector in the UK it is important that instrumental teachers, are trained well enough to know how to encourage pupils to enjoy music and performing as a lifelong activity.

At present specific training for musicians to become performance coaches does not exist. In the future, performance coaching might offer another career pathway to students who decide not to become professional musicians or teachers. In the absence of trained music performance coaches like the one in my interview study sport psychologists would be the obvious professionals to employ in conservatoires. However, there are other myths, which are barriers to progress. For example, there are the beliefs that you should only seek the help of a PC if you have a problem, and that musicians are artists and not athletes (Hays, 2002). Pecen et al., (2016, p.8) notes that music culture is ‘anxiety-ridden’, and also ‘lenient towards the use of performance enhancing drugs’, which is quite different to sport culture. She suggests sports practitioners could work with musicians using PST provided they approach musicians in a culturally-informed way. My research supports this suggestion by demonstrating that a Performance Coach trained like a sport psychologist was effective in using PST in a conservatoire.
10.4. Reflecting on multi-method approach and future research

Multi-method as methodology was an appropriate way to conduct an exploration into an under-researched topic. The approach enabled me to choose methods to suit the particular opportunities that were presented during the evolution of my design and thinking. Both the literature review, in itself a new perspective on PST for musicians, and the three separate studies undertaken, give a breadth of understanding not possible through any one study or method. The problems of using multi-method research highlighted in 3.1.2 outweighed the strengths derived from the differing perspectives about the potential of PST for musicians.

The different studies and methods allowed comparisons between and across data sets. For example, I was able to compare the potential of PST for the specialist and recreational learner. I was also able to compare performance issues and concerns between these two groups, as well as between different age groups and standards within the AR. I was able to study performance concerns more generally from using a questionnaire survey but could look at performance concerns in individual profiles through my own teaching data. I am aware that using a variety of methods gives a fuller more extended picture of PST but not necessarily a more rigorous one (see 3.1.2). What this multi-method research has to offer is a broad picture of the potential of one-to-one PST for musicians and new insight into future research topics about performance training and best practice.

The most informative data in previous research about musicians’ performance experiences came from qualitative findings, which showed individual differences (Clark, Lisboa & Williamson, 2014; PST programmes reviewed in 2.3). The qualitative data generated in my research gave a rich picture of the teaching and performance experiences of pianist participants, which demonstrated individual differences of both specialist and recreational musicians. These findings suggest that qualitative methodology might offer better insights in future to the subjective world of the performer as previously advocated and justified by Holmes & Holmes, (2013) for research into music performance, and advocated by Hemmings & Holder (2009) to study sport. The use of case study alone or as part of a future AR project about PST and musicians would be informative.
Whilst the benefits of PST to the individual performer may be better studied through qualitative methods, there is still a place for quantitative methods to discover more specifically about the effectiveness of the individual mental strategies for performance in both music and sport. For example, as yet there are no studies to show the improvement in psychological skills of using a performance routine for a music performance. An experimental design to show the effects of one group using a routine compared to a control group who did not, would be instructive for the practitioner. Variables such as age, gender, expertise and performance context should also be considered.

There are as yet no clear models through which to study performance training for musicians. The work of Collins and colleagues in sport (1.1.4) use the model of Long Term Development, which could prove useful to music researchers. Clark and Lisboa (2013) discuss this as an option, and also using implementation science as a possible methodology (p. 165). My model of performance preparation (Figure 10.1) offers potential for future researchers to study performance practice and its functions more specifically.

More coherent use of a consistent language and clear definitions are needed if researchers are going to use terms from sport. The interpretation of goal setting by the practitioners was that it was about good organisation, and the setting of targets to improve learning rather than performance; an interpretation mirrored in the research literature (2.2.4.2). A systematic intervention study would be needed to change this understanding and evaluate the effectiveness of goal-setting to improve performance rather than practice. This lack of clarity applies to the results of music performance psychology research generally. Most of the performance studies in music psychology use specialist music students as participants, and yet the results often refer more generally to musicians. The implication is that the results are applicable to all musicians. My research suggests that recreational musicians are not the same as specialists, and therefore researchers should be more specific in their claims to knowledge.

Researchers using PST interventions in music thus far have aimed to reduce anxiety and/or improve performance quality through the training. The difficulties of measuring performance quality in music were discussed in 2.4.1.3, and question whether improving performance quality should be an aim of the training. It was
notable that the interviews in the conservatoire revealed how the clients felt about performance and their general musical lives not whether they were achieving a better standard of performance. In the AR many of the older piano pupils wrote about how they wanted to improve psychological skills and their performance experience, rather than how they wanted to improve their performance standard. By improving the psychological skills of confidence, concentration, control and commitment PST can improve the performance experience. It is possible that a consequence of using PST to improve the performance experience might be an improvement in performance quality.

External observers usually conduct performance assessments in PST research. Future research could examine whether the teacher's and/or the student's assessment of their performance is more important in evaluating the success of PST than an external assessor. Although not written in the context of PST, Wesolowksi (2012) has already suggested that teachers can develop their own ‘rubrics’ for assessment, and Daniel (2001) has explored the benefits of student self-assessment in conservatoires. Perdomo-Guevara (2017) argues that the emphasis in performance should not be on anxiety but on joyous performance experience and ways to promote this. Joy could be an additional assessment criterion. In future research about PST, two groups could be assessed in differing ways: one could be assessed externally and the other could create their own self-assessment criteria. This would develop understanding from the performer’s perspective of the value of differing types of assessment.

10.5. Conclusion

When I began my research in 2011 very little was known about psychological preparation for music performance. As a participant in the two performance worlds of music and sport, I was afforded insight into how PST from sport might be transferred to the training of musicians. I wanted to know whether using PST could improve the performance experience for musicians, and also how practitioners could best deliver PST. My own negative performance experiences as a developing pianist, and my experience of already using PST in my teaching were influential in these choices (1.1.1 and 1.1.3). My aim was to make a contribution to knowledge
about musicians as performers because musicians themselves have largely been neglected in music psychology research.  
In the introduction I began with this question:

**RQ1 What is the potential of using one-to-one psychological skills training, researched mainly in sport psychology, to prepare musicians of all ages and abilities psychologically for performance?**

My answer to this question is that one-to-one PST has the potential to cater for musicians of all ages and abilities to help them improve and enjoy their performance experiences. The traditional strategies that have comprised PST programmes in sport, imagery, self-talk, relaxation, goal setting and simulation training alongside other ‘talking’ strategies is one way to start to develop structured performance training, which at present is absent for musicians. In the absence of another model for performance training, PST seems to have potential in both the conservatoire and the piano teachers studio to give strategies for the teacher to teach and the performer to use. An additional benefit of using PST as an approach was that it provided a positive shared language, which enabled better communication between practitioners, as well as practitioners and their students.

Learning about performance and training, both research and practice, from other sport and other performance domains, can help institutions like conservatoires reflect on the purpose and effectiveness of the training they offer. This can also help piano teachers understand how they might already teach performance skills but how with the right tools they could do this more explicitly and effectively. The research in this thesis thus adds to an emerging interest in the potential of the application of research from other performance domains for the benefit of musicians (2.5).

The review of PST research in music and sport (Chapter 2) shows how sport psychology research has taken the lead. However, my research opens up many exciting new avenues for music psychologists to explore the performance experience, performance coping strategies and performance practice.

My research has made original contributions in several respects. It has extended knowledge about PST for the specialist musician and made an original
contribution in discoveries about PST and the performance experience for recreational pianists, and very young learners. It is hoped that the evidence in this thesis may contribute to change so that musicians and researchers can think and learn more about performance training and how to enjoy the performance experience.

As researcher, my exploration of PST for musicians gave me new conceptual understanding and allowed me to consolidate my thinking about performance enhancement, and PST as a framework for training musicians in performance. As a practitioner, my research has given me the confidence that my existing approach to teaching performance skills is effective, and it showed me how and where I can make improvements. This research has made me question my values about the teaching of performance skills but has made me stronger in my belief that musicians deserve to be given positive performance experiences through structured teaching that enables them to enjoy sharing and communicating their music with others as a lifelong experience. I will continue to pursue this goal. It is hoped that my research has provided a glimpse into a future where performance training is the norm for all musicians.
References


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Haddon, E. (2007). What does mental imagery mean to university music students and their professors. In: A. Williamon & D. Coimbra (Eds.), *Proceedings of the*


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APPENDICES

*Italics are used where explanation is needed in the following Appendices.*
APPENDIX 1

Tables of studies using psychological skills training approaches.
<table>
<thead>
<tr>
<th>Study</th>
<th>Aim</th>
<th>Sample and method</th>
<th>Length of intervention</th>
<th>Programme content</th>
<th>Ways to test</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark &amp; Williamon (2011)</td>
<td>To examine the effects of PST programme. Would MST enhance use of and ability in self regulated learning, as well as improve musical and mental skills including imagery?</td>
<td>23 conservatoire students Experimental group 14 Control 9</td>
<td>9 weeks divided into 3 week blocks Delivered by the researcher</td>
<td>Topics for each 3 week block: Motivation and effective practice Relaxation and arousal control Performance preparation and enhancement</td>
<td>Self-regulated learning interview schedule Musical skills survey Imagery survey Trait anxiety survey Self efficacy questionnaire Live performance in front of audience Feedback forms</td>
<td>Generally beneficial. Goal setting improved the amount and effectiveness of practice. Improvement in control over anxiety symptoms and more facilitative views of that anxiety.</td>
</tr>
<tr>
<td>Hoffman &amp; Hanrahan (2012)</td>
<td>To manage anxiety and enhance performance</td>
<td>33 musicians students, amateur and professional Experimental group 15 Control group 18</td>
<td>Three hour MST programme over three weeks. Delivered by a trained psychologist</td>
<td>3 workshops on different topics Self-awareness about negative thoughts Cognitive restructuring through positive self-talk Use of imagery</td>
<td>Heart rate measures State and trait anxiety survey Performance quality judged by 4 researchers Anxiety follow up after one month</td>
<td>Significant reduction in self reported MPA and significant improvement in performance quality</td>
</tr>
<tr>
<td>Osborne Green &amp; Immel (2014)</td>
<td>To test the effectiveness and applicability of short MST programme aimed to improve: MPA regulation Two weakest areas identified by Psychologic Skills Inventory(PSI)</td>
<td>31 conservatoire students</td>
<td>3 week programme comprised 2 weekly lectures and a series of masterclasses. Supplementary workbook of ‘11 strategies for audition and performance success’ Delivered by the authors.</td>
<td>Centering ‘taught as the primary pre performance routine’. Workbook topics included: Channeling energy Developing confidence, Improving practice, Learning and memorisation Build courage, recover from mistakes dealing with adversity</td>
<td>Performance profile and psychological skills inventory developed by Greene to assess 21 psychological skills</td>
<td>Centering led to better control of ‘performance energy’ Significant reduction in MPA Improved performance preparation as well as improved control and interpretation of somatic anxiety and ways to restructure negative cognitions</td>
</tr>
<tr>
<td>Steyn et al. (2014)</td>
<td>To see if a combination of PST and mindfulness training could have a positive effect on psychological well being.</td>
<td>36 university undergraduate music students Experimental group 21 Control group 15</td>
<td>Seven week programme</td>
<td>Training in attention Arousal control centering, breathing techniques, goal setting, imagery. Psyching up and down, self-talk PPRs mental rehearsal and cognitive restructuring. Positive perceptions of anxiety, ones own ability, and success and failure were a key part of the programme</td>
<td>Five different questionnaires were used to assess psychological wellbeing pre and post-test intervention</td>
<td>Measures of wellbeing were seen to improve post intervention. Self-confidence increased while cognitive and somatic state anxiety decreased. Growth mindset was stronger post intervention and fixed mindset was decreased.</td>
</tr>
</tbody>
</table>
### Studies of Adolescent Musicians

<table>
<thead>
<tr>
<th>Study</th>
<th>Aim</th>
<th>Sample and method</th>
<th>Length of intervention</th>
<th>Programme content</th>
<th>Ways to test</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Osborne Kenny &amp; Cooksey (2007)</td>
<td>To show the effectiveness of combined individual and group CBT programme aimed to reduce MPA.</td>
<td>23 adolescent music students with high MPA. Randomly assigned to intervention program group or behaviour exposure only control group</td>
<td>7 sessions of CBT or behavioural exposure only Assessments done by registered psychologist (first author) Programme therapist (third author).</td>
<td>Psychoeducation, goal setting, cognitive restructuring and Relaxation training</td>
<td>MPAI-A (Osborne &amp; Kenny, 2005). Anxiety disorder interview schedule STAI inventory (Spielberger, 1983) PES Parental expectancy scale (Eisen et al., 2004) Various physiological measures including heart rate Performance quality assessed by judges. Pre and post test measures</td>
<td>Significant improvement in self reported MPA posttest for students who ‘actively engaged in the programme and who adopted techniques Reductions for non adherent and behaviour exposure only but not so much Less performance avoidance in CBT group</td>
</tr>
<tr>
<td>Osborne (2013)</td>
<td>To reduce MPA and promote resilience</td>
<td>55 adolescent music students who had been learning for average of 3-9 years 2 groups 27 and 28 waitlisted</td>
<td>8 week programme</td>
<td>CB intervention programme called ‘Unleash your potential’ covered Goal setting, self-talk, relaxation, imagery stress regulation, recovery after setbacks identifying strengths ‘concepts of peak performance’</td>
<td>MPAI-A (Osborne &amp; Kenny, 2005) MES- M motivation and engagement scale for music (Martin 2008) Assessment pre and post intervention</td>
<td>Significant reduction in self reported MPA Significantly reduced further after 2 months ‘Improved resilience to setbacks stress and performance pressure’ p 309</td>
</tr>
<tr>
<td>Braden, Osborne &amp; Wilson 2015</td>
<td>To assess if the programme reduced or could change the manifestations of MPA, and to improve performance quality</td>
<td>62 female adolescent music students from a Catholic girls school 30 experimental group 32 control randomly assigned</td>
<td>8 week programme</td>
<td>‘Unleash your musical potential’ programme New topic each week included cognitive restructuring, goal setting, imagery, relaxation technique, routines, flow and resilience.</td>
<td>Self reported MPA using modified MPAI – A from (Osborne &amp; Kenny, 2005) Judge rated behavioural manifestation of MPA Performance quality.</td>
<td>Significant reduction in MPA for group one and two and for follow up for group 1 2 months later Judges did not detect behavioural signs of MPA in either group.</td>
</tr>
</tbody>
</table>
1. Can PST facilitate instrumental practice and performance?

2. Might PST impact preconceived self-efficacy motivation and satisfaction with progress and performance?

3. Might PST decrease anxiety and worry in practice and performance?

<table>
<thead>
<tr>
<th>Methodology</th>
<th>Intervention</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mixed methods</strong></td>
<td>15 weeks of PST, one individual session per week and 7 group sessions delivered by Hatfield in consultation with sport psychologist.</td>
<td>Significant increase in regular use of psychological skills. Worry decreased. Acceptance training improved self-confidence. Improved self-regulation. Goal setting improved motivation, concentration and self-efficacy and facilitated self-regulated learning.</td>
</tr>
</tbody>
</table>
APPENDIX 2  PHASE 1 STUDY 1

APPENDIX 2A

Letters to prospective focus group participants

Department of Music
University of Sheffield
The Jessop Building
34 Leavygrave Road
Sheffield
S3 7RD

Dear EPTA teacher,

I am a PhD student at the University of Sheffield and I am studying psychological preparation for music performance. This is a new area of research in music psychology. As a piano teacher myself, I am particularly interested in talking to piano teachers.

