“I’m not injured, this is just my life”:

An exploration of the experiences of conservatoire students with chronic playing-related musculoskeletal disorders

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ABSTRACT

Playing-related musculoskeletal disorders (PRMDs) are a notably common problem among both professional musicians and conservatoire students. However, the primary focus of PRMD literature is on professional musicians. In addition, the word 'chronic' is rarely used in relation to musicians despite nearly two thirds of professional musicians displaying long-term or chronic PRMDs (symptoms lasting over 3 months). PRMDs affect musicians physically, psychologically and socially, particularly in the case of chronic conditions. There are limited qualitative studies regarding PRMDs, meaning the lived experiences of musicians with these conditions are often overlooked. This project aimed to begin filling a gap in the literature by holistically exploring the experiences of conservatoire students suffering from chronic PRMDs. This study used a qualitative approach and phenomenological methodology. Participants were recruited from conservatoires in the United Kingdom and Ireland. An in-depth semi-structured interview was conducted with 5 students who self-reported to be suffering from a chronic PRMD. The interview schedule was informed by the biopsychosocial model, ensuring that pain was explored in a holistic way. Interview transcripts were analysed using Interpretative Phenomenological Analysis (IPA) and preliminary findings were cross-checked with participants. Four key themes emerged from the data 1) Adapting to a new lifestyle 2) Dealing with internal and external pressures 3) Searching for guidance and support and 4) Living with stress and insecurities. The key findings support and elaborate on previous studies and are discussed in relation to existing literature and the biopsychosocial model. Using the biopsychosocial model in conjunction with IPA explored the individual holistic experiences of conservatoire students with chronic PRMD. The findings highlighted how physical, psychological and social aspects were all interconnected and constructed each participant's individual chronic PRMD experience. Based on the key findings, implications for further research and recommendations for injury assessment and management in conservatoires are discussed.

Key words: *Playing-Related Musculoskeletal Disorders, Chronic Pain, Conservatoire Students, Biopsychosocial Model, Musicians' Injuries, Phenomenology*

CONTENTS

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CHAPTER 1. INTRODUCTION AND LITERATURE REVIEW

1.1. Introduction

Playing-related musculoskeletal disorders (PRMDs) have been shown to affect up to 86% of professional musicians (Ackermann et al., 2011; Kenny & Ackermann, 2015; Steinmetz et al., 2015). This remarkably common health problem can become chronic, disabling (Zaza & Farewell, 1997) and emotionally devastating for musicians (Guptill, 2011). It has been suggested that the high prevalence of PRMDs among professional musicians can be attributed to chronic musculoskeletal conditions that were improperly treated during younger years (Burkholder & Brandfonbrener 2004; Savvidou & Stanek, 2019). However, the majority of studies regarding PRMDs have focused primarily on professional musicians, meaning earlier pain experiences are often overlooked. In addition, chronic pain in musicians is underrepresented in the literature despite recent results demonstrating that almost two thirds of professional musicians suffer from chronic PRMDs (Gasenzer et al., 2017). PRMDs are equally prevalent in conservatoire students when compared to professional musicians (Steinmetz et al., 2015; Savvidou & Stanek, 2019). Thus, further investigation into PRMDs, and specifically chronic PRMDs, in conservatoires is needed to gain a better understanding of these conditions in the early stages of a musician's career. This dissertation reports on research that holistically explored conservatoire students' experiences of suffering from chronic PRMDs. It begins by addressing the current literature, describes a qualitative methodological approach and presents results based on five interviews, concluding with a discussion of the key findings and implications for further research.

1.2. PRMDs: Definition, causes, treatments and experiences

1.2.1. Defining PRMD

The frequencies of PRMDs in musicians varies across studies and often depends on data collection methods and how PRMD is defined (Guptill, 2011). An established definition of PRMD is "any pain, weakness, numbness, tingling or any other symptoms that interfere with your ability to play your instrument at the level to which you are accustomed; excluding mild, short-lived aches and pains" (Zaza & Farewell, 1997, pp. 93). The term PRMD encompasses a range of musculoskeletal disorders (Zaza, 1998; Steinmetz et al., 2015), which predominantly affect the neck, upper extremities and lumbar spine (Steinmetz et al., 2015; Cruder et al., 2018). PRMDs can be either structural or non-structural disorders

(Wynn Parry, 2004). Structural disorders such as tendonitis and carpel tunnel syndrome have clear-cut physical pathologies which allow for diagnosis. Conversely, non-structural disorders are difficult to diagnose and treat as they have no definitive physical pathologies (Wynn Parry, 2004). In the absence of physical pathologies, musicians are often diagnosed with 'overuse injuries' such as repetitive strain injury or musculoskeletal pain syndrome (Steinmetz et al., 2015). This is a major problem for the profession, as research has shown that over half (52% of 1044) of injured musicians display non-structural disorders which often leads to improper diagnosis and treatment (Wynn Parry, 2004).

1.2.2. Causes and treatments of PRMDs

The perceived causes of PRMDs are multifactorial and can be attributed to biological/biomechanical (Wristen, 2000; Wynn Parry, 2004), psychological (Kenny, 2010, 2011; Leaver et al., 2011), psychosocial (Rickert et al., 2013) and environmental factors (Foxman & Burgel; 2006; Hansen & Reed, 2006). Biological risk factors can be both intrinsic (sex and hypermobility) and extrinsic (weight of instrument, poor posture, insufficient instrument set-up and poor technique) (Wynn Parry, 2004). Females are more likely to develop a PRMD than males (Zaza & Farewell, 1997; Davies & Mangion, 2002), which can be explained by a range of hormonal, biological and psychosocial factors (Suvinen et al., 2005).

Increased muscle tension due to stress is a perceived psychological cause of PRMDs, with prolonged muscle tension leading to chronic pain (Davies & Mangion, 2002; Wynn Parry 2004). In addition, somatisation (expressing psychological distress through physical symptoms) has shown to be a psychological injury risk factor among professional musicians (Kenny & Ackermann, 2009; Leaver et al., 2011). Somatising is an issue across domains such as sports (Root et al., 2016), nursing (Freimann et al., 2013) and teaching (Howard et al., 2017) and it has been noted that the lack of diagnosable symptoms or a pathological source of pain often leads to further distress and frustration for somatising patients (Al Busaidi, 2019). Musicians rarely attribute their physical pain to a psychosomatic factor (Kenny & Ackermann, 2009). However, considering the high percentage of musicians with non-structural and non-diagnosable PRMDs (Wynn Parry, 2004), further investigation into the prevalence and awareness of somatisation among musicians is needed.

Small practice spaces, long rehearsals and demanding schedules (Foxman & Burgel, 2006) as well as performance pressures and interpersonal relationships (Rickert et al., 2013) are environmental and psychosocial risk factors for developing a PRMD. Furthermore, results from Rickert et al.'s study

of orchestral musicians demonstrated that perceived lack of control regarding these psychosocial factors can contribute to psychological distress, increasing injury risk (Rickert et al., 2013).

Of all performing artists, musicians are often the most difficult to treat as dancers and actors tend to have acute, recognisable injuries which can be treated similarly to athletes (Brandfonbrener, 2006). The most common forms of treatment for PRMDs are physiotherapy, occupational therapy, massage therapy and acupuncture (Wood, 2014). Alternative therapies such as Alexander Technique (AT) and meditation have also shown to be highly effective (Wood, 2014). However, many musicians leave injuries untreated, out of fear of being perceived as an inferior musician or jeopardising their career (Brandfonbrener, 2006; Rickert et al., 2014a). Furthermore, those musicians who do seek medical help often report their diagnosis and treatment as unsatisfactory due to lack of knowledge from healthcare professionals regarding musicians' injuries (Wood, 2014). Multiple studies have acknowledged the importance of specialist knowledge for treating musicians' PRMDs (Brandfonbrener 2006; Guptill et al., 2005; Guptill, 2011; Wilson et al, 2014). However, searching for specialised healthcare practitioners has shown to be frustrating and costly, with many musicians resorting to self-help (Brandfonbrener 2006; Rickert et al., 2014b). Despite the multiple psychological and environmental issues discussed above, the primary focus on preventing and treating PRMDs is on physiological factors, meaning injured musicians' psychosocial needs and experiences are often overlooked.

1.2.3. Experiences of musicians with PRMDs

While quantitative studies have been effective in demonstrating the prevalence, physical locations and perceived causes of PRMDs, qualitative research regarding injured musicians is underrepresented. However, those studies which did adopt a qualitative approach yielded valuable insights into the experiences of musicians with PRMDs (Bragge et al., 2006; Guptill, 2011; Rickert et al., 2013, 2014a, 2014b).

Guptill's phenomenological study explored the lived experiences of professional musicians with playing-related injuries (Guptill, 2011). Guptill's detailed analysis demonstrated how PRMDs are emotionally devastating for musicians, with participants using words such as fear, apprehension and depression, particularly when discussing their future career. In addition, participants' opinions of speaking about their injuries to other musicians varied. Some felt that discussing injuries with colleagues created a sense of a community among injured musicians while others noted a stigma,

keeping their injuries private out of fear of job-related repercussions (Guptill, 2011). This stigma or 'culture of silence' was also a key finding in Bragge et al.'s study of professional and tertiary level pianists with PRMDs (Bragge et al., 2006). In addition, Bragge et al.'s findings illustrated the impact that pressures such as perfectionism and performances had on these elite pianists with PRMDs.