I am writing therefore to ask if you would be willing to participate in a Research Focus Group. The group would consist of between 3 and 12 teachers from your EPTA group. The discussion will last approximately one hour, and will include discussing your knowledge and understanding of psychological preparation for performance and what psychological skills you may use and/or teach. I will collect data by audio recording the discussion.

The discussion will be completely confidential and I will not use real names in any published research. You will be able to request a copy of any transcripts I use to ensure you agree the content, and I would also be happy to make my completed research available to you at the end of my doctoral studies.

If you have any questions regarding this research please contact me by email :-
maryh@wkes.co.uk

Could you please reply to Catherine Cleaver if you are willing to participate. She has agreed to find a suitable day, time and venue for me. She will send any further details to you.

Best wishes

Mary Hawkes

MA., BA Comb Hons., Cert Ed, LGSMT
Dear Student,

I am a PhD student at the University of Sheffield studying "Psychological preparation for music performance". This is a new area of research in music psychology and I am particularly interested in finding out about the experiences and views of both music performers and teachers. As you are undertaking the MA course in Performance and Pedagogy I thought your experiences and views on this topic would be particularly relevant.

I am writing therefore to ask if you would be willing to participate in a Research Focus Group. The group would consist of no more than 6 students all studying on your course. The discussion will last approximately one hour and will include questions on your practice strategies, experiences of performance and approaches to teaching. I will collect data by audio recording the discussion.

The discussion will be completely confidential and I will not use real names in any published research. You will be able to request a transcript to ensure you agree the content, and I would also be happy to make my completed research available to you at the end of my doctoral studies.

If you have any questions regarding this research please contact me by email:

maryh@wkes.co.uk

Could you please reply to Luan Shaw by DATE NEEDED if you are willing to participate. She has agreed to find a suitable day, time and venue for me, and further details of the arrangements will be sent to you within a few weeks.

Best wishes

Mary Hawkes
FOCUS GROUP INTERVIEW GUIDE

Introduce self including background and research question.

I chose you as a group because I hope you can offer useful insights from the teacher’s viewpoint. As stated on the forms your discussion will be completely confidential. If I use quotes they will not be able to be traced to a name. However, to be helpful to me in transcribing the tape could you first introduce yourself with your name and number. I can then match the comments to the voices. Thank you.

YOUR OWN PERFORMING

Q I would like to start with your own personal experiences of mental preparation for performance. Could you talk about your own performing experiences and how you prepared?

Ideas for prompts
Did you develop these skills yourself or with a teacher?
Was your mental preparation different for exams/auditions/concerts
How does this kind of preparation affect your performance?
What psychological factors do you think contribute to good and bad performances?

YOUR OWN TEACHING

Q What do you include in your teaching to prepare your students mentally for performance?

Ideas for prompts
Do you think that mental skills be taught?
Can you foresee any problems in trying to teach such skills?
How important is preparing mentally for performance?

THE POTENTIAL OF SPORT PSYCHOLOGY

Q There is evidence that professional musicians are using mental skills similar to professional athletes in order to help them achieve the best state of readiness to perform. What do you know about this?

Ideas for prompts
Do you think sport and music can be compared?
Could you talk about what do you understand by psychological or mental skills training?
Is the idea of mental training as opposed to physical training a useful concept?
APPENDIX 3  PHASE 2 STUDY 1

APPENDIX 3A

Recruitment letters for interview study.

Department of Music
University of Sheffield
The Jessop Building
34 Leavygrave Road
Sheffield
S3 7RD

Dear Musician,

I am a PhD student at the university of Sheffield and I am studying psychological preparation for music performance. My overall question is

"Can Sports Psychology help musicians?"

This is a new area of research in music psychology and I am particularly interested in finding out about how sport psychology techniques might be effectively used to enhance music performance.

Karen O’Connor’s work in Birmingham is unique in the UK at the present time. Therefore, as one of her clients/former clients your experience is ground breaking for a researcher. I am writing therefore to ask if you would be willing to be interviewed for approximately one hour. I will include questions on your background and performing experience, as well as more specific questions about your personal experience of sports psychology techniques to enhance performance. I will collect data by audio recording the discussion.

The discussion will be completely confidential and I will not use real names in any published research. You will be able to request a copy of any transcripts I will use to ensure you agree the content, and I would also be happy to make my completed research available to you at the end of my doctoral studies.

If you have any questions regarding this research please contact me by email --

maryh@wkcs.co.uk

Could you please reply to me to arrange a date and venue

Best wishes

Mary Hawkes
Email sent 4.11.2013

Dear Name of Performance Coach,

When we first met in January you said that you would be willing for me to interview you for my research.

I finally have a general question, viz;
Can sports psychology help musicians?

I have reached a stage in my project where I have a number of questions to ask about sports psychology techniques for musicians following on from focus groups I ran earlier in the year. You and your clients are probably the only people who can answer these questions with any authority.

I am writing to ask if you are still willing to be interviewed. The interview would last an hour and I will collect data by audio recording the discussion. The discussion will be completely confidential and I do not use any real names in published research. You will be able to obtain a copy of any transcripts, and I would also be happy to make my completed research available to you at the end of my doctoral studies.

I seem to remember you thought some of your clients might be willing to be interviewed. If this is correct I am particularly interested in pianists, although I would be grateful for the opportunity to interview anyone.

I look forward to your reply, and also to seeing you again at the workshop later in the month.

Best wishes

Mary

~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Mary Hawkes
MA., BA Comb Hons., Cert Ed, LGSMT
Postgraduate Doctoral Student
Department of Music
University of Sheffield
The Jessop Building
34 Leavygreave Road
Sheffield
S3 7RD

Address for correspondence:
73 Wigginton Road
Tamworth
B79 8RN

Tel 01827 62287
Mobile 0796 956 2850
PARTICIPANT INFORMATION SHEET


You have been invited to take part in this part of my research project because you were referred to me by Performance Consultant NAME. I understand that you have some experience of her work, which is taken directly from Applied Sports Psychology. As the use of Sports Psychology for musicians is little known and researched, you will give a unique perspective to my research.

ALTERNATE PARAGRAPH FOR COACH
You have been invited to take part in this part of my research project because you are unique in the world of Music in the UK working as a Performance Consultant using techniques taken from Applied Sports Psychology. As the use of Sports Psychology for musicians is little known and researched, you will give a unique perspective to my research.

Your interview will last about one hour and will be audio recorded. I will ask you to complete a consent form before we begin the interview.

The interview will include questions about your psychological preparation for performance, including your experience of any sports psychology techniques you use or may have used.

ALTERNATE PARAGRAPH FOR COACH
The interview will include questions about your work and your expert opinions regarding psychological preparation for performance and the sports psychology techniques you use.

You are free to stop the interview at any time, or to refuse to answer questions as you see fit.

All information collected about you during the research interview will be kept strictly confidential. Any information about you, which is analysed, will have your name removed so that you cannot be recognised from it.

The results of the research will be written up for my PhD. If you would like a copy to read, it should be available at the beginning of July 2017. You will not be identified in any report.

The project is being supervised by Dr Stephanie Pitts of Sheffield University Music Department, and has been approved by the Department Ethics Supervisor Tim Shephard, both of whom may be contacted at the University. You are welcome to discuss any concerns about the interview, with me in person, by phone or email.

Many thanks for your help.

Mary Hawkes

Contacts for further information
Mary Hawkes maryh@wkes.co.uk 01827 62287 0796 956 2850
Supervisor Dr Stephanie Pitts s.e.pitts@sheffield.ac.uk 0114 222 0481

Department of Music
University of Sheffield
The Jessop Building
34 Leavygreave Road
Sheffield
S3 7RD

Thank you for taking part in this research.
APPENDIX 3C

Interview Topic Guides.

Guide for clients

Thank you for agreeing to take part in this interview. Can I assure you that you will remain completely anonymous, and your answers will be strictly confidential. Could you please complete the participant consent form? Introduce self and research.

I understand that you are or have been a client of NAME OF COACH. I am very interested in your views about this kind of training. There are no right and wrong answers. I am interested in your opinions and personal experience. Feel free to interrupt me, or ask me to repeat anything.

Introduction

• Tell me about your background and your performing experience.

Psychological preparation for performance

• When you were first learning to play the piano what did you do to prepare for a performance?
• Did your preparation change as you got older and more experienced?
• In what ways did your teacher(s) help you cope psychologically with performance?
• Did your preparation change when you got to the conservatoire?
• Could you tell me what performing you are doing at the moment?
• What psychological preparation do you do now?

Exploration of sports psychology techniques

• How did you come to be interested in the work of the Performance Coach?
• Could you describe the sports psychology techniques you worked on with the coach?
• Could you describe how these techniques have helped you as a performer?
• How long did it take to learn the technique(s)?
• How much practice did you need to do before the technique became part of performance?
• Have you continued to use the techniques you were taught by the coach?

Perceptions of sports psychology applied to music

• When you first heard of the Performance Coach using sports psychology techniques for musicians what similarities, if any, did you see between the musician and the athlete?
• Did you or do you see any barriers to you or musicians in general using Sports Psychology techniques to enhance performance?

_The future of applying sports psychology to music performance_

• How would you like sports psychology for musicians to develop for the future?

COOL DOWN

Did you understand all the questions?
Do you think I led or influenced your responses in any way?

THANK YOU FOR AGREEING TO BE INTERVIEWED.

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**Guide for Performance Coach**

Thank you for agreeing to take part in this interview. Can I assure you that you will remain completely anonymous, and your answers will be strictly confidential. Could you please complete the participant consent form? Introduce self and research.

**Introduction**

- Can you tell me how you came to be a Performance Coach?
- Could you describe your training?

**Performance Coaching**

- Could you describe briefly your work and some of the techniques you use?

  **PROMPT**
  
  How did you learn to use these techniques?
  
  How long it takes for a client to learn the techniques. For example, how much practice do they need to do before the technique becomes part of performance?
  
  How long do you see clients for on average?
  
  How long is a consultation?
  
  How long does it take for the client to learn, practice and then put the technique into practice?
  
  Q Are there any techniques you have developed that you might now call a music psychology technique?
The clients
The next questions are about what you think may contribute to differing psychological needs of your clients.

Firstly do you think the instrument the client plays contributes to this?
Do you think the genre of music they play and the different types of training plays a part?
Do you think the problems you see at the conservatoire are generated by the type of training there or did these musicians have the problems before they came?
Have you found soloists have different problems to team players?
Is there anything else in your experience that contributes to any performance issues or concerns your clients may have?

Performance Anxiety
In the research literature the largest number of studies on performance is about Music Performance Anxiety. In my research findings so far musicians and teachers could not talk about psychological preparation for performance without referring to "nerves" and how to cope with "nerves". Sports psychology talks about enhancing performance.

Did you or do find this negative way of thinking true for your clients? If yes, How did you or do you change this way of thinking?

PROMPT
If yes, how do you think these barriers can be removed?
Do your clients know about the autonomic nervous system?

Practice
I'd like to talk a bit about practice. The old fashioned view is that all you need to do to prepare for a performance is "practice, practice, practice". What are your views on this?

Q Do you offer your clients advice about practice?
Q How easy is it to get your clients to practice the skills you teach them?

The Future
Q In ten years time where would you like to see Sports Psychology for musicians?

THANK YOU FOR AGREEING TO BE INTERVIEWED.
APPENDIX 4A

Recruitment letter for piano teachers including proposed research timetable

Dear Piano Teacher,

I am a fellow EPTA member and part time teacher of piano and theory of music. I am also a part time PhD student at the University of Sheffield. My interest is a new area of research in music psychology, viz., Can Sport Psychology benefit musicians?

As well as teaching the piano I coached tennis for 16 years at a local Club and in my training I learned about mental skills for performance. I taught various techniques to my pupils, and I became interested in applying these methods to my piano pupils. Developing pianists seemed to need the same kind of help as developing tennis players in building confidence, improving focus and controlling anxiety in performance. As a researcher I am particularly interested in investigating whether sport psychology techniques can help developing pianists enhance their performance skills.

I am writing to ask if you would be willing to participate in an Action Research Group comprising local piano teachers, including me as a participant as well as researcher. The main aim would be to improve our pupils’ experience of performing by teaching them one or more sports psychology techniques in lesson time. As a consequence I hope to discover which techniques are most successful in helping our pupils, and also which techniques work best for us as teachers within our already hectic lesson schedules.

The research will be initiated with a meeting in late January/early February 2014 to decide together what we would do, depending on our individual needs and types of teaching practice. The number and ages of pupils who take part will depend on you and your time, whether you teach in a school or privately, the size of your practice etc. The technique(s), which I will explain at the meeting, would need to be taught then practised in at least four lessons leading up to a performance.

The main research will take place in the Summer and Autumn terms 2014 after I have obtained ethical approval from the university for the project. You and your pupils/parents will have to complete forms agreeing to participate in this research. Your participation is entirely voluntary and you would be free to withdraw at any time.

The project will be completely confidential and I will not use real names in any published research. You will be able to request a copy of anything I use to ensure you agree the content, and I would also be happy to make my completed research available to you at the end of my doctoral studies.

The project should not be too time consuming. I have written a timetable of the commitment at the end of this email.
If you have any questions regarding this research please email maryh@wkes.co or phone me at home 01827 62287 or mobile 0796 956 2850. **If you are willing to participate please email your reply by November 22nd.**

When I know the numbers I will contact you regarding a suitable day, time and venue for our initial meeting. I will send out an information sheet regarding psychological skills before this meeting. It will give you time to consider which psychological skills you may teach already and what new skills might fit in with you and your pupils.

I look forward to hearing from you.

Best wishes
Mary Hawkes

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Mary Hawkes
MA., BA Comb Hons., Cert Ed, LGSMT
Postgraduate Doctoral Student
Department of Music
University of Sheffield
The Jessop Building
34 Leavygreave Road Sheffield S3 7RD

Address for correspondence:
73 Wigginton Road
Tamworth
B79 8RN
Tel 01827 62287
Mobile 0796 956 2850

**PROPOSED TIMETABLE FOR PIANO TEACHER RESEARCH**

**RESEARCH AIM:** to enhance your pupils' performing experience through psychological skills training

The skills will be taught specifically for performances your pupil(s) will give in each term. It could be an informal performance, a concert, Festival or examination.

The commitment is as follows:-

**January 2014**

Receive information sheet regarding the psychological techniques you might consider teaching as part of the research project. An example of a technique is to teach a pre-performance routine. The aim might be to improve the concentration of a pupil who always plays too fast when they perform.

**Jan /Feb 2014**

Initial planning meeting. The number of pupils you involve is up to you. As a group we may decide to target one age group or leave individual teachers to choose as they wish. I will discuss and make clear the techniques suggested in the information sheet.
**Summer term 2014**
Distribute questionnaires to pupils regarding their performance concerns. You will use the answers in these questions and your knowledge of that pupil to help you decide which skill(s) you will teach them.

**Summer term 2014**
In the 4 lessons (minimum) prior to the pupils performance, teach the skills during lesson time. Record briefly what you do.
Following their performance, pupils complete another questionnaire. Teachers complete an evaluation sheet.

**July or September 2014**
Meeting to plan the action for the Autumn term. Bring all records, questionnaires and evaluation forms to this meeting. The plan will depend on the evaluation of the Summer term.

**September 2014**
Distribute pupil questionnaires. It is likely you may use the same pupils for this term but you may choose to add more or teach less. It is up to you.