Rickert et al.'s three-part multi-strategy study of PRMDs in orchestral environments highlighted various psychosocial injury risk factors (Rickert et al., 2013), negative cultures, behaviours and attitudes towards injuries (Rickert et al., 2014a) and the experiences of musicians undergoing rehabilitation (Rickert et al., 2014b). Their findings demonstrated how participants faced psychological and emotional trauma due to their PRMD, often causing them to feel socially marginalised (Rickert et al., 2014a). In addition, their final study highlighted the challenges of finding efficient medical care and demonstrated how concealment of injuries led to chronic conditions (Rickert et al., 2014b).

These qualitative studies provided valuable insights into the various psychosocial and emotional elements of being an injured musician, which had not yet been explored in previous PRMD literature. However, the experiences of conservatoire students with PRMDs are still underrepresented.

1.3. PRMDs in conservatoire students

While multiple studies have addressed the high frequencies of PRMDs among professionals (Ackermann et al., 2011; Kenny & Ackermann, 2015; Steinmetz et al., 2015), recent studies have demonstrated that up to 89% of conservatoire students currently suffer or have suffered from a PRMD (Ioannou & Altenmuller, 2015; Savvidou & Stanek, 2019). Conservatoire students face a range of challenges while preparing to be a professional musician such as practice volume, complex student-teacher relationship, psychological pressures (Pecen et al., 2016), competitive pressures, social comparison and unsupportive environments (Pecen et al., 2018). In addition, students deal with demanding schedules, pressurising exams and performances and cramped practice spaces, which are all injury risk factors (Rickert et al., 2013). Recent studies have noted that the onset of PRMDs and other psychological issues in music students corresponds with the transition period of entering conservatoire, due to increased hours of practicing and psychological pressures (Ioannou & Altenmuller, 2015; Pecen et al., 2018).

Injured students initially turn to their primary instrumental teacher over a healthcare professional for advice (Williamon and Thompson, 2006; Ioannou & Altenmuller, 2015; Savvidou & Stanek, 2019). However, while music teachers may have experienced a PRMD themselves, they are not

physicians and passing on inappropriate advice may potentially exacerbate the issue (Williamon & Thompson, 2006). In addition, of those injured students that do consult healthcare professionals, only a small percentage actually undergo treatment (Wood, 2014; Guptill et al., 2005; Savvidou & Stanek, 2019). Health promotion strategies and provisions have been implemented in conservatoires (Williamon & Thompson, 2006; Clark et al., 2013). However, findings from Perkins et al.'s study demonstrated that further development and awareness of health promoting services in conservatoires is needed at an institutional and environmental level (Perkins et al., 2017).

Given the high prevalence of PRMDs in conservatoire students and the potential impact this has on their quality of life and career longevity, exploration of conservatoire students' experiences is needed to provide insights into the onset of PRMDs and how they can become chronic in this formative and intense period of a musician's life.

1.4. Chronic pain and chronic PRMDs

Pain is generally defined as chronic when it is continuous or recurring for over 3 months, which is considered past the point of expected healing (Crofford, 2015). Chronic pain conditions are often stigmatised as there are usually no pathological or diagnosable symptoms (Holloway et al., 2007; Crofford, 2015). People with chronic pain frequently experience comorbid emotional and psychological issues (Bair et al., 2008; McCracken & Zhao O'Brien, 2010). Thus, psychological interventions are particularly useful, if not essential, for chronic pain management (Kerns et al., 2011). For example, self-compassion, acceptance, mindfulness (Carvalho et al., 2018) and developing the mind and body connection have all shown to be effective coping strategies (Jackson, 2005; Morone & Greco, 2007).

PRMDs can develop into chronic conditions, with symptoms often lasting for 5 years or longer (Zaza, 1998). PRMDs are commonly comorbid with psychological distress and music performance anxiety (MPA) among orchestral musicians (Kenny & Ackermann, 2015). As discussed above, psychological distress is also a risk factor for developing a PRMD, so it is likely that the relationship between chronic PRMDs and psychological distress is reciprocal. Despite the fact that PRMDs are often a long-term problem (Zaza, 1998) with multiple comorbid issues (Kenny & Ackermann, 2015), the term 'chronic pain' is seldom used in relation to musicians.

Results from a recent quantitative study demonstrated that 66% of 740 professional orchestral musicians suffered from PRMDs and 63.5% of all respondents' symptoms were chronic, defined by their study as recurring or continuous pain for over 3 months (Gasenzer et al., 2017). In addition, 50% of

participants reported that their pain was constant. Gasenzer et al. noted that the surprisingly low response rate (8.6%) may have been due to professional musicians not wanting to expose their injuries (Gasenzer et al., 2017). Their low response rate may also explain the lack of literature regarding chronic PRMDs, as musicians may not want to be labelled with a 'chronic condition'. Nevertheless, further investigation and information is needed to begin to normalise the issue and reduce the stigma surrounding chronic PRMDs, allowing those affected to seek the treatment and support they need. However, to truly gain valuable information regarding chronic PRMDs, one must understand pain and its multidimensional nature.

1.5. Medical models for understanding pain

The theoretical understanding of pain has evolved throughout the last century. The traditional, and somewhat outdated, biomedical model considers pain as either being of physiological origin or due to psychological issues. This approach meant that pain which could not be linked directly to a physiological pathology was considered psychogenic or "all in the patients head" (Turk et al., 2011, p. 16). It is now well established that the biomedical model is insufficient for understanding and treating the complexity of chronic musculoskeletal pain (Nijs et al., 2013). In addition, musicians have been shown to reject the traditional biomedical model as it often disregards their need to continue playing (Guptill, 2012; Wilson et al., 2014; Ting & Rocker, 2019).

Turk et al. (2011) argued that making the distinction between 'disease' and 'illness' is essential to understand chronic conditions. Unlike disease, which can be explained by a physical pathology or 'objective biological event,' illness is a subjective experience, leading to physical, emotional, psychological and behavioural issues. Like illness, pain is a subjective state, resulting from sensory input, influenced by a person's genetics and learning history as well as physiological and psychological factors, personal appraisals, expectations and social environment (Turk et al., 2011).

The biopsychosocial (BPS) model, first conceptualised by George Engel (1997), views pain as the complex interaction between biological, psychological, sociocultural factors (Gatchel et al., 2007). Taking a BPS perspective allows one to understand chronic pain by considering the interplay between these factors and how they have shaped a person's longitudinal experience. For example, pain is often initiated by a biological factor; psychological factors may then modulate one's perception of pain and social factors may affect behaviours. On the other hand, psychological components (i.e. stress) may affect hormone production, altering biological factors. In addition, avoidance behaviours (i.e. not

playing your instrument for a period of time) might reduce symptoms initially. However, longer rest periods may cause deconditioning, affecting biological factors. Thus, all elements of the BPS model are interconnected and the reciprocal interplay between these factors make up one's pain experience (Turk et al., 2011), as depicted in Figure 1.

Manchester (2011) argued that we owe it to all performing artists to take a BPS healthcare approach to medical problems in the performing arts, addressing not only physiological issues but also psychosocial factors.

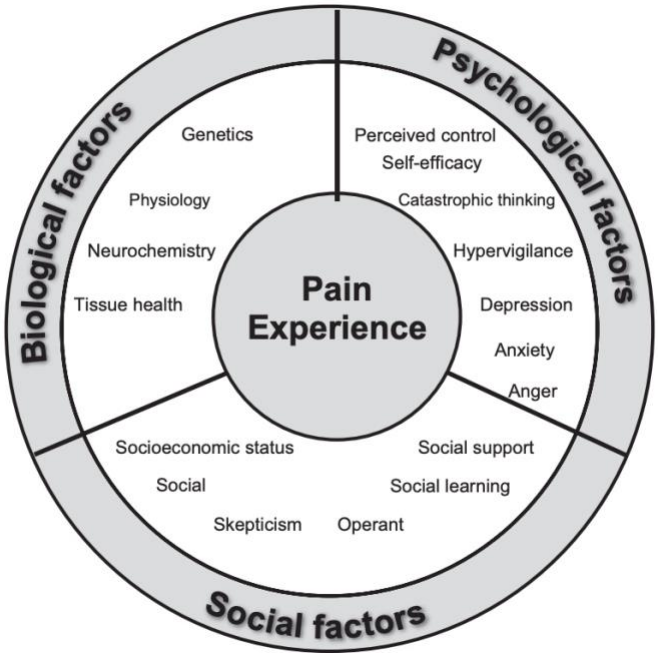

Figure 1. Biopsychosocial model of pain (Adams & Turk, 2018)

1.6. Aim and research question

There are no known qualitative studies that exclusively explore conservatoire students' experiences of suffering from chronic PRMDs. This current study aimed to fill that gap, in light of the literature above, using the BPS model as a conceptual framework to gain a holistic understanding of conservatoire students' experiences. Chronic PRMD was defined by this study as symptoms listed in Zaza and Farewell's (1997) PRMD definition, which have been recurring or continuous for over three months. This study was guided by the research question: "What are the experiences of conservatoire students with chronic PRMDs?