**Autumn term 2014**
In the 4 lessons (minimum) prior to the pupils performance teach skills during lesson time. Record briefly what you do.
Following their performance pupils complete another questionnaire. Teachers complete an evaluation sheet

**End of Autumn term 2014**
Return all records questionnaires and evaluation sheets to me.

**January 2015**
Just an Idea! A final meeting would be good to evaluate the project if you have time. It could take the form of an EPTA professional development day where other teachers come to hear what we did. It depends how it goes!
Recruitment letter to parents/pupils for the survey

Department of Music,  
University of Sheffield  
34 Leavygreave Road  
Sheffield  
S3 7RD

Dear Parent or Guardian,

I am currently in Year 3 of part time study for a PhD in Psychology for Musicians from Sheffield University. My research concerns understanding psychological preparation for performance and in particular whether sports psychology can help developing musicians.

I am writing to you because your child’s piano teacher has agreed to participate in my research. The first part of the project is a questionnaire survey.

I need permission for your child to complete the questionnaire with the help of their teacher during a piano lesson. The questions should take less than 5 minutes to complete. The questions aim to discover what piano pupils think about piano performance in relation to other performing activities they may do, their aims and concerns when performing, and any performance preparation they may do.

Before giving permission discuss this with your child and ensure they are agreeable to take part in the survey. Your child’s answers will be completely confidential and their name will not be used in my PhD or any other future publications.

Your child may be asked to take part in the second part of the project starting next term. If so, you will receive further information and a consent form in due course.

Could you please sign the slip below if you agree to your child taking part in this questionnaire survey, and return it to their teacher as soon as possible.

Thank you for your help.

Yours sincerely

Mary Hawkes MA, BA Hons, Cert Ed, LGSMT

CONSENT SLIP

Name of Child ________________________________

Name of Parent ________________________________

I consent to my child taking part in the piano pupil questionnaire survey during one of their piano lessons.

Signed ____________________________ Date _____________

Mary Hawkes, Music Department, University of Sheffield
APPENDIX 4C

Background Information for teachers

MY RESEARCH QUESTION
Can Applied Sports Psychology help musicians?
In this part of my research I want to know if and how sports psychology techniques can help developing musicians.

AIMS OF THE PROJECT
This project aims to

• Use a sports psychology model to introduce the idea of teaching mental skills to developing pianists
• To discover if by teaching mental skills to our pupils that they become more competent and confident performers.
• To discover if such teaching is sustainable

As far as I am aware, there is no research concerning music performance psychology for developing musicians. YOU ARE GOING TO BE PIONEERS!

MY BACKGROUND AND THE RATIONALE FOR THIS PROJECT

I have been involved in music and sport all my life. As a youngster I tried out all kinds of musical instruments and I also played many sports. While at school I achieved grade 8 at the piano and I played for my county at both hockey and tennis. I studied Music and Physical Education at university where I was introduced to more sports, choral singing and accompanying. I qualified as a Primary school teacher where I was able to use my practical skills in both sport and music. When I had a young family I gave up school teaching to teach piano and coach tennis. My piano pupils have ranged from 5 - 75yrs, beginners through to Diploma level. In tennis I built up a Junior Programme at a local tennis club where I taught players from 5 - 65 years, beginners to county players. As part of my Long Term Professional Development as a tennis coach, I took a Sports Psychology Diploma where I was able to follow up my interest in psychology first developed at university.

The idea for my thesis began with two observations:-
1. that as a young teenager I performed piano solos at school and for the family. Although I wanted to be a performer I never really enjoyed doing so. At the same time I performed as a singles tennis player in similar pressure situations yet loved it. Why did the same young person, equally able at both disciplines, welcome the tennis yet dread the piano?
2. that while studying for the Sports Psychology Diploma, I worked with my tennis pupils to develop their psychological skills. It occurred to me that I was not helping my piano pupils at all when they
faced similar psychological issues in performance. These skills perhaps should be useful to both tennis players and pianists. Why had I not thought of using psychology for the pianist before, especially after my own performing experience? There is evidence that elite musicians have well developed psychological skills to prepare themselves for performance, and that they have largely developed these skills themselves. It is not clear what happens to those musicians who do not manage to develop these skills? It is most likely that they avoid performing. Would it not be better if we taught relevant skills to our pupils as they develop as musicians and performers rather than leave it to chance?

**QUESTIONS YOU MAY HAVE ABOUT THE PROJECT?**

**Why would we want to teach our pupils to prepare psychologically?**
A bad experience when you are young can often put you off for life; teaching mental skills could prevent this happening.

**Which pupils should we use and how many?**
We can choose to work with one pupil (a case study), with a group, or with all pupils.

**What do we mean by a performance?**
The performance can be anything we choose, from an informal pupils concert to an examination or Festival or other competition.

**How long will the project last?**
Until the end of the Autumn term 2014.

**What will we need to do?**
First I will ask you to complete forms consenting to take part in this research. Pupils, and in the case of those pupils who are under 18 parents, will also have to complete consent forms.
Distribute pupil performance questionnaires to all pupils.
We will use the answers to these questionnaires to help us plan what we will teach leading up to a performance in the Summer term.
Teach a psychological skill(s) to our pupil(s) for 4 weeks prior to a performance in both the Summer term and the Autumn term.
Record and evaluate our work, and the pupils’ performance.
Ask pupils to complete evaluation sheets.

**When should I start?**
We need to teach the new skill(s) at least four weeks before the performance so that they have chance to practice the skill.

**How am I going to record and evaluate what I do?**
We will use a teaching diary, which I will provide. We can then record what we do in the lessons, as well as evaluate progress.
The pupils’ performance will be assessed, by both you and the pupil. We will discuss assessment at the meeting.
What should I do before the meeting?

Read the following sheets on Performance Anxiety and Mental Skills. Use the questions at the end to reflect about what you already teach or consider in order to help your pupils in performance.

Write down any ideas or questions you may have.

MENTAL SKILLS FROM SPORTS PSYCHOLOGY AND THEIR SUGGESTED APPLICATION TO PIANO PERFORMANCE

The following is taken from my ideas in teaching sports psychology skills to my pupils, from strategies devised by a unique music performance consultant NAME INSERTED who has been working for several years with conservatoire music students to enhance performance through using sports psychology skills; and from the focus group findings previously mentioned.

You may find you are already using some of these strategies yourself or with your pupils when performing but using different terms. Before the meeting it is helpful if you can familiarise yourself with the following sports psychology terms: - pre performance routine, simulation training, goal setting, imagery, positive self talk, relaxation.

Below are illustrations of the various techniques and how they might be incorporated into piano lessons.

1. **Pre Performance Routine.** Teach a simple pre performance routine. This appears to help both more and less experienced pupils control the starting tempo as well as improve concentration. Such a routine that could be taught might be:

   - Walk out, sit down and adjust stool, find hand position, think through a few bars of the music.
   - PLAY.

   Pre performance routines can be used for the performance, as above, or can be devised for the whole or part of the day of the performance. Athletes plan routines for what they do at the performance venue, and/or for the day of the performance including the warm up, diet, and practice etc.

2. **Simulation Training.** Simulation training is practising performing in conditions as near as possible to the actual performance. You can use roleplay, mock examinations and recordings to help your pupils practice to perform. An important part of this is to distinguish between practising to improve and learn, and practising to perform. When practising to perform they should keep going whatever, and manage their mistakes. Mistakes need to be discussed in this context, so pupils are allowed to be less than perfect.

3. **Goal Setting.** This is a particular way of planning for a performance using goals for motivation and feedback. Integral to this planning is that the student (and parents if the child is young) take an active part in the planning with the teacher. All goals must be agreed and owned by the pupil. I found this type of planning particularly useful with a grade 8 student where we planned to have as many performance practice opportunities as possible before the examination. We planned when his pieces needed to be ready technically and took into consideration A level work as well as other hobbies and commitments. The plan was simply:-

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• Autumn term - two pieces ready to perform at Pupils Christmas concert.
• Spring term – perform all three pieces in the Recital Class of the local Music Festival. Mock examination at the end of this term.
• Summer term  Three mock examinations in the weeks leading up to the exam.

Important in planning for younger and less experienced pupils is the way we plan to introduce performing. Consideration could be made of the different sorts of performances on a continuum from low pressure to high pressure. The pressure in this case is being judged.

**LOW** Play to teacher > to next pupil > to family members at home  > informal pupils concert  > formal concert possibly at school > Music Festival > Examination **HIGH**

We can help control external factors that may affect our pupils by considering the venue, the piano at the venue, the order of play, and the make up of the audience.

4. **Imagery or mental practice.** Particularly for self conscious teenagers I have tried using imagery. When they practice at home they try to imagine themselves at the performance venue. It will depend on the individual and what is making them feel self conscious as to exactly what you help them imagine, but the idea is for them to practice seeing themselves succeeding in performance. They then use this image on the day of the performance.

5. **Positive Self Talk and Triggers** This can be a way of motivating oneself, converting negative thoughts to positive, or to help concentration and self belief. A few buzz words or phrases practiced at home and used in role play situations in preparation for performance can really help. Trigger words said to oneself, or written in the music as well as stickers or drawings on the score can help change negative thoughts to positives.

6 **Relaxation** Various relaxation methods that you will know such as yoga, meditation or DMR (deep muscle relaxation) are used by athletes to help them in performance. I have not found a way to include such training in my piano lessons, because this kind of training is time consuming. However, you may have a pupil with experience of yoga and for whom it could be useful to use that skill to help them in performance.

Karen has found a useful book to help her students called The Chimp Paradox by Dr Steve Peters, a sports psychiatrist who helped Team GB cycling to win medals at the Games in 2012. Dr Peters presents a simple way of explaining how our brains work. The Chimp is the part of the brain responsible for emotion. It is the Chimp that we have to manage in order to perform successfully. I will talk more about this at the meeting.

The key to mental skills training is that pupils should *practice these mental skills* as they do their technical and interpretive skills. In sport mental skills training is phased in during the weeks leading up to a performance. I would suggest four weeks as a minimum time to practice the mental skills before a performance. However, part of this research will be discovering the optimum number of weeks for mental skills training.
PERFORMANCE ANXIETY (NERVES)

The findings from both the focus groups I ran in 2013 (including the EPTA piano teacher group) showed that the most common way for musicians and piano teachers to discuss psychological preparation for music performance was to by discussing “nerves” and how to deal with “nerves”. And, on the whole “nerves” was considered detrimental to performance.

The latest sports psychology research on performance anxiety or “nerves” suggests that it is not the anxiety and the symptoms themselves that affect the performance; rather it is the individual’s interpretation of the symptoms of anxiety that determines the outcome. For example, it has been seen in top athletes that they interpret physiological symptoms of anxiety such as shaking, heart racing, clammy hands etc as signs that they are looking forward to the performance. They embrace these feelings. It is a sign that they care about their performance.

I would suggest it is essential that we as teachers understand the body’s automatic response to danger ie the Fight or Flight mechanism in order to help our pupils with performance. You may already have an understanding of this. If not, follow this link for an interesting explanation using fun video clips.

http://cmhc.utexas.edu/stressrecess/Level_One/fof.html

The next link is to a website designed by a violinist turned psychologist Dr Noa Kageyama who has embraced sports psychology in performance.

http://www.bulletproofmusician.com/about/

There are some good articles on his website about performance anxiety and how you can make it a positive rather than a negative.


Reading these articles should help you understand the sports psychology perspective. Dr Kageyama however works mostly with musicians who are elite. We work mainly with musicians who are learning to play the piano as a hobby. This does not affect the responses to performance but does affect the techniques we may choose to use with our students. If we are to successfully enhance performance within our half hour lesson time we need to choose techniques that are easy to learn, take up minimal time in the lesson, and are effective.

An American performance psychology consultant, who has years of experience working with both top athletes and musicians as a performance consultant discovered some important distinctions about practice between athletes and musicians. These distinctions could explain why music performance might be more anxiety provoking than athletic performance for some individuals. Although his work is with elite performers the following is, I think, relevant to us.

In his book “Playing your best when it counts” (2011) Dr Bill Moore distinguishes between the amounts of time spent practising and the amount of time spent performing for musicians compared to athletes.
"For the most part, athletes are players who practice while musicians are practitioners who play... The vast majority of a musician's life is spent preparing to perform... Most competitive athletes will have dozens of performance repetitions over the course of six months, while musicians may have one or two. This fact has huge implications for how, and what, musicians practice in order to play their best when it really counts." p22

Furthermore, Moore (2011) distinguishes between two types of practice.

"From a psychological perspective, practicing to perform is not the same as practicing to improve. In other words, the mental skills needed to be a great practitioner are not the same mental skills needed to be a great performer." p22

Dr Moore has a number of Youtube videos of interest, including the 80 20 rule of practice. You will find these videos by typing Dr Bill Moore into the search bar on Youtube. Most of our professional development as instrumental teachers concerns teaching and learning. Most of the articles and advice concerning performance in books and magazines tend to talk only about performance anxiety. I noticed the performance tips on the ABRSM website are good and seem to have been influenced by sports psychology. There is also good advice on what to do at the examination, a leaflet "My turn next". However, if the pupil merely reads this advice it is unlikely that they will be able to put these tips into practice. For example, how easy is it to remember to smile at the examiner? In applied sports psychology these tips would be taught and practiced in training, maybe as a mock or roleplay situation or in a less pressured performance.

http://gb.abrsm.org/regions/fileadmin/user_upload/regulations/myTurnNext.pdf

Managing anxiety is a key to successful performance whether it is sport, playing the piano or speaking in public. The difference in perspective in sport psychology is that through mental skills training we can enhance performance and manage anxiety. In music performance the traditional advice is mainly to treat anxiety because it is viewed as detrimental to performance.
Background Information sheets for pupils

For participants under the age of 18 years this information was amended as shown in parenthesis.

Participant Information Sheet for Piano Pupils (and parents)

Research Project: A study to find out whether sports psychology can help developing musicians. This study involves six piano teachers and their pupils.

You are (Your child is) being invited to take part in a research project. Before you decide it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with your parents. Ask your teacher if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part. Thank you for reading this.

What is the purpose of the project?

Most of the current research on music performance has been done with professional performers. Much of the research of the psychology of performance has been conducted within sports psychology. The purpose of this study is to study pianists who are developing their performance skills, and to see if teaching specific sports psychology techniques can help improve confidence and concentration in performance. This study will take place during the Summer and Autumn terms 2014. Pupils will be taught a mental skill(s) for four weeks leading up to a performance during both terms.

Why have I (has your child) been chosen?

You have (Your child has) been chosen because you are a pupil of one of the participant teachers in my project.

Do I (Does my child) have to take part?
It is up to you \textit{(and your child)} to decide whether or not to take part. Refusal to take part will not involve any consequences. If you do decide to take part you will be given this information sheet to keep (and be asked to sign a consent form). If you decide to take part you are still free to withdraw at any time without giving a reason.

\textbf{What will happen to me \textit{(my child)} if I take part?}

You \textit{(your child)} will be taught specific skills designed to help you prepare for a performance in the Summer term and Autumn term of 2014. You \textit{(your child)} will be asked to complete a questionnaire before this training takes place, and you \textit{(he/she)} will be asked to keep a student diary of the lessons leading up to your performance as well as complete a questionnaire about your performance in both terms.

\textbf{What do I \textit{(does my child) have to do?}}

You do \textit{(Your child does)} not have to do anything special for this research. You must try to practice and play what your teacher sets you, as you would normally.

\textbf{What are the possible disadvantages and risks of taking part?}

I cannot foresee any unexpected discomforts, disadvantages or risks to participants, which may arise during the research.