CHAPTER 2. METHODOLOGY AND METHODS

2.1. Epistemology and methodology

Ontology is a philosophical premise which posits that reality is either objective or subjective (Williamon et al., in press). As discussed above (see 1.5. on understanding pain), pain is ultimately a subjective state, influenced by physiological, psychological and social factors (Turk et al., 2011). Thus, exploring the experiences of conservatoire students with chronic PRMD seeks to generate subjective information. On the other hand, epistemology focuses on how we come to know what we know and the type of knowledge we wish to generate. Establishing the appropriate epistemological framework lays the foundations for the research design and methodological decisions to effectively answer a research question (Crotty, 1998).

Social constructionism is an epistemology which postulates that reality is a social construct, recognising that each person's experience of reality is subjective and serves "to construct a more socially-objective (or shared) sense of how the world is experienced" (Williamon et al., in press, p. 11). By applying this epistemological framework, the researcher plays a crucial role in understanding individuals' perspectives within a wider social context. Social constructionism follows a 'bottom-up' approach, in which knowledge is routed in the nuances and idiosyncrasies of the individual, rather than testing a theory or hypothesis (Creswell, 2014). This epistemological approach was deemed most appropriate for dealing with the complex and idiosyncratic subject that is chronic PRMD, focusing on the subjective experiences of individuals and how they are constructed within wider social contexts.

Social constructionism is closely linked with qualitative methodology, as qualitative research seeks to understand the social world from the perspective of the participant (Williamon et al., in press). In addition, qualitative research explores the meaning that people assign to a social or human issue, usually in the form of interviews, focus groups or observations (Creswell, 2014). There are many strategies one can employ when taking a qualitative approach, one of which is phenomenology. Phenomenology is a scientific methodological approach and field of philosophy concerned with exploring direct experiences of a phenomenon from a subjective, first-person perspective (Kakkori, 2009). A phenomenon is either observed or perceived (e.g. pain) and phenomenology focuses on capturing participants' direct experiences of a phenomenon and how it is meaningful to them (Williamon et al., in press). Considering the research question "what are the experiences of

conservatoire students with chronic PRMDs?" which aims to gather subjective experiences of the perceptual, subjective nature of chronic PRMDs, phenomenology was deemed the most appropriate methodological approach.

2.2. Methods

2.2.1. Participants

Participants were recruited from conservatoires in the United Kingdom and Ireland through convenience sampling, in the form of social media posts and word of mouth. To meet the inclusion criteria, participants had to be conservatoire students who self-reported to be suffering from a chronic PRMD. Participants were not required to have a formal diagnosis of their pain. Chronic PRMD was defined by this study as "any pain, weakness, numbness, tingling or any other symptoms that interfere with your ability to play your instrument at the level to which you are accustomed" (Zaza & Farewell, 1997, pp. 93) which have been continuous or recurring for over 3 months. 'Student' was defined by this study as someone who is currently studying or has graduated from conservatoire within the last 18 months.

Eight people were recruited initially, five of whom met the full inclusion criteria and were eligible to participate which is in line with the recommended number of participants for a phenomenological study (Williamon et al., in press). All participants were under the age of 25 and the sample was comprised of four females and one male. Four of the participants were at different stages of their undergraduate degrees and one participant graduated the previous year. Three participants were studying in U.K. and two were studying in Ireland. The length in which participants had been suffering from chronic PRMDs ranged between 16 months to 6 years. One participant was diagnosed with a genetic chronic pain disorder known as Hypermobile Ehlers-Danlos Syndrome (hEDS) prior to developing a PRMD. This participant was still considered eligible to participate as she also suffers from a chronic PRMD, thus her experiences were deemed equally valuable. Table 1 provides summary demographic information for the five participants.

Table 1. Demographic summary of participants using pseudonyms

Participants	Gender	Age	Level of study	Genre	Principal instrument	Length of PRMD	Pain locations
Jade	Female	22	Undergrad	Classical	Violin	6 years	Neck & upper extremities
Helen	Female	22	Undergrad	Classical	Oboe	3 years	Upper extremities
Chris	Male	24	Graduate	Jazz	Guitar	4.5 years	Upper extremities & lower back
Lisa	Female	19	Undergrad	Classical	Saxophone	3.5 years	Neck & upper extremities
Sarah	Female	22	Undergrad	Classical	Cello	16 months	Upper extremities

2.2.2. Data collection

Data collection took place in the form of in-depth semi-structured interviews lasting between 45-70 minutes with each participant. Interviews were chosen as a method for this research project as they are closely linked to phenomenology and allow for detailed and subjective information to be generated (Williamon et al., in press). Interviews are also particularly useful when a topic has not been explored before (Creswell, 2014), as is the case with this study. Semi-structured interviews allow participants to speak freely and lead the way at times while also ensuring that certain areas are covered. In addition, semi-structured interviews focus on what is meaningful to participants while allowing contrasting perceptions to be conveyed (Cridland et al., 2015). Semi-structured interviews are often guided by a framework, boosting the objectivity and trustworthiness of the findings (Kallio et al., 2016). This study implemented the BPS model (see 1.5 above on understanding pain) as a guide when creating the semi-structured interview (see Table 2 for interview guide). Considering the BPS model when developing questions allowed chronic PRMDs to be explored in a holistic way, ensuring that important areas were not overlooked during the interview process. Participants were asked predominantly open-ended questions, encouraging them to speak freely and prompts were used in some areas if necessary.

Table 2. Semi-structured interview guide

Can you please tell me all about your playing-related pain?
- When did it start?
- How do you experience the pain in your body? (what symptoms)
- How often do you notice the pain?

In what way does your pain affect your playing?
- Practice
- Lessons
- Performances

What does your body feel like when you're not playing?
- Does the pain affect non-musical areas of your life? If so, how?
- What are your relationships with others like when you're in pain?

Who have you spoken to about your pain?
- Why did you choose to speak to them?
- Why have you chosen not to speak to people?

AND/OR

Have you gotten any professional help for your pain?
- When? Where?
- What was that like?
- Were you given a diagnosis?

How do you feel about your pain?
- What emotions do you feel when you are in pain?
- What attitudes/thoughts do you have about your pain?
- How do you feel about your future career?

What is it like to be a conservatoire student in pain?
- What do you think the culture around pain is in your conservatoire?
- What are the biggest challenges that you're faced with?
- Is there a specific place you associate with being in pain?
- How do you experience time when you're in pain?
- Are there times in the semester that you notice your pain gets worse?

2.2.3. Procedure

This study was approved by the CUK Research Ethics Committee. Prior to the first interview, a pilot interview was run, and questions were improved, boosting the content validity of the interview. Participants were given a participant information sheet (see Appendix 1) and informed written consent was obtained from each participant before the interviews took place (see Appendix 2 for consent form). Interviews were held via online video calling platforms (e.g. Skype, Microsoft Teams) due to the current coronavirus pandemic. Each interview was audio-recorded on two mobile phone devices and transcribed verbatim. The audio recordings were destroyed once transcription was completed and data was securely stored. The participants' names were replaced with pseudonyms and any identifiable

information such as the names of teachers, healthcare professionals and conservatoires were removed from the transcripts for confidentiality purposes.

2.2.4. Analysis

Given the complex, idiosyncratic nature of chronic PRMDs, Interpretative Phenomenological Analysis (IPA) was deemed the most appropriate analytical approach as it focuses on exploring each participant's individual experience in detail (Smith et al., 2009). IPA is closely linked with phenomenology and begins with the participant making meaning of their experience during data collection. The researcher then plays an important role, aiming to understand the participants' lived experiences from their point of view during analysis (Williamon et al., in press). The author of this study has experienced a chronic PRMD for a number of years and any preconceptions were acknowledged and put aside to allow the findings to be guided by the data, following a bottom-up approach (see 2.2.5. below on reflexivity). Doing so allowed for new insights and themes to emerge, based on the participants' experiences.

Analysis followed six stages. First, the first transcript was read multiple times and points that were relevant or insightful were jotted on the left-hand margin. Second, upon further reading, subordinate themes, based on the preliminary insights, were jotted on the right-hand margin (see Appendix 3 for transcript extract). Third, subordinate themes that were connected in some way were then clustered together, forming superordinate themes. Fourth, this process was repeated, from the beginning, for each participant to ensure that contrasting experiences were not overlooked as the purpose of IPA is not to generalise across participants but to focus on individual experiences (Williamon et al., in press). Fifth, separate analysis tables of superordinate and subordinate themes were created for each participant (see Appendix 4 for IPA table). Each participant was then invited to comment on the accuracy of the preliminary findings, depicted in their table, to ensure that nothing had been misinterpreted or overlooked. Some minor changes were made based on the participants' feedback before, finally, all of the analysis tables were combined to create the final superordinate themes.