\textbf{What are the possible benefits of taking part?}

The possible benefits for you are that by learning new skills you \textit{(your child)} could become a more confident and motivated performer. It is hoped that you \textit{(he/she)} may find the project interesting and possibly informative.

\textbf{What happens when the research study stops?}

You and your teacher \textit{(your child and their teacher)} will continue to use any successful psychological strategies in the future.

\textbf{What if something goes wrong?}
If you are worried about the way you are being treated during the research please refer to me Mary Hawkes 01827 62287 email maryh@wkes.co.uk. If you have a serious concern following participation in the project please contact the University Registrar and Secretary 0114 222 1100 email registrar@sheffield.ac.uk

**Will my taking part in this project be kept confidential?**

All information collected about you during the course of the research will be kept strictly confidential. Any information analysed will have your name removed so that you cannot be recognised from it.

**What will happen to the results of the research project?**

The results of the research will be written up for my PhD. If you would like a copy to read, it will be available at the beginning of July 2017. You will not be identified in this thesis or any future publications

**Who has reviewed the project?**

The University of Sheffield, Departmental Ethics Review Body.

**Contact for further information**

Mary Hawkes 01827 62287
Supervisor Stephanie Pitts, Music Department, University of Sheffield

**Thank you for taking part in this research.**
APPENDIX 4D

Letter of participation for teachers

The Jessop Building
34 Leavygreave Road
Sheffield
S3 7RD

This letter confirms that

NAME ________________________________

participated as an action researcher in the PhD project of Mary Hawkes, student at University of Sheffield, Music Department from January 2014 to January 2015.

The project aimed to discover if mental skills researched in Applied Sports Psychology could be practical and useful to developing pianists to improve piano performance.

All action researchers undertook a short Mental Skills Training course run by the Lead Researcher. They took ideas from this course and subsequent group and individual meetings to use with their piano pupils to improve performance. Data was collected through questionnaires, diaries and recorded meetings.

The research took place during the Summer and Autumn terms 2014. The teaching in every case led to the participating pupils performing at a concert, Music Festival or examination. Performances were evaluated by both pupils and teachers.

The results will be reported by the Lead Researcher as part of her doctoral thesis.

Lead Researcher  Mary Hawkes

Signed ____________________________

Supervisor Professor Stephanie Pitts

Signed _________________
APPENDIX 4E

Piano Pupil Questionnaires

The first page of each questionnaire asked for the same demographic details (See below). On the next pages I show the rest of the questionnaires for each age group.

QUESTIONNAIRES ONE, TWO AND THREE

(Questions common to all age groups).

This questionnaire forms part of research into whether sports psychology can help developing pianists. This questionnaire aims to find out what you think about piano performance in relation to other performing activities you do, as well as your piano performance aims and concerns and your current performance preparation. I would be grateful if you could complete the following questions. All responses will be treated in confidence. If you have any questions about the research, please contact: Mary Hawkes MA, Dept of Music, University of Sheffield, S10 2TN email mup07meh@sheffield.ac.uk

Thank you!

FACTS ABOUT YOU

Where there is a box answer with a tick.

1. Sex Male □  Female □

2. Age group  12 – 16 □  17 - 18 □  19 – 25 □  26- 35 □

36 – 45 □  46- 55 □  56 + □

FACTS ABOUT YOU AND PERFORMING

3. ABRSM or equivalent piano examination grade passed, if any. ___

4. What grade, if any, are you working towards now? _____
5. For how many years have you played the piano? ______

6. For how many of those years have you had lessons? ______

7. For how many years have you been with your current teacher? __________

8. What performances did you do last year?

   Pupils’ Concert □  School Concert □  Music Festival □  Examination □
   Competition □ (please specify) __________  Other □ (please specify)

9. How many piano solo performances do you do each year?

   once a year □  once a term □ once a week □  other □ (give details)

10. Do you now, or have you ever, performed on any other instrument or in any of the following activities in or out of school? Write the activity in the table below.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Name of activity</th>
<th>Activity</th>
<th>Name of Activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instrument</td>
<td></td>
<td>Instrument</td>
<td></td>
</tr>
<tr>
<td>Individual Sport</td>
<td></td>
<td>Team Sport</td>
<td></td>
</tr>
<tr>
<td>Acting/Public</td>
<td></td>
<td>Dancing</td>
<td></td>
</tr>
<tr>
<td>Speaking</td>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
11. Including piano performance indicate which performing activity you prefer. Put your favourite first.

1 __________________  2 __________________
3 __________________  4 __________________

Can you give reasons for your preferences?

YOU AND PIANO PERFORMANCE

12. Do you ever perform from memory?

Always □  Sometimes □  Never □

If Yes have you ever had a memory lapse (ie stopped playing because you forgot) when performing?

Yes □  No □

If Yes, can you describe what happened?
13. When you perform on the piano what are your aims? If you have more than one aim number your aims in order of preference. Number 1 would be your main aim.

<table>
<thead>
<tr>
<th>Aims</th>
<th>Aims</th>
</tr>
</thead>
<tbody>
<tr>
<td>To enjoy the music</td>
<td>To please the audience with my playing</td>
</tr>
<tr>
<td>To pass, get merit or distinction (if the performance is an examination)</td>
<td>To do my best</td>
</tr>
<tr>
<td>To win (if the performance is a Festival or other competition)</td>
<td>To please my parents</td>
</tr>
<tr>
<td>To get through the piece without stopping</td>
<td>To please my teacher</td>
</tr>
<tr>
<td>To play all the notes right</td>
<td>To feel a sense of achievement</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

In what way do your aims affect your performance?
For example, do your aims help you to play better or do they make you more nervous?

14. When you perform on the piano do you have any concerns about any of the following?

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>
Can you indicate by using a number from the scale above by how much you are concerned with the following either before you perform or when you are performing.

<table>
<thead>
<tr>
<th>The piano you have to play that is different to your own.</th>
<th>Being embarrassed or self conscious</th>
</tr>
</thead>
<tbody>
<tr>
<td>The venue size</td>
<td>Thinking about other things when you want to concentrate on the performance</td>
</tr>
<tr>
<td>Whether you know the venue</td>
<td>Breathing</td>
</tr>
<tr>
<td>Parents in the audience</td>
<td>Heart racing</td>
</tr>
<tr>
<td>Teacher in the audience</td>
<td>Butterflies in tummy</td>
</tr>
<tr>
<td>The Examiner at an examination</td>
<td>Sweaty hands</td>
</tr>
<tr>
<td>The Festival or competition adjudicator</td>
<td>Tension in different parts of body</td>
</tr>
<tr>
<td>The size of the audience</td>
<td>Getting the tempo right</td>
</tr>
<tr>
<td>Being put off by sounds in the room</td>
<td>Expressing the style of the piece</td>
</tr>
<tr>
<td>Order of play (ie if you go first or last)</td>
<td>Remembering the phrasing and dynamics</td>
</tr>
<tr>
<td>Making mistakes</td>
<td>Pleasing my parents</td>
</tr>
<tr>
<td>If playing from memory – forgetting what to play</td>
<td>Pleasing my teacher</td>
</tr>
</tbody>
</table>
Playing solo | Pleasing myself
---|---
Whether I have done enough practice | Whether I like the music I am playing
Other Concern (please specify) | Other concern (please specify)

YOU AND PERFORMANCE PREPARATION

15. **Besides practice do you do any of the following before you perform?**

| I imagine myself playing at the concert | I relax by doing deep breathing |
| I rehearse my pieces away from the piano | I have a set routine that I always do |
| I talk to myself saying positive words to give me confidence | I do practice performances for my family or others |

If you do a set routine please describe what you do?

If you say words to yourself what do you say?

16. **How do you think any of your answers in Q15 help you in performance?**

17. **How did you learn to do the things you do in Q15. For example, did your teacher or parents help you, or did you do it yourself?**
YOU AND YOUR MOST RECENT PERFORMANCE EXPERIENCE

18 Think back to your most recent performance. What was the date?

Informal Pupils' Concert  □  Formal Concert  □  Examination  □  Music
Festival  □  Other  □

What piece (s) did you play?

Three things that were good about this piano performance were:-

1

2

3

Three things that I could do to improve my piano performance in the future are:-

1

2

3

What I remember most about this performance was

Thank you for taking part in this research.
QUESTIONNAIRE TWO FOR PUPILS AGED 8 - 11 YEARS

(Age specific questions).

MOST RECENT PERFORMANCE EXPERIENCE

13. What was your most recent performance? Was it a concert, exam or competition?
   When was it?
   What did you play?
   What did you enjoy about this piano performance?
   What did you dislike about this performance?
   What do you remember most about this performance?

14. Can you remember what your aims were for this performance? (use suggestions below as prompts)

<table>
<thead>
<tr>
<th>To enjoy the music</th>
<th>To please the audience with my playing</th>
</tr>
</thead>
<tbody>
<tr>
<td>To pass, get merit or distinction (if the performance is an examination)</td>
<td>To do my best</td>
</tr>
<tr>
<td>To win (if the performance is a Festival or other competition)</td>
<td>To please my parents</td>
</tr>
<tr>
<td>To get through the piece without stopping</td>
<td>To please my teacher</td>
</tr>
<tr>
<td>To play all the notes right</td>
<td>To please myself</td>
</tr>
</tbody>
</table>
Any other aims?

15. **At this performance did you have any concerns or worries about any of the following?**

<table>
<thead>
<tr>
<th>Concern</th>
<th>Concern</th>
</tr>
</thead>
<tbody>
<tr>
<td>The piano you had to play that was different to your own.</td>
<td>Thinking about other things when you want to concentrate on the performance</td>
</tr>
<tr>
<td>The size of the room where you performed</td>
<td>Fast Breathing</td>
</tr>
<tr>
<td>The size of the audience</td>
<td>Heart racing</td>
</tr>
<tr>
<td>Who was in the audience,</td>
<td>Sweaty hands</td>
</tr>
<tr>
<td>Eg parents, teacher, examiner</td>
<td></td>
</tr>
<tr>
<td>Being put off by sounds in the room</td>
<td>Feeling tight in different parts of body</td>
</tr>
<tr>
<td>Order of play (ie if you go first or last)</td>
<td>Butterflies in tummy</td>
</tr>
<tr>
<td>Making mistakes</td>
<td>Playing at the correct speed</td>
</tr>
<tr>
<td>If playing from memory – forgetting what to play</td>
<td>Remembering the louds and softs</td>
</tr>
<tr>
<td>Playing on your own</td>
<td>Pleasing my parents</td>
</tr>
<tr>
<td>Being embarrassed or self conscious</td>
<td>Pleasing my teacher</td>
</tr>
<tr>
<td>Whether you had done enough practice</td>
<td>The music you were playing</td>
</tr>
</tbody>
</table>

Any other worries or concerns?

What was your biggest concern when you performed?
PERFORMANCE PREPARATION

16. Do you ever do any of the following to get ready for a performance?

<table>
<thead>
<tr>
<th>Imagine yourself playing at the concert</th>
<th>Relax by doing deep breathing before you go up to play</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talk to yourself to give you confidence</td>
<td>Have a something you always do to get you ready to perform</td>
</tr>
<tr>
<td>Do practice performances for my family or others</td>
<td></td>
</tr>
</tbody>
</table>

Can you describe the routine you always do?

If you say words to yourself what do you say?

How did you learn these things? (prompt by yourself, parent or teacher helped)

Thank you for taking part in this research.
QUESTIONNAIRE THREE FOR PUPILS AGED 6-7 YEARS

(Age specific questions. Note that the youngest pupils did not have question 12 about aims.)

Q12 MOST RECENT PERFORMANCE EXPERIENCE

Most recent performance

Date

Piece or Pieces

Solo or duet

What did you enjoy about this piano performance?
Prompt: Why was that?

What did you dislike about this performance?
PROMPT: Why was that?

What do you remember most about this performance?

Could you draw yourself on the next page playing the piano at a concert and bring it back to me for the next lesson?
APPENDIX 4F

Teacher Worksheets

There were two worksheets I asked the teachers to complete during the project. The idea of these were to help the teachers think about what they were teaching, how they were teaching and for what purpose.

TEACHER WORKSHEET – end of Cycle 1

Please rate the statements below using the following scale.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly Agree</td>
<td></td>
<td></td>
<td></td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>

At this point in the research how much would you agree with the following?

<table>
<thead>
<tr>
<th>Mental Skills are as important as other skills in piano performance</th>
<th>It is mental skills that make the difference between a great performance and an average one</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental skills can be taught to piano pupils of all ages</td>
<td>Mental skills need practice</td>
</tr>
<tr>
<td>Mental skills can improve confidence in performance</td>
<td>Mental Skills can improve competence in performance</td>
</tr>
<tr>
<td>Introducing mental skills training 4 weeks before a performance was the right time.</td>
<td>It is not effective teaching mental skills when the pupil is still struggling with their piece technically.</td>
</tr>
</tbody>
</table>
Add any comments below on how the mental skills training is affecting your pupil’s learning and/or your teaching.

SUMMARY OF RESEARCH
Can you summarise here your research this term. I would like you to present this summary to the group at the meeting. Can you describe what you did, and include positive things as well as problems or concerns you wish to address at the meeting?

WHAT TO DO NEXT TERM
Can you outline here what you want to do next term?

TEACHER INFORMATION and WORKSHEET TWO -between cycles

WHAT NEXT?

REMEMBER
A sports psychology approach to performance through the use of mental skills training and other strategies is used to enhance performance not to treat anxiety.

BEING CLEAR ABOUT ANXIETY

What exactly is anxiety? It is not just one thing and it is not the same for all individuals. From the research literature seems to include:
- physical symptoms such as butterflies in tummy, shaky hands etc
- worrying thoughts eg everyone is watching me, I am being judged
- outward behaviours eg fiddling with music or talking about being panicky.

PHYSICAL SYMPTOMS – the autonomic nervous system

In order to help with the physical sensations of anxiety explaining to the pupil about the ANS can help. The fact that these kind of symptoms happen to everyone and are NORMAL. It is how you respond to these symptoms that affects the performance not the symptoms themselves. A certain amount of arousal seems necessary to make an exciting performance. It is a case of getting a balance.
WORRYING THOUGHTS/CONCERNS
Comparison of performance concerns from the two questionnaires are interesting and could be used a diagnostic tool for future performance. Using the responses as a start of a discussion re performance concerns could help you decide what strategies may be needed for your pupil for the next performance.

GOAL SETTING
Goal setting is specific planning that involves the performer in the planning and the evaluation. It is likely that it is not suitable for young pupils as they need more teacher direction.
On reading the goals written as AIMS FOR PERFORMANCE in the questionnaires some of you may wish to consider goal setting in your planning. You need to take note of the following findings from research on goal setting for this to be effective.

PUPIL SHOULD OWN THE GOAL (S)
Research on goal setting suggests it works best as a motivator and aids confidence. However it is thought to work best if performer owns the goals ie they have been part of the planning of the goals,
The difference from your usual planning is that you work with the pupil to decide on the goals, and that it should be their goal not yours. You are there to help them achieve it.

GOAL NEED TO BE SMART.

Specific
Measured
Agreed
Realistic
Timed
The types of goal that are set are thought to affect how the performer feels.
Process goals seem to be more motivating than outcome goals which can add more pressure in performance.

A Process goal - to remember the dynamics when I perform at the concert or to play at the correct tempo.
Outcome goal – to pass with merit or to win the competition
Goals need to be **specific** rather than vague. A vague goal such as “**to do myself justice**” I think needs discussion to find out what that entails. If this is made more realistic and specific it can help the pupil feel they have achieved.

Goals such as **pleasing the teacher or parents** are difficult to assess and may not be useful. It might be informative to read your pupils’ questionnaire responses re their goals and try to help them decide on more realistic measurable aims.

**LONG TERM - MEDIUM TERM - SHORT TERM GOALS**

Having specific goals in the long middle and short term are supposed to keep the performer motivated and increase confidence that they will get to their goal.

Below is an example of my planning so far with a pupil.

<table>
<thead>
<tr>
<th>LONG TERM</th>
<th>MEDIUM TERM</th>
<th>SHORT TERM GOALS UP TO DEC 2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>To pass grade 8 by July 2016</td>
<td>DEC 2014 perform a grade 7 piece at pupils Christmas concert 2014</td>
<td><strong>Grade 7 piece</strong> Consolidate notes and fingering of piece to play at the concert. Be able to perform the nuts and bolts by half term. Work on expression and character November December practice performing.</td>
</tr>
<tr>
<td>March 2015 To perform in recital class at Tamworth Music Festival using pieces at grade 6 and 7 known by Christmas 2014. Start to learn grade 8 piece</td>
<td></td>
<td>Learn notes and fingering of <strong>Sleigh Ride duet</strong> for concert by half term Work on expression in November and practice with partner from end of November. Practice performing with partner in December</td>
</tr>
<tr>
<td>July 2015 Perform grade 8 piece at pupils concert Learn next piece</td>
<td></td>
<td><strong>Sight Reading</strong> Use Improve your sight reading grade 5 Paul Harris to systematically go through various rhythms and keys in this book. One stage every two weeks.</td>
</tr>
</tbody>
</table>
Dec 2015 Perform grade 8 piece at pupils concert
Learn third piece

<table>
<thead>
<tr>
<th>Scales /arpeggios keys to be chosen from the sight reading stage. They will be practiced in the ways required for Trinity College London syllabus eg 4 octaves, leg and stacc with varying dynamics.</th>
</tr>
</thead>
</table>

March 2016
Perform all three grade 8 pieces at
Recital Class of Music Festival

<table>
<thead>
<tr>
<th>Aural tests – recognition of major and minor and different types of cadence to be learned by Dec 2015</th>
</tr>
</thead>
</table>

July 2016
Take grade 8 examination

<table>
<thead>
<tr>
<th>Short term goals for next be set before end of this assess medium term goals.</th>
</tr>
</thead>
</table>

It needs to be agreed how much time the pupil will spend and has time to spend practicing. I may ask him to produce a timetable of his out of school activities with piano practice slotted in.

**EVALUATION** Goal setting involves being able to specifically evaluate what you set out to do. This is where goal setting is most effective. By setting SMART goals you can together evaluate the performance and give useful feedback, which can then be used to plan or revise the plan for the long term performance goal.

Obviously in examinations the exam is the goal and you have the mark sheet as well as your evaluation in a mock exam to use. For young ones especially having goals other than to pass the examination may be productive eg to remember dynamics if they forgot them in the last exam or performance.

**EXAMINATIONS AND PERFORMANCE**

Whilst the pieces are the obvious performance element of an exam it may be useful to think of the whole thing as a performance. And how do you practice all these elements under pressure at home. Is one practice session in a weekly lesson enough? How could the pupil practice exam pressure at home? Using recordings is an easy way if you cannot find an audience easily.

Problems highlighted by TB was that testing **scales** in a random order gave her pupil problems because she had practiced the scales in book order. Devising games that pupil can do with parent
or by themselves could help them. Parents may be able to give regular tests at home to put pupil under pressure.

**Sight reading** - also needs strategies. Checklist a la Paul Harris and the golden rules “always count never stop” are simple and good to use near to exam time. Knowing your current reading speed is useful so pupils do not try and play too fast in the exam.

**Aural** – practice at home via ABRSM aural trainer, Hofnote or such like may be necessary for higher grades.
ACTIVITY ONE

Identify the specific mental demands of playing a piano solo at a concert.

Identify the specific mental demands of playing the four elements of a piano examination.

Scales

Pieces

Sight reading

Aural

What are the main differences between these two types of performance?

•
ACTIVITY TWO

In the second and third column below give examples of how demonstrating or not demonstrating these qualities affects performance in a concert or an exam.

<table>
<thead>
<tr>
<th>MENTAL QUALITY</th>
<th>POSITIVE EFFECT</th>
<th>NEGATIVE EFFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CONCENTRATION</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONFIDENCE</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CONTROL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMMITMENT</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
ASSESSMENT OF YOUR THINKING AT THIS STAGE IN THE RESEARCH QUESTIONS RELATED TO THE FINDINGS

DEVELOPMENT OF THE PERFORMER - AGE AND EXPERIENCE

Q How involved should the pupil be in their own psychological preparation at different ages/stages of their development?

Q How can we teachers capitalise on what seems to be the natural enthusiasm of youth to enjoy the experience and atmosphere of performance?

Q What might stop young children being so enthusiastic?

Q What do you need to aware of if you teach a child for example from aged 8 – 18 years in terms of psychological preparation? How might your teaching change over time?
PERFORMANCE CONCERNS AND PRESSURES

The evidence so far suggests that performance concerns cover a wide range of perceived pressures both internal and external.

Q How does this challenge what we think our pupil means if they say they are nervous?

Q How useful is the word “nerves”? 

Q Can and should we eliminate it from our vocabulary?

AIMS FOR PERFORMANCE
GOAL SETTING AND PLANNING

FINDINGS

Discrepancy between the aims of our performers and our aims. Was this more noticeable at different ages and experience?

A number of our performers said their aims made them nervous.

Q How can you further explore these aims and their effects?

Explore your own data from the original questionnaire and the data collected in the Summer term.

Q Did you find anything surprising about your pupils’ aims and their evaluation of those aims after the performance?

Q How did their aims for performance match with yours? Did you state clear aims?
GOAL SETTING AS A PSYCHOLOGICAL STRATEGY

“The importance of goal-setting cannot be understated. Yet very few of us actually do it, often because we aren’t quite sure how to”. Bulletproofmusician.com

Goal setting is a powerful tool that teacher and performer can use to establish joint objectives. This specific type of planning involves the performer in both PLANNING AND EVALUATION.

GOAL SETTING is thought to have many benefits:-

- Focus attention
- Direct effort towards the task
- Help maintain effort/motivation
- Help performers plan action
- Help performers control their anxiety
- Monitor progress and provide feedback
- Build self confidence

GOALS NEED TO BE SMART.

S pecific
M easurable
A greed
R ealistic
T ime – phased
E xciting
R ecorded

TYPES OF GOALS

The types of goal that are set are thought to affect how the performer commits to the goals themselves and how they feel in relation to the performance.

Process goals seem to be more motivating than product or outcome goals.

A Process goal - specifies what the performer has to do in order to achieve something eg to remember the dynamics when I practise performing this week / or when I perform at the concert

Outcome goal - specifies an end result either in terms of comparison with other performers or against a standard eg a Festival competition or examination to pass with
LONG TERM PLANNING

LONG TERM - MEDIUM TERM - SHORT TERM GOALS
Having specific goals in the long middle and short term are supposed to keep the performer motivated and increase confidence that they will get to their goal.

It is recommended you set outcome goals for long term aims and intermediate aims or when effort is the key factor. However, process oriented goals seem best for short term goals especially if skill is the main concern.

EVALUATION/FEEDBACK Goal setting involves being able to specifically evaluate what you set out to do. This is where goal setting is most effective. By setting SMARTER goals you can together evaluate the performance and give useful feedback, which can then be used to plan or revise the plan for the long term performance goal.

SET A DATE FOR THE PERFORMANCE

WRITE DOWN YOUR GOALS This way you are always clear what you and your pupil are trying to achieve. Write the goals somewhere that you and your pupil can find them easily.

THINK OF POSITIVES NOT NEGATIVES Positive goals are statements about what you want (e.g. play loudly), while negative goals are statements about what you don't want (e.g. don't play softly). Get into the habit of stating your goals as statements of what you want, as opposed to what you don't want.

GIVE FEEDBACK It's important for us to monitor how we are doing, and see what progress we are making towards the accomplishment of our end-goal. Is there still a great deal of work to be done? Are you almost there? Just a couple more things to tweak, or maybe a couple dozen?

“If you don’t know where you are going, you’ll end up someplace else.” -Yogi Berra

Q Could you take elements from the goal setting approach to make your teaching of a mental skill more specific?
LEARNING MENTAL STRATEGIES FOR PERFORMANCE

FINDING

Pupils appeared to used more strategies than the one's we taught.

Q Are they really using these strategies? How can we find out?

Q If yes, how are they learning and practising them?

Q How does our teaching fit in? Should we build on what they do already? Teach something new?
TEACHING STRATEGIES TO IMPROVE MENTAL QUALITIES
THE FOUR C's CONFIDENCE CONCENTRATION CONTROL COMMITMENT

Certain strategies seem easier to teach in the limited lesson time we have.

Q What strategies have you found most useful so far to teach your pupil(s) to better prepare mentally for performance?

Q In what ways do you think you can improve your teaching to enhance performance this term?

Q How confident do you feel about this approach? Do you have any doubts/reservations?

CONFIDENCE IN OUR ABILITY TO TEACH MENTAL STRATEGIES FOR PERFORMANCE

Q How confident are you to teach the different strategies?

Simulation of the performance in the lesson (may include role play)
Pre performance Routine

Imagery Visualisation
Mental rehearsal

Relaxation deep breathing
More complex techniques such as yoga, meditation or PMR

Arousal control can you explain the autonomic nervous system to a pupil

Reframing / positive talk/key words
Affirmation statements used by you or pupil
Key words either stated or written on crib cards
Reframing negative thoughts to positive ones
Eg thoughts about the ANS, the audience, other pressures

Q which of the above strategies do you think are the most important and realistic to teach to your pupils in the next part of the project?
EXAMINATIONS AND PRESSURE

The exam as a whole performance

Q In terms of focus how does performing in an exam differ psychologically from performing in a concert?

Q How might you adapt teaching of scales, sight reading and aural in the lessons to replicate the performance situation?

Scales

Sight reading

Aural
PRACTISING THE PRESSURE

“I DON’T KNOW WHAT’S THE MATTER I PLAYED THIS OK AT HOME?”

Q How can we build up pressure in practice performances to lead up to the real thing?

Q how can we help our pupil practise performance pressure at home?

Q How can we help our pupils practise performing more?
APPENDIX 4G

Preparation and planning for performance sheets

There was a sheet for teacher and pupil designed to give data to summarise and reflect on the pupils’ preparation five weeks before the performance. The teachers were asked also to write what they were planning to teach during each four week cycle. The aim in the pupil sheet was for me to assess musical readiness for performance and whether lack of readiness might affect teaching performance strategies. The aim in the teacher sheet was to assess their learning about performance strategies by seeing how much they planned to use them.

Pupil planning sheet Cycle 1 and 2

<table>
<thead>
<tr>
<th>PUPIL PERFORMANCE PREPARATION SUMMER/AUTUMN TERM</th>
<th>DATE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NAME</td>
<td>RESEARCH NUMBER</td>
</tr>
</tbody>
</table>

PERFORMANCE INFORMATION (please tick as appropriate)

<table>
<thead>
<tr>
<th>Informal  Pupils’ Concert</th>
<th>□</th>
<th>Formal Concert</th>
<th>□</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination</td>
<td>□</td>
<td>Music Festival</td>
<td>□</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>□</td>
<td>________________</td>
<td></td>
</tr>
</tbody>
</table>

PIECE(S) AND COMPOSER

Playing from memory | □ | from music | □ |
### SUMMARY OF MY PREPARATION FOR THIS PERFORMANCE SO FAR
Include how well you know the pieces (notes, fingering, dynamics, etc), how well is the piece (s) in your memory (if you are playing from memory), how long you have been preparing the piece(s), any difficulties, how you feel about the piece(s) at the moment, why did you choose this piece(s) etc.

### REFLECTION
*How do you feel about performing this piece (s) at the moment?*
What work do you still have to do? What things are working well? What are not?

### Teacher planning sheet Cycle 1 and 2
**TEACHER PERFORMANCE PLAN AND REFLECTION SPRING/AUTUMN TERM**

*To be completed 5 weeks before the performance*

**DATE**

**PUPIL RESEARCH NUMBER**

*What are you going to teach your pupil to prepare them mentally for this performance?*

**REFLECTION** *Try to include answers to the following as well as anything else you think is relevant.*

How have the data findings from the questionnaires and your own data influenced your preparation for performance with this pupil?

How well do you think your pupil has prepared the piece(s) so far?

What do they still have to improve?

How do you hope your teaching will improve their performance? *(use the 4 Cs in your answer).*

What are your concerns if any?
Teacher and Pupil Diaries

Diaries were used to collect data about lessons and pupils’ practice. The aims of the diaries were twofold. The first was for teacher and pupil to record what happened in both lessons and practice, which would be data I could analyse. The second aim for the teachers was to provide a tool to help them reflect on their teaching. I researched all kinds of ways to develop diaries. Robson (2002) gives ‘notes for guidance in developing a diary form’ which I followed by giving the structure considerable thought ‘as a questionnaire’. This meant anticipating what I might want to write in my final analysis. In order to help the teachers analyse and reflect on their own teaching, their diary was divided into four questions, which mirrored the action cycles as a whole:

- What did I do? \hspace{1cm} ACTION
- What did I learn? What did the pupil learn? \hspace{1cm} EVALUATION
- What do I think? \hspace{1cm} REFLECTION
- What next? \hspace{1cm} PLANNING

The second aim for the pupil diary was to make sure it was workable. The pupil diary design became very simple as the teachers had already had negative experiences in trying to get pupils to complete practice diaries. They anticipated problems with pupils completing them, as well as possibly losing them. Despite the simple design, in Cycle 1, as anticipated, many diaries, particularly from teenage pupils, were either too brief, incomplete, or non-existent. It was decided for Cycle 2 that the diary should become more structured. What pupils had to practice was completed by pupil or teacher at the top of the diary page and then the pupils reflected on this by answering specific questions written in the diary.

Teacher and pupil diaries are shown in the rest of this appendix.
Pupil Diary Cycle 1

PUPIL PERFORMANCE PRACTICE DIARY CYCLE 1  WEEK ONE  DATE

Research

Number

Record your practice in minutes in the boxes below each day.

<table>
<thead>
<tr>
<th>DAY</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reflection

Things that worked well, things that did not, what I learned this week, what I have achieved.
Pupil diary Cycle 2

PUPIL PERFORMANCE PRACTICE DIARY  WEEK NUMBER  DATE

PUPIL RESEARCH NUMBER

*Pupil and/or teacher to complete first box at the end of the lesson.*

| What I need to practice this week is |
| I am trying to improve |

Record your practice in minutes in the boxes below each day.

<table>
<thead>
<tr>
<th>DAY</th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Evaluate what you did this week (tick the box that reflects your motivation and effort)

| Self motivation | Low | Medium | High |
| Effort | Low | Medium | High |

Reflection

| I practiced |
| I improved |
| I have learned |

What went well this week

What did not go well
**MY PRACTICE THIS WEEK**
Write in things you are going to practice. Are you practicing to perform or practicing to improve? How will you practice?