2.2.5. Rigor and reflexivity

Reflexivity is the process of continuous self-awareness and evaluation of how the researcher may be influencing the research (Finlay, 2002). Reflexivity was ongoing through all stages of this

research project. A reflexive journal was kept throughout where the researcher noted any insights, surprises, connections or ways in which preconceptions and personal experiences may be influencing the research. Good practice in IPA goes beyond describing what participants say at a surface level by presenting insightful interpretation of the participants' lived experiences (Peat et al., 2019). In addition, quality in IPA, and all qualitative research, is confidence that the findings accurately reflect the participants' experiences (Shenton, 2004). Due to the interpretative nature of IPA and the researcher's own experience of a chronic PRMD, cross-checking the preliminary findings with the participants boosted the credibility and trustworthiness of the results.

CHAPTER 3. RESULTS

The IPA analysis resulted in four superordinate themes and 14 subordinate themes as summarised in Table 3. In what follows, each subordinate theme is discussed with reference to the individual experiences of the participants.

Table 3. Summary of superordinate and subordinate themes

Superordinate themes	Subordinate themes	Description
1. Adapting to a new lifestyle	1.1. Physical manifestation of pain	How pain was experienced in the body
	1.2. Coping with chronic PRMDs	Developing coping strategies and managing pain
	1.3. Seeking professional help	Attending physiotherapy and other healthcare
	1.4. Becoming aware of the mind and body	Injury led to awareness of the mind and body connection
2. Dealing with internal and external pressures	2.1. Pressure to develop as a musician	Injury affects progress as a musician
	2.2. Pressure from the conservatoire	Expectations to fulfil student requirements
	2.3. Pressure to recover and be reliable	Not wanting to be labelled as an injured musician
	2.4. Financial pressures	Injury adds to/causes financial pressure
3. Searching for guidance and support	3.1. Finding people who understand or relate	Some had difficulty relating to people, while others felt connected because of their injury
	3.2. Being in an (un)supportive environment	Some experienced a supportive environment and others did not
	3.3. Need for guidance	Some experienced a lack of institutional guidance and advice
4. Living with stress and insecurities	4.1. Living with concerns, stress and loss of confidence	Injury causes stress, worry and performance anxiety for some
	4.2. Injury evokes negative thoughts and emotions	Experiencing feelings of sadness and frustration
	4.3. Living with doubts and uncertainty	Doubts about ability/future, uncertainty about diagnoses

1. Adapting to a new lifestyle

All of the participants discussed the ways in which having a chronic PRMD affects their daily lives and how they have adapted to living with pain.

1.1. Physical manifestation of pain

The predominant areas of pain were the upper extremities and lower back. Jade reflected on telling her parents about her pain, at the age of 16: "I described it to my parents as pains in my veins." For Jade, the pain became debilitating: "I lost all feeling in my left hand and down my forearm" and affected menial tasks: "I wasn't able to hold things. Like, my mum had to wash my hair for ages."

Helen discussed how her pain began in her first year of conservatoire and mostly affected her ring and baby finger, which she described as: "shooting pain up the arm. It's kind of like I can't feel these two fingers." For Helen, the loss of feeling when playing her instrument seemed to be the most prominent feature of her PRMD.

Chris's pain also began in first year. He discussed how he experienced pain differently in different parts of his body. He described the pain in his back as "a sort of ache" whereas he felt "an overarching sense of tiredness" in his fingers. The intensity of Chris's pain varied but he noted that when it was bad, it would wake him up during the night and that he "actually dreamt I was having pain in my dream! It was that bad!"

Lisa was diagnosed with Hypermobile Elhers-Danlos Syndrome (hEDS) at the age of 10 and her PRMD began at the age of 16, when she started clarinet. She noted that her "worst area is my shoulders and neck." Lisa described how the weight of the clarinet on her thumb caused pain and a "tingling sensation" in her wrists but the saxophone caused less pain due to the neck strap. It seemed difficult for Lisa to differentiate the feeling of PRMD from her general pain as for her "pain is pain." However, she described playing-related pain as more of a musculoskeletal issue: "it kind of feels like, um, your muscles are really tight and kind of like you have a sharp stabbing pain in your muscles."

Sarah had been experiencing a PRMD for the shortest period of time (16 months). She discussed how the pain seemed worse in the mornings: "when I woke up in the morning for the first like hour it would be quite stiff, if I tried to move it a lot it would be a little bit painful." It seemed that for Sarah,

although her PRMD was not very painful, its persistence is what was problematic. Their experiences demonstrate how chronic PRMDs manifest physically.