---

**Teacher Diary Cycle 1 and 2**

**TEACHER DIARY ENTRY**

<table>
<thead>
<tr>
<th>PUPIL NUMBER</th>
<th>DATE</th>
</tr>
</thead>
</table>

**ACTION**
WHAT DID WE DO?

Can you describe what you did in the lesson.
Include any interesting conversation, gestures, expressions or interesting behaviour
<table>
<thead>
<tr>
<th>EVALUATION</th>
<th>WHAT DID WE LEARN?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What did you hope your pupil learned?</td>
</tr>
<tr>
<td></td>
<td>What did you learn?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>REFLECTION</th>
<th>WHAT DO I THINK/FEEL?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Use the reflective questions on separate sheet if you are unsure what to write in this section.</td>
</tr>
<tr>
<td></td>
<td>Try to write about strengths before any problems.</td>
</tr>
</tbody>
</table>

| PLANNING | WHAT NEXT? |
APPENDIX 4J

Pupil and teacher performance evaluations

The purpose of the evaluation sheets was to analyse the effect of the teaching on the performance experience for each cycle. Teacher and pupil evaluation sheets had separate designs. There were separate evaluations for children aged 7 – 11 years and pupils aged 12 years and above. The older pupils had to report their mental strategy use and performance concerns. This data could then be compared with the same questions from the questionnaire to show change. The older pupils’ evaluation was amended to accommodate shared aims in our teaching for Cycle 2.

PIANO PUPILS PERFORMANCE EVALUATION SHEET - Pupils at Primary School (aged 8 – 11 years)

PERFORMANCE please tick as appropriate

Informal Pupils’ Concert ☐ Formal Concert ☐ Examination ☐

Music Festival ☐

Other ☐ please specify

Solo ☐

Duet with another pupil ☐

Duet with teacher ☐

Playing from memory ☐ from music ☐
What did you enjoy about this performance and why?

What did you dislike about this performance and why?

When you get home draw yourself at your performance below.

Pupil performance evaluation Cycle 1 – pupils aged 12 years and over

BEFORE THE PERFORMANCE
Please complete this section on the morning of the performance
please tick as appropriate

Informal  Pupils’ Concert  □  Formal Concert  □  Examination  □
Music Festival  □  Other (please specify)  □
Solo  □
Duet with another pupil  □
Duet with teacher  □
Playing from memory  □  from music  □
AIMS

What are your aims for this performance? Please put your aims in order of importance with number one being the most important.

1

2

3

Answer the following by using a number from the scale below

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
<td></td>
</tr>
</tbody>
</table>

Thinking about your performance today, how concerned are you about the following?

<table>
<thead>
<tr>
<th>The piano you have to play that is different to your own.</th>
<th>Being embarrassed or self conscious</th>
</tr>
</thead>
<tbody>
<tr>
<td>The venue size</td>
<td>Thinking about other things when you want to concentrate on the performance</td>
</tr>
<tr>
<td>Whether you know the venue</td>
<td>Breathing</td>
</tr>
<tr>
<td>Parents in the audience</td>
<td>Heart racing</td>
</tr>
<tr>
<td>Teacher in the audience</td>
<td>Butterflies in tummy</td>
</tr>
<tr>
<td>The Examiner at an examination</td>
<td>Sweaty hands</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------</td>
<td>------------------------------------------------</td>
</tr>
<tr>
<td>The Festival or</td>
<td>Tension in different parts of body</td>
</tr>
<tr>
<td>competition</td>
<td></td>
</tr>
<tr>
<td>adjudicator</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>The size of the</td>
<td>Getting the tempo right</td>
</tr>
<tr>
<td>audience</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Being put off by</td>
<td>Expressing the style of the piece</td>
</tr>
<tr>
<td>sounds in the room</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Order of play (ie if</td>
<td>Remembering the phrasing and dynamics</td>
</tr>
<tr>
<td>you go first or last)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Making mistakes</td>
<td>Pleasing my parents</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>If playing from</td>
<td>Pleasing my teacher</td>
</tr>
<tr>
<td>memory – forgetting</td>
<td></td>
</tr>
<tr>
<td>what to play</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Playing solo</td>
<td>Pleasing myself</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Whether I have done</td>
<td>Whether I like the music I am playing</td>
</tr>
<tr>
<td>enough practice</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Concern (please</td>
<td>Other concern (please specify)</td>
</tr>
<tr>
<td>specify)</td>
<td></td>
</tr>
</tbody>
</table>
**AFTER THE PERFORMANCE**

Please complete this section as soon as possible after your performance.

*Can you answer the following questions by using a number from the scale below*

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>

**How well did you remember the following?**

<table>
<thead>
<tr>
<th>The notes and fingering</th>
<th>Dynamics (Louds and Softs)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable tempo (speed)</td>
<td>Articulation (Legato/Staccato)</td>
</tr>
<tr>
<td>Interpretation/character of the piece?</td>
<td>Pre performance routine or other mental skill you have been practising</td>
</tr>
</tbody>
</table>

**Could you rate the following using the above scale?**

<table>
<thead>
<tr>
<th>How confident did you feel when you were waiting to perform?</th>
<th>How confident did you feel during the performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well did you communicate with the audience</td>
<td>How well did you manage your mistakes/slips?</td>
</tr>
<tr>
<td>How well did you remember the Pre Performance Routine or other mental skill for this performance?</td>
<td>How much did you enjoy this performance?</td>
</tr>
<tr>
<td>How well did you achieve your aims?</td>
<td>How confident are you about performing in the future?</td>
</tr>
</tbody>
</table>
What have you been learning and practising during the last 4 weeks to help your performance? *Please tick.*

<table>
<thead>
<tr>
<th>Activity</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagining myself playing at the concert</td>
<td>Relaxing by doing deep breathing</td>
</tr>
<tr>
<td>Rehearsing my pieces away from the piano</td>
<td>A pre performance routine</td>
</tr>
<tr>
<td>Talking to myself saying positive words to give me confidence</td>
<td>Practice performances for my family or others</td>
</tr>
<tr>
<td>Goal setting – making realistic aims for this performance</td>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>

**REFLECTION**  What are your thoughts/feelings on the usefulness of the above for this performance? For example, do you think it improved your confidence? Do you think it helped you to perform better? In what ways?

I completed this form myself  [ ]  I completed this form with help  [ ]
Pupil performance evaluation Cycle 2 – pupils aged 12 years and over

BEFORE THE PERFORMANCE

Please complete this section on the morning of the performance

AIMS

What are your aims for this performance?

1

2

3

Answer the following by using a number from the scale below

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
</tr>
</tbody>
</table>

- The piano you have to play that is different to your own.
- Being embarrassed or self conscious
- The venue size
- Thinking about other things when you want to concentrate on the performance
- Whether you know the venue
- Breathing
- Parents in the audience
- Heart racing
- Teacher in the audience
- Butterflies in tummy
Thinking about your performance today, how concerned are you about the following?

**AFTER THE PERFORMANCE**

Please complete this section as soon as possible after your performance.

How well did you achieve your aims?

<table>
<thead>
<tr>
<th>The Examiner at an examination</th>
<th>Sweaty hands</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Festival or competition</td>
<td>Tension in different parts of body</td>
</tr>
<tr>
<td>The size of the audience</td>
<td>Getting the tempo right</td>
</tr>
<tr>
<td>Being put off by sounds in the room</td>
<td>Expressing the style of the piece</td>
</tr>
<tr>
<td>Order of play (ie if you go first or last)</td>
<td>Remembering the phrasing and dynamics</td>
</tr>
<tr>
<td>Making mistakes</td>
<td>Pleasing my parents</td>
</tr>
<tr>
<td>If playing from memory – forgetting what to play</td>
<td>Pleasing my teacher</td>
</tr>
<tr>
<td>Playing solo</td>
<td>Pleasing myself</td>
</tr>
<tr>
<td>Whether I have done enough practice</td>
<td>Whether I like the music I am playing</td>
</tr>
<tr>
<td>Other Concern (please specify)</td>
<td>Other concern (please specify)</td>
</tr>
</tbody>
</table>
Can you answer the following questions by using a number from the scale below

1  2  3  4  5  6  7  8  9  10  
Not at all         Very much

<table>
<thead>
<tr>
<th>Question</th>
<th>Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>How confident did you feel when you were waiting to perform?</td>
<td></td>
</tr>
<tr>
<td>How confident did you feel during the performance?</td>
<td></td>
</tr>
<tr>
<td>How confident are you about performing in the future?</td>
<td></td>
</tr>
<tr>
<td>How well did you manage your mistakes/slips?</td>
<td></td>
</tr>
<tr>
<td>How well did you concentrate during the performance?</td>
<td></td>
</tr>
<tr>
<td>How relaxed did you feel during this performance?</td>
<td></td>
</tr>
</tbody>
</table>

Which of these mental skills did you use for this performance? *(please tick)*

<table>
<thead>
<tr>
<th>Skill</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Imagining myself playing at the concert</td>
<td></td>
</tr>
<tr>
<td>Relaxing by doing deep breathing</td>
<td></td>
</tr>
<tr>
<td>Rehearsing my pieces away from the piano</td>
<td></td>
</tr>
<tr>
<td>A pre performance routine</td>
<td></td>
</tr>
<tr>
<td>Talking to myself saying positive words to give me confidence</td>
<td></td>
</tr>
<tr>
<td>Practice performances for my family or others</td>
<td></td>
</tr>
<tr>
<td>Goal setting – making specific, realistic aims for this</td>
<td></td>
</tr>
<tr>
<td>Other (please specify)</td>
<td></td>
</tr>
</tbody>
</table>
REFLECTION

What are your thoughts/feelings on the usefulness of the mental skills you used for this performance? For example, do you think it improved your confidence or your concentration?

Do you think the mental skills helped you to perform better? In what ways?

Do you think you prepared your pieces well enough for this performance? (if an exam, comment on the scales, sight reading and aural)

Could you have improved your preparation? If yes, in what ways?

I completed this form myself  □  I completed this form with help  □
Teacher Evaluation of Performance Cycle 1

Pupil number                  date

Performance
Informal Pupils’ Concert      Formal Concert       Examination
Music Festival                Other                  please specify

PIECE(S) AND COMPOSER

Can you answer the following questions by using a number from the scale below

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Very much</td>
<td></td>
</tr>
</tbody>
</table>

How well did your pupil remember the following?

<table>
<thead>
<tr>
<th>The notes and fingering</th>
<th>Dynamics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable tempo</td>
<td>Articulation</td>
</tr>
<tr>
<td>Interpretation/character of the piece?</td>
<td>The mental skill they were taught</td>
</tr>
</tbody>
</table>

In your opinion, how effective was the sports psychology technique/approach for this performance?

<table>
<thead>
<tr>
<th>For their competence</th>
<th>For their confidence</th>
</tr>
</thead>
</table>
How well do you think the pupil?

| Engaged with their audience | Performed to the best of their ability |

REFLECTION

What are your thoughts/feelings on the usefulness of the technique/approach you used with your pupil for this performance?

What next for this pupil?
Teacher Evaluation of Performance Cycle 2

Teacher evaluation sheet

Performance

Informal Pupils’ Concert  □  Formal Concert  □ Examination  □

Music Festival □  Other □ please specify

Did they perform a  SOLO □
               DUET WITH ANOTHER PUPIL □
               DUET WITH TEACHER □

Write pupil’s three main aims for this performance in the left boxes below? They may be technical or musical as well as psychological. Make them **SMARTER**.

**Before the performance**  **After the performance**

<table>
<thead>
<tr>
<th>AIM ONE</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIM TWO</td>
<td>Evaluation</td>
</tr>
<tr>
<td>AIM THREE</td>
<td>Evaluation</td>
</tr>
</tbody>
</table>
REFLECTION

What are your thoughts/feelings on the usefulness and effectiveness of the psychological technique/ approach in your teaching to prepare your pupil for this performance? How useful did you find this evaluation?
APPENDIX 4K

Reflections

During the project the teachers were asked to complete three reflections. Together these reflections were designed to assess the teachers’ attitudes towards the teaching of mental strategies for performance during the course of the project.

First teacher reflection

REFLECT ON YOUR OWN PERFORMANCE PREPARATION AND YOUR TEACHING FOR MUSIC PERFORMANCE

You may like to reflect on your own learning to perform piano solos and the way you learned other things to see how this might inform our teaching. For example, I reflected on how I learned to play and compete at tennis, with how I learned to play the piano and perform. I also compared myself as a piano teacher and as tennis coach. This reflection brought out some interesting distinctions that I will bring to the meeting.

The idea of this reflection is get you thinking about teaching performance skills and why they could be helpful. You may have been taught mental skills when you were learning to play and perform on the piano. As a teacher you may already use some of the strategies mentioned in the previous section, but call it something else. You may have never really considered exactly why you are doing this, or called what you do “performance psychology”. Could you please bring your reflections, ideas and questions to the initial meeting.

Reflect and then write down any strategies you may use as a performer either now or in the past.

How do you think these strategies help?

Reflect on your own teaching and write down any strategies you already use with your pupils?

How do you think these strategies help your pupils?

How does your own performance experience affect the way you teach now?
Do you use different strategies with different age groups, differing levels of experience or types of pupil?

Any other thoughts, questions or ideas.

**Second Teacher reflection**

*to be completed as soon as possible after the one to one meeting*  

**AIMS FOR THE PROJECT**

This project aims to

- Use a sports psychology model to introduce the idea of teaching mental skills to developing pianists
- To discover if by teaching mental skills to our pupils that they become more competent and confident performers.
- To discover if such teaching is sustainable

How do you feel with regard to the above aims?

What are your hopes for this project?

What are your concerns?

Has your teaching changed in any way since you agreed to participate in this project?

---

**Final reflection**

TEACHER NUMBER  

**SUMMARY OF MY RESEARCH INTO USING A SPORTS PSYCHOLOGY APPROACH WITH PIANO PUPILS TO IMPROVE PIANO PERFORMANCE**

How many pupils took part, age, gender and experience.

Type of performance they did each term.

What have you found of benefit to your teaching from taking part in this project?
How do you think your pupils have benefitted? In what ways?

What do you think now about teaching performance as a skill? How is this thinking the same or different to before the project?

How important do you think mental skills are for the performer? Has your thinking changed in any way regarding this question?

What mental skills did you find easiest to integrate into lessons?

What problems did you have including mental skills in your lessons?

Do you think there is an age or stage of learning where pupils feel more vulnerable as solo performers?

Do you think it is true that playing solo is worse than playing a duet or accompanying for your pupils?

How beneficial did you find thinking about the Four C’s?

Did you find performance profiling useful? If yes in what way?

What will you take forward into your teaching in the future from being a participant in this project?

Please note anything else of interest regarding piano performance and psychological preparation
Reflective questioning guidance for diaries

Below are questions you may find helpful for your reflective writing when you complete the section “What did I think/feel?” in your diary. It will not be possible to answer all the questions for each diary entry but you should try and reflect on both positives and negatives each time.

What am I doing?
Is this what I should be doing?
How successful am I?
What was good about what I thought/felt?
What is a better way to do this?
Could I have done anything differently?
What do I need to do to achieve this?
How far have I been successful?
Who has learnt what?
What needs to change?
What are my concerns?
Do I have doubts about this?
Is this sustainable?
Am I committed to this?

Is my pupil committed to this?
The questionnaire survey design and development

The survey was written with two aims:

- To provide an overview of recreational piano pupils’ performance experience to be subject to analysis for trends
- To provide a diagnostic tool to help the teachers choose pupils to participate in the action cycles.

It was designed noting the purposes and pitfalls of designing questionnaires highlighted by Gilham (2007) and Robson (2002). After pilot testing and consultation with the teachers at the first group and individual meetings it was decided to use three age appropriate versions of the survey.

- Questionnaire one - for children and adults aged 12 years and over.
- Questionnaire two - for pupils aged 8 – 11 years
- Questionnaire three - for pupils aged 6 - 7 years old.

The teachers decided together that the age groups should reflect the UK school transitions.

<table>
<thead>
<tr>
<th>Infant</th>
<th>5 - 7 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior</td>
<td>8 – 11 years</td>
</tr>
<tr>
<td>Secondary</td>
<td>12 – 18 years</td>
</tr>
<tr>
<td>Adult</td>
<td>19 years and older</td>
</tr>
</tbody>
</table>

Playing standard pupil was to follow UK examination board grades.

<table>
<thead>
<tr>
<th>Beginner</th>
<th>Preliminary – Grade 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate</td>
<td>Grade 3 – 5</td>
</tr>
<tr>
<td>Advanced</td>
<td>Grade 6 – 8</td>
</tr>
</tbody>
</table>

We used the grade that pupils were working towards rather than the grade they had achieved as the benchmark. Some pupils had not taken an examination for a number of years so results of the examinations were not necessarily going to reflect their playing
standard at the time the questionnaire was administered. It was decided that I could grade these pupils by considering using the pieces they performed most recently as a guide (Questionnaire One Q18, Questionnaire Two, Q17).

Developing the questions

Aims for performance
This question was designed so that the teachers could see the types of aims pupils set for themselves and the effect they had on the performance experience. I anticipated working on the principles of goal setting with the group, so the aims chosen were a selection of performance and process goals (see information on goal setting, Appendix L).

Mental skills
The wording for the section on mental skills for preparation in performance discussed in the sports psychology literature was shaped from the basic psychological skills described in Hardy et al. (1996), and the ‘canon’ of psychological skills training (Andersen, 2009).

Performance concerns
The aim in this assessment of performance concerns was firstly to assess what types of concerns recreational piano pupils had about performing, and see if they could be compared to those of specialist musicians assessed by Clark, (2010). The second aim was to monitor performance concerns at each performance evaluation to assess the effects of the teaching in the action cycles.

I developed a scale that was not directly referring to performance anxiety: hence, performance concerns. Careful consideration was given to the wording of the questions. The 29 items in the Likert – Type scale of performance concerns for questionnaire one were developed from Clark (2010), as well as cognitive and physiological symptoms of anxiety categories I had used in my MA dissertation on attentional control in piano performance (Hawkes, 2009). Additional items were
added after piloting this part of the questionnaire with three former pupils (adults at this time). The a priori categories of concerns were physiological symptoms of arousal, concerns about the performance environment, pleasing self and others, musical issues, concentration and being self-conscious.

The analysis

I had planned for all pupils to respond to performance concerns by using the Likert-type scale but the group decided that a simple yes/no answer for the younger children was more appropriate (Questionnaire Two, Q15). The wording about the concerns was also slightly adapted from Questionnaire One to make the language more appropriate for younger children.

The Likert-type scale chosen for Questionnaire one was 1 – 10 rather than the usual 1 – 7 because it was felt that young people would more easily understand 10 as the highest score (= very concerned). My aim was to use Factor Analysis to explore the correlations between the items with an expectation that the resulting components might mirror the a priori categories. Principal Components Analysis rather than Exploratory Factor Analysis was used because of this thinking. (Williams, Onsman & Brown, 2010, p.3).

I was not sure at the start how big the sample would be. The total sample was 107 but the sample for questionnaire one was 60. There is some controversy about the minimum size of sample that can be used for factor analysis. Howitt and Cramer (2008) suggest that 50 is the bare minimum but other authors give different ‘rules of thumb’. For example, Beavers et al. (2013) discuss subject to variable ratios as well as the minimum recommended cases to be 100. These authors also discuss the debate in the literature that if factors have four or more items with loadings for .60 or higher then size is not relevant. Williams et al. (2010) require that the researcher checks the correlation matrix for factors over 0.30, in general, and if over 0.50 then a smaller sample is acceptable. The other way to test the sampling adequacy and suitability of the data for this factor analysis is to use the Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity (Williams et al., 2010). If the measures of
sampling adequacy are high and the Bartlett test shows significance then it is appropriate to analyse a smaller sample than the 100 recommended.

For my data there were 59 responses to all items. The tests for sampling adequacy were that the KMO of .900 was ‘Marvellous’ (Beavers et al., 2013, p. 4) and the Bartlett test was significant as shown in Table A1.

**Table A1** Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett’s Test of Sphericity

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | .900 |
| Approx. Chi-Square | 3362.017 |
| Bartlett’s Test of Sphericity | df | 325 |
| | Sig. | .000 |

To assess the reliability of the scale itself I conducted the Cronbach’s Alpha test for 29 items. The result was .941 which is very high. Because both the Alpha and KMO scores were high it was decided to proceed with the Factor analysis (see Chapter 6).

The correlation matrix showed that the following items, ‘forgetting what to play, Festival adjudicator, other concerns’ were not strongly related enough to other items so were removed. The final analysis was of 26 items.
APPENDIX 4M

Preliminary Findings

PRELIMINARY FINDINGS OF ACTION RESEARCH CYCLE ONE

Mary Hawkes
University of Sheffield

THE SAMPLE

- 6 piano teachers
- 24 pupils: 20 female, 4 male
- 10 beginners (2 adults, 2 age 15 yrs, the rest 12 yrs and under)
- 9 Intermediate (6 age 12-16 yrs, 3 x 17 – 18 yrs)
- 5 advanced (2 adults, 3 x age 12 – 18 yrs)
- 5 pupils took examinations
- 20 played in pupil or EPTA concerts

THE STRATEGIES USED BY THE TEACHERS

- Simulation/practice performance (included role play): 24
- Performance practice at home (pupils): 23
- Pre performance routine: (some routines included imagery, key words, deep breathing): 15
- REFRAMING / POSITIVE TALK / KEY WORDS: 8
- Imagery: 6
- Relaxation: 5
- Arousal/Behaviour control (use of prop): 2

How the psychological strategies seemed to work
Evidence from teacher diaries

PRACTICE/MOCK PERFORMANCES
- Having full mock 4 weeks before the exam provided a “clear benchmark” useful for detailed planning of the following lessons
- Mock exams highlighted weak areas and a need to manage mistakes in performance
- Differentiated practice ie practice to perform v practice to improve, helped give focus and structure to lessons as well as to performance
- Extra performance practice gave confidence
- Simulation training helped with confidence
- Practice performances and finding opportunities to practice performance at home improved confidence

PRE PERFORMANCE ROUTINES
- PPR improved focus/concentration at the performance (3 teachers)
- Keeping a diary and practising the PPR aided effective practice and made parents aware of need to help organise time to practice.
- PPR and toy helped behaviour and confidence

DISCUSSION ABOUT PERFORMANCE CONCERNS
- Discussion about “nerves” was beneficial by “recognising it and finding ways to deal with it together”
- SELF BELIEF
  - Imagery could be useful because the pupil thinks it is useful
- CONCERTS
  - Benefits of performing at a concert are listening to others and more obvious connection with the audience. Can ‘share’ the music.
  - Playing regularly in concerts is a factor in improving confidence
How the psychological strategies seemed to work
Evidence from teacher diaries

DISCUSSION ABOUT PERFORMANCE CONCERNS
• Discussion about “nerves” was beneficial by “recognising it and finding ways to deal with it together”

SELF BELIEF
Imagery could be useful because the pupil thinks it is useful

CONCERTS
Benefits of performing at a concert are listening to others and more obvious connection with the audience. Can ‘share’ the music.
Playing regularly in concerts is a factor in improving confidence

EVIDENCE FROM PUPIL DIARIES

PRACTICE
• Practice performances gave confidence (boy age 11)
• Making a difference in practice ie to perform and improve helped (girl age 11)
• Practice performances in front of family gave confidence and showed up things that could be improved (adult)
• Practice gave me confidence (girl age 9)

GOALS
• Setting realistic goals raised confidence (boy age 11)

IMAGERY/VISUALISATION
• Imagery helped confidence (teenage girl)
• Imagining herself playing at the concert when she was playing at home improved confidence (girl aged 12-16)
• Visualisation “crucial to managing my expectations and building confidence (adult)

EVIDENCE FROM PUPIL DIARIES

POSITIVE THINKING/AFFIRMATIONS
• Positive thinking cards helped (not sure how) (girl age 15)
• Positive words “calmed me down” (girl age 12-16)

RELAXATION
• Yoga was calming (adult)

COMBINATION OF STRATEGIES
• A combination of imagery, goal setting, PPR and performance practice helped control her “nerves” and improved accuracy and feeling in the pieces (adult)
• A combination of simulation training, PPR, and imagery (“telling myself noone is there”) “100% helped me not to be nervous” (girl age 11)

EVIDENCE FROM PUPIL DIARIES

SUMMARY
Strategies improved
• Concentration
• Confidence
• Emotional control
• Planning
• Practice
• Accuracy and feeling in the performance

There seems to evidence of more strategies being used by the pupils than are being taught by the teachers. This is reflected in their performance evaluation sheets.
PROBLEMS AND FAILURES

evidence from diaries

PPT did not work – pupil broke down
Pretending that an audience is there, when practising at home did not work for two pupils
Diaries - pupils did not benefit from the record keeping
Pupil diaries gave only limited data.
Not easy in every case to assess the effectiveness of the strategies

PRELIMINARY FINDINGS FROM CYCLE ONE OF ACTION RESEARCH PROJECT

THE QUESTIONNAIRES

MARY JAMES
UNIVERSITY OF SHEFFIELD

PERFORMANCE EXPERIENCE

Frequency of Performing

Performance Type

Non evaluative 30%
Evaluation 51%

Once a year 37%
Twice a year 30%
Once a term 33%

MEMORY

Have you ever had a memory lapse?

Do you ever perform from memory?

Never 46
Sometimes 43
Always 11
Total 100

Total 61

AIMS FOR PERFORMANCE

N = 54

NEGATIVE STATEMENTS

eg make me more nervous (18)
put pressure on me (18)

POSITIVE STATEMENTS

eg help me perform better (15)

POSITIVE AND NEGATIVE

eg enhance my performance (15)

AIMS FOR PERFORMANCE

N = 49

NEGATIVE STATEMENTS

eg make me more nervous (15)
put pressure on me (18)

POSITIVE STATEMENTS

eg help me perform better (12)

POSITIVE AND NEGATIVE

eg enhance my performance (12)
PERFORMANCE CONCERNS N = 59

COMPONENT 1
POTENTIAL DISTRACTORS TO PERFORMANCE

2. Parents and teachers as judges

COMPONENT 2
POTENTIAL DISTRACTORS TO PERFORMANCE

3. Being judged by others

STRATEGIES PUPILS SAID THEY USED IN PREPARATION FOR A PERFORMANCE N = 100

COMPONENT 4 & 5
Pressure on the day of Performance

N = 100

1. Practice performances to family and friends

COMPONENT 5
Pressure on the day of Performance

Imagery

Positive self-talk

Mental rehearsal

Pre-performance routine

THREE THINGS YOU COULD DO TO IMPROVE ABOUT YOUR LAST PERFORMANCE N = 63

Psychological well-being

Musical details

Practice, specific aims and reasoned

WHAT I REMEMBERED MOST ABOUT MY PERFORMANCE N = 60

Playing well/expressing

WHAT I ENJOYED

WHAT I DISLIKED

WHAT I REMEMBERED

N = 59

2. Having fun

Memories

Emotions

Memory

Pleasure

Satisfaction

Success
APPENDIX 4N

Additional resources

Teacher information for Cycle 2 taken from Sport Training Adviser (n.d.).

The 4 Cs of Sport Psychology

Concentration, confidence, control and commitment are the 4Cs of sport psychology. They are generally considered to be essential mental qualities important for successful performance in sports.

Concentration is the ability to maintain focus on relevant stimuli (e.g., cues) for a period of time.

Confidence is a general term for a belief in one's capabilities.

Control is the ability to maintain emotional composure regardless of distractions.

Commitment is the ability to continue working toward one's goals.

The techniques of relaxation, centering, mental imagery, and hypnotherapy are among the ways to assist athletes in achieving the 4 Cs of sport psychology.

1. Concentration

Concentration is the first of the 4 Cs of sport psychology. Concentration is the ability to sustain attention on selected stimuli. It can be disrupted by our own thoughts and feelings that distract us.

Intense concentration is requires emotional energy. The harder athletes try to concentrate, the more it can slip away. Effective concentration is an effortless process.

Concentration comes naturally when the mind is completely consumed with the immediate situation. The athlete becomes absorbed in the competition, paying attention to just the right cues to perform well.
Concentration is dynamic, so it constantly shifts from one point to another. A loss of concentration occurs when attention is divided or shifts to something irrelevant.

2. Confidence

Confidence is the next of the 4 Cs of sport psychology. Elite athletes often say that confidence is fragile, especially when they compete under pressure. Confidence allows the athlete to focus on essential tasks. Fluctuations can mean the difference between best and worst performances.

Sport research focuses on self-confidence—the belief that one has the internal resources, abilities, and expectations to achieve success.

Researchers break down self-confidence into many sub-categories to study and assess it and its influence on sport performance. Two basic categories of self-confidence are state and trait.

Trait self-confidence (global) is the degree to which individuals believe in their ability to succeed, in general.

State self-confidence is the belief that they can succeed in a particular moment. In sport, it may be task or skill specific.

According to Feltz, the sources of self-confidence are:

Mastery experiences, or performance accomplishments, are the most critical dimension. When athletes perform a task successfully, they are willing to try something more difficult. On the other hand, repeated failures can diminish confidence.

- Vicarious experiences boost confidence through the emotional motivation they provide. Vicarious experiences are those felt through the experience of someone else’s participation. One source occurs from watching successful teammates. This stimulates the notion, "if they can do it, so can I!"

- Imagery is another useful source of vicarious experiences. This strategy is used to help the athlete create and experience a successful performance by imagining the performance in as much detail as possible including the sights, sounds, and muscle activity.

- Verbal persuasion is a strategy widely used by teachers, coaches, and peers to influence behavior. It is useful for boosting an athlete’s confidence by convincing them they are completely capable of accomplishing the challenge ahead.
• **Physiological states** such as muscular tension and butterflies in the stomach can reduce feelings of confidence.

• **Emotional states** relate to how the athlete controls the emotions associated with competition, such as excitement and anxiety. Big competitions can create undue anxiety and self-doubt, so it is critical that the athlete learns to control their thoughts and emotions.

3. **Control**

Control, the third of the 4 Cs of sport psychology, refers to emotional control, or composure. An athlete’s ability to maintain control of their emotions in the face of adversity and remain positive is essential to winning.

Two emotions which are often associated with poor performance are anxiety and anger. Emotions can claim the athlete’s level of concentration and attentional focus. Identifying when an athlete feels a particular emotion and understanding the reason for the feelings is an important stage in helping an athlete gain emotional control.

**Consequences of emotional responses.** Emotional responses have an impact on performance, whether positive or negative. The following describes what can happen with emotional responses.

- **Intrapersonal** consequences may be cognitive, physiological, or motivational. Heightened arousal of may affect power, muscular tension, and coordination.

- **Cognitive consequences** apply to attentional focus, information processing, and decision-making. With high physiological arousal, attention narrows to relevant cues or irrelevant cues, which can positively or negatively affect performance. Anger can prompt greater risk taking in sport situations.
• **Motivational consequences** affect the athlete’s desire to perform. Dysfunctional emotions result in an inappropriate amount of energy. Long term, emotions could influence both persistence and commitment.

• **Interpersonal consequences** are those that affect others. Opponents’ and teammates’ emotions may shape a given athlete’s interpretations and responses. It may influence judgements about situations, such as the intent of an opponent to cause harm.

### 4. Commitment

Commitment is the final quality of the 4 Cs. Sport commitment is defined as a psychological state representing the desire or resolve to continue sport participation.

**Factors that affect commitment.** The Sport Commitment Model developed by Scanlan and her colleagues (2003) suggests that enjoyment, personal investments, involvement opportunities, attractive alternatives, social constraints, and social support all influence an athlete’s level of sport participation and commitment. Among those factors, **enjoyment** has been the strongest predictor of sport commitment among youth athletes. They also found that **sport enjoyment and involvement opportunities** were the strongest predictors of sport commitment in elite rugby and collegiate soccer players.

It is generally agreed that **motivation** is a key contributing factor to commitment. Motivation is defined as the psychological energy, or the force that initiates, or directs, and even sustains our behaviors over a period of time. It is the force driving you to choose certain types of behaviors over others.

**Strategies to Improve the 4 Cs of Sport Psychology**

The following strategies can help athletes accomplish the 4 Cs of sport psychology:

• State performance goals clearly.
• Use pre-performance routines
• Practice imagery and visualizations.
• Maintain a positive pre-competitive environment.
• Provide positive feedback and praise.
• Criticize the athlete’s behavior, not the athlete personally.
• Use positive self-talk.
• Practice relaxation techniques.
APPENDIX 4P

Consent form

All participants in each of the three studies completed a generic consent form (see below). Only the heading differed for each set of participants.

Piano Teacher /Researcher Consent Form

Title of Project: Can Sports Psychology help musicians?
Name of Lead Researcher: Mary Hawkes
Participant Name: ____________________________________________________________

Please initial box

1. I agree to take part in the above project as one of the participant teacher researchers.

2. I understand that the data I collect throughout this project will be confidential.

3. I undertake to store the questionnaire responses and any other data concerning my pupils or their parents safely.

4. I will only use the data in ways consistent with the EPTA or ISM codes of professional conduct.

5. I will make certain that my pupils or parents responses are anonymised before they are shared with other members of the research team.

Name of Participant __________________________ Date _______________ Signature __________________________

Researcher __________________________ Date _______________ Signature __________________________

Copies: One copy for the participant and one copy for the Supervisor.

Mary Hawkes, Music Department, University of Sheffield
Can Sports Psychology help musicians? 5/02/14
APPENDIX 4R

Performance Profiling

The introduction of the performance profile was to provide the teacher with information about their pupil and performance all in one place. The profile was designed to include data from the original questionnaire, data from Cycle 1 teaching and performance, and other useful background information from the individual teacher. The profile could be discussed with the pupil to provide in depth knowledge about how the pupil felt about the last performance, what they wanted to improve for the next performance and so on. Teachers could add to the profile following the next performance.

Performance profile for piano pupils

PIANIST CODE ________________

BACKGROUND INFORMATION

AGE _______ EXAM GRADE PASSED IF ANY ________________

EXPERIENCE NUMBER OF YEARS OF LESSONS ________________

PERFORMANCE EXPERIENCE _____________________________

DATA FROM QUESTIONNAIRE related to a previous performance

Enter scores from original questionnaire in left column and scores from Summer performance in next column

<table>
<thead>
<tr>
<th>To enjoy the music</th>
<th>To please the audience with my playing</th>
</tr>
</thead>
<tbody>
<tr>
<td>To pass, get merit or distinction (if the performance is an examination)</td>
<td>To do my best</td>
</tr>
<tr>
<td>To win (if the performance is a Festival or other competition)</td>
<td>To please my parents</td>
</tr>
<tr>
<td>To get through the piece without stopping</td>
<td>To please my teacher</td>
</tr>
<tr>
<td>To play all the notes right</td>
<td>To feel a sense of achievement</td>
</tr>
<tr>
<td>Other (please specify)</td>
<td>Other (please specify)</td>
</tr>
</tbody>
</table>
How did they say their aims affected performance on questionnaire?

How would you describe their aims in goal setting terms?
Were they outcome or process goals?
Are these goals SMARTER?

---

In the table below write in performance concerns from first questionnaire in L column and performance concerns from Summer performance in R column.

Highlight any concerns that score 8 or higher.

<table>
<thead>
<tr>
<th>The piano you have to play that is different to your own.</th>
<th>Being embarrassed or self conscious</th>
</tr>
</thead>
<tbody>
<tr>
<td>The venue size</td>
<td>Thinking about other things when you want to concentrate on the performance</td>
</tr>
<tr>
<td>Whether you know the venue</td>
<td>Breathing</td>
</tr>
<tr>
<td>Parents in the audience</td>
<td>Heart racing</td>
</tr>
<tr>
<td>Teacher in the audience</td>
<td>Butterflies in tummy</td>
</tr>
<tr>
<td>The Examiner at an examination</td>
<td>Sweaty hands</td>
</tr>
<tr>
<td>The Festival or competition adjudicator</td>
<td>Tension in different parts of body</td>
</tr>
<tr>
<td>The size of the audience</td>
<td>Getting the tempo right</td>
</tr>
<tr>
<td>Being put off by sounds in the room</td>
<td>Expressing the style of the piece</td>
</tr>
<tr>
<td>Order of play (ie if you go first or last)</td>
<td>Remembering the phrasing and dynamics</td>
</tr>
<tr>
<td>Making mistakes</td>
<td>Pleasing my parents</td>
</tr>
<tr>
<td>If playing from memory – forgetting what to play</td>
<td>Pleasing my teacher</td>
</tr>
<tr>
<td>Playing solo</td>
<td>Pleasing myself</td>
</tr>
<tr>
<td>Whether I have done enough practice</td>
<td>Whether I like the music I am playing</td>
</tr>
<tr>
<td>Other Concern (please specify)</td>
<td>Other concern (please specify)</td>
</tr>
</tbody>
</table>

What information does this give you when you compare the two performance occasions?
MENTAL SKILLS

Tick which answers your pupil gave on the original questionnaire in the L column, and answers they gave after the Summer performance in the R column.

<table>
<thead>
<tr>
<th>I imagine myself playing at the concert</th>
<th>I relax by doing deep breathing</th>
</tr>
</thead>
<tbody>
<tr>
<td>I rehearse my pieces away from the piano</td>
<td>I have a set routine that I always do</td>
</tr>
<tr>
<td>I talk to myself saying positive words to give me confidence</td>
<td>I do practice performances for my family or others</td>
</tr>
</tbody>
</table>

What mental skills did you think you taught them this term? (evidence from your diary)

How does this compare with what they said they did?

Note anything of interest

TEACHER/PUPIL EVALUATIONS OF SUMMER PERFORMANCE

How well did your pupil remember the following?

WRITE your scores in L column and their scores in R column

<table>
<thead>
<tr>
<th>The notes and fingering</th>
<th>Dynamics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Suitable tempo</td>
<td>Articulation</td>
</tr>
<tr>
<td>Interpretation/character of the piece?</td>
<td>The mental skill they were taught</td>
</tr>
</tbody>
</table>

Complete your scores here In your opinion, how effective was the sports psychology technique/approach you used for this performance?

| For their competence | For their confidence |
**How well do you think the pupil?**

<table>
<thead>
<tr>
<th>Managed their mistakes?</th>
<th>Performed to the best of their ability</th>
</tr>
</thead>
</table>

**Copy pupil scores here.**

<table>
<thead>
<tr>
<th>How confident did you feel when you were waiting to perform?</th>
<th>How confident did you feel during the performance?</th>
</tr>
</thead>
<tbody>
<tr>
<td>How well did you communicate with the audience</td>
<td>How well did you manage your mistakes/slips?</td>
</tr>
<tr>
<td>How well did you remember the Pre Performance Routine or other mental skill for this performance?</td>
<td>How much did you enjoy this performance?</td>
</tr>
<tr>
<td>How well did you achieve your aims?</td>
<td>How confident are you about performing in the future?</td>
</tr>
</tbody>
</table>

If you compare your evaluation with that of your pupil what do you notice?
DATA FROM TEACHER DIARY

WHAT WERE YOU TEACHING YOUR PUPIL towards the Summer performance?

TECHNICALLY

MUSICALLY

PSYCHOLOGICALLY

DATA FROM PUPIL DIARY AND PERFORMANCE EVALUATION

What was your pupil practicing towards this Summer performance?

TECHNICALLY

MUSICALLY

PSYCHOLOGICALLY

How does this information help you plan for this term with regard to this pupil?
Ask your pupil to rate their psychological skills using this dartboard. 0 is low 10 is high. For example, shade in how confident you feel about your next performance. 10 would be extremely confident.
## APPENDIX 4T

### Goal setting plans for Cycle 2

Goal setting for MaryP1

<table>
<thead>
<tr>
<th>MEDIUM TERM</th>
<th>SHORT TERM GOALS UP TO DEC 2015</th>
</tr>
</thead>
</table>
| To pass grade 8 by July 2016 | **Grade 7 piece and Christmas Duet**  
**September to half term**  
Consolidate notes and fingerings of pieces to play at the concert. Be able to perform the nuts and bolts by half term. |
| **DEC 2014** perform a grade 7 piece at pupils Christmas concert 2014 |  
**October /November** Work on expression and character |
| **March 2015**  
To perform in recital class at Tamworth Music Festival using pieces at grade 6 and 7 known by Christmas 2014. Start to learn grade 8 piece. |  
**December** practice performing solo and with duet partner |
| **July 2015**  
Perform one grade 8 piece at pupils concert Learn next piece. |  
**Sight Reading** Use Improve your sight reading grade 5 Paul Harris to systematically go through various rhythms and keys in this book. One stage every two weeks. |
| **Dec 2015**  
Perform another grade 8 piece at pupils concert Learn third piece. |  
**Scales /arpeggios** keys to be chosen from the sight reading stages. They will be practiced in the ways required for Trinity College London syllabus eg 4 octaves, leg and stacc with varying dynamics. |
| **March 2016**  
Perform all three grade 8 pieces at Recital Class of Music Festival |  
**Aural tests** – recognition of major and minor and different types of cadence to be learned by Dec 2015 |
| **July 2016**  
Take grade 8 examination |  
Short term goals for next term to be set before end of this term. Reassess medium term goals. |
Goal Setting for pupils of Janet

P3 teenage boy  P4 teenage girl P5 teenage girl

TA  Long Medium and short term planning for all three pupils

Long term goal  Pass grade 7 in the Spring term.

Medium term goal  Informal concert as a 'stepping stone' to long term goal.

Pupils to play two of their examination pieces to each other.

Short term goals

Week one  Dozen a Day (DAD) warm up

Grade 7 Scale clinic

A piece ornaments

C piece whole piece together – duet with teacher

Week two  DAD warm up

C3 clinic on difficult bars

A2 and C3 dynamics

Week three  DAD warm up

Grade 7 sight reading

A2 and C3 style and confident performance

C3 technical work if needed

Week four  DAD warm up

Aural tests grade 7

Role play/simulation – performance of pieces

Discuss tactics and strategies for managing errors
APPENDIX 4W

Analysis of teacher planning for each action cycle.

Psychological strategies planned for Cycle 1

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Strategies planned</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet</td>
<td>Simulation Training including role play to reproduce exam performance environment</td>
<td>The purpose of this plan for both pupils was to ‘lead to a more competent and confident performance and also to reduce levels of performance anxiety’.</td>
</tr>
<tr>
<td>Fiona</td>
<td>P12 Simulation Training and Pre performance routine &lt;br&gt;P1 Simulation training and Imagery</td>
<td>The purpose of the routine was expressed by TBP12 as follows: ‘she explained that she often starts playing before adjusting the stool or gets half way through a piece before realizing that she is not sitting straight and can’t access the pedal, and this is a distraction which creates nerves...’ (Teacher Preparation Sheet)</td>
</tr>
<tr>
<td>Yvonne</td>
<td>Pre performance routine &lt;br&gt;Difference between practicing to perform and practicing to improve &lt;br&gt;Simulate of performance conditions</td>
<td>I am going to teach P14 a routine for the exam to help her to warm up and focus her mind. I will simulate exam conditions as far as possible. I know the room as I have taken clarinet exams there as an adult (prep sheet). Help her understand difference between playing at home and under pressure. &lt;br&gt;P1 ‘can be self conscious so practicing the routine should help overcome that’ &lt;br&gt;P20 she is confident but been nervous in the past so I hope to maintain present attitude”.</td>
</tr>
<tr>
<td>Angela</td>
<td>P5 yoga and mock examinations &lt;br&gt;P12 adequate preparation &lt;br&gt;Positive thinking cards &lt;br&gt;Mock performances &lt;br&gt;Deep breathing &lt;br&gt;P3 relaxation using toy prop &lt;br&gt;Positive thinking cards &lt;br&gt;Routine and mock performance</td>
<td>‘To improve posture, relieve tension and help concentration’. &lt;br&gt;Essential to feeling confident &lt;br&gt;Build confidence &lt;br&gt;Avoid self consciousness &lt;br&gt;Help her keep calm. &lt;br&gt;Build confidence and help him enjoy performing.</td>
</tr>
<tr>
<td>Lynn</td>
<td>Simulation exercises &lt;br&gt;Positive triggers and positive self talk &lt;br&gt;Relaxation – deep breathing &lt;br&gt;Imagery &lt;br&gt;Pre performance routine</td>
<td>TE did not write the purpose of the strategies as she had not yet chosen them.</td>
</tr>
<tr>
<td>Mary</td>
<td>Develop Routines that pupils have already begun to learn. &lt;br&gt;Simulation training through practice performances in and out of lessons.</td>
<td>The purposes of the routines and practice performances were going to be specific to each pupil. However I wanted to assess confidence and competence.</td>
</tr>
</tbody>
</table>
### Psychological strategies planned for Cycle 2

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Strategies planned</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janet P3 P4  P5</td>
<td>Same plan for all three pupils. Goal Setting Role play/ Simulation training</td>
<td>Using forward planning to aid confidence – sense of achievement when goals are achieved. Role play/ simulation will be at a practice performance in December ‘as a step to the grade V11 examination in the Spring term 2015.</td>
</tr>
<tr>
<td>Yvonne P5 P12</td>
<td>Same plan for both pupils with one exception Pre performance routine</td>
<td>‘I noticed his concern over making mistakes’. Noted from Q. PPR to be used in the exam room. No purpose stated but guess as before. To help concentration and focus GS to make sure everything is done in time “I noticed his concern with making mistakes, pleasing teacher/parents/ worry over examiner”.</td>
</tr>
<tr>
<td>Angela</td>
<td>Individual plans P5 playing at a concert P12 at an examination P5 Techniques arm swings/yoga integrated into PPR Imagery Positive thinking cards. Secure preparation of the pieces P3 mock examinations with teacher role playing the examiner. Informal concert prior to the exam. as well. Practice on different pianos</td>
<td>P5 Imagery - ‘bubble idea will help her to concentrate and avoid/ignore distractions. Commitment to practicing her fluency and expression she hope would help control and thus improve confidence. P3 Build confidence through practice performances. Improve concentration by working on the scales and SR.</td>
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<tr>
<td>Lynn</td>
<td>Individual plans for 7 pupils Simulation exercises to include Pre performance routines Positive triggers and positive self talk Imagery</td>
<td>All pupils did simulations of the performance but the detail of the simulation might vary depending on the purpose. Pupil had to introduce their pieces and the aim of this was to improve focus. For P14 simulation with distractions to help improve concentration.</td>
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<tr>
<td>Mary</td>
<td>Individual plans for 9 pupils Further develop pre performance routines Simulation training Goal setting with 2 pupils.</td>
<td>The purpose of the teaching was to improve the one or more of the Four Cs the pupil identified that they wanted to improve.</td>
</tr>
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