1.2. Coping with chronic PRMDs

All five participants discussed how they cope with their pain. For Chris, self-medicating in the form of painkillers or alcohol seemed necessary. Although he discussed this with a light-hearted attitude, he noted that this "isn't the best thing to do in the world umm, but you know, needs must." He also discussed how jazz culture alleviated his pain: "I think, being a jazz musician, you drink quite a lot (laughs) which is true for all musicians probably but um, it was quite a good painkiller." Similarly, Jade mentioned "taking painkillers all of the time." This seemed, for her, to be the only way to get through long orchestra rehearsals. Conversely, Sarah was advised by her physio to "take 2 ibuprofen 4 times a day for a week" but did not want to. For Sarah, practising in 20-minute sections with breaks seemed to be the most effective coping strategy.

Lisa, Sarah and Helen noted that using supports, straps and splints helped them with their pain. Sarah described how her "fingers were taped together" by the physio and how although this was helping, her teacher disagreed with this approach. Helen discussed how wearing a wrist support helped her, but she was told that it "looked weird" and was advised to stop using it, so she did. Although these coping strategies were effective, it seemed as though they were not 'normal' or accepted in the music world, causing them to stop using them.

It appeared that for Lisa, who has hEDS in addition to chronic PRMD, maintaining a positive mindset helped her cope. She discussed how her mental strength allowed her to persevere: "I don't find it normally gets to the stage where I have to stop because mentally, I want to carry on." However, she noted that when it is bad, she needs to "take a nap" or distract herself with friends.

Lisa discussed how she spent years "learning how to deal" with her pain. She described her pain as part of her everyday life and that she came to accept it. Similarly, Jade reflected on when she was told that her pain was something that she would "have to live with" which was initially upsetting for her. She discussed how she eventually accepted this by telling herself "I'm not injured, this is just my life." Jade also described her change in mindset and self-compassion: "I try to be really nice to myself [now] and nice to my pain and I do feel sorry for myself but in a caring way." Both Lisa and Jade had been

experiencing life with pain for the longest time and it seemed that their acceptance and selfcare was a prominent coping strategy that came with time.

1.3. Seeking professional help

All of the participants sought some form of professional help for their pain. Chris discussed how regular physiotherapy sessions were the reason he continued his degree: "I don't think without [physio] I would have gotten through [conservatoire]. I probably would have dropped out, due to backpain." Chris also noted how the physiotherapy sessions were provided for free by his conservatoire.

Sarah mentioned that she acquired funding for physiotherapy and although this experience seemed helpful, her pain was not resolved: "by the end the [physiotherapist] just sort of had to discharge me as it were because there wasn't much more she could say, she thought it would have been fixed by our last session together."

Jade discussed how she attended regular physiotherapy sessions which involved travelling around Ireland and flying to London. She described the process of seeking professional help as something "I never want to do again." It appeared that because these services were not easily accessible for Jade, this experience was time consuming and took a financial toll.

Four participants mentioned their experiences of Alexander Technique (AT). Jade attributed AT to be "the reason I started playing again" and Chris described how AT "really alleviates the pain." For Helen, AT was an "eye-opening" experience and the simplicity of it "was like magic": "she just made subtle changes to my shoulders and then all of the sudden there was no pain!" Conversely, Lisa noted how AT was compulsory in her conservatoire but that "it's just really draining because I think it's just sort of focusing on all the areas of your body that don't really work very well and that's quite tiring." However, she discussed how AT helped her develop a good mindset around practicing.

Jade and Helen both sought psychological help for their pain. Helen discussed how her PRMD was "really taking a toll psychologically" and that she "had to go and talk to somebody about it." For both Helen and Jade, seeking psychological support seemed like a positive experience and was also a service that was provided by their conservatoire.

All of the participants emphasised the importance of a healthcare professional who understands musicians. Jade noted that she "needed a specialist of music" and Lisa discussed how it was "nice to meet someone who understood from a musical point." Similarly, Sarah discussed how her appointment

with an NHS physiotherapist was not as useful: "obviously the NHS don't really know about musicians like that's not what they're trained in." For all of the participants the most effective help seemed to be from professionals who were specialised in musicians' injuries and services that were easily accessible or provided by their conservatoires.

1.4. Becoming aware of the mind and body

Some of the participants mentioned how chronic PRMDs made them more aware of their mind and body. Jade discussed her "passion for the mind and body" and how a holistic approach helped her injury. For Jade, AT seemed to broaden her awareness of the body and mind: "[AT] brought me into just like really minding my body, doing Pilates, really trying to be strong and like developing my mind."

Chris described his awareness of the mind and body in everyday life:

> "[I would be] doing a menial task… washing up or something and thinking 'ahh my shoulders are really, really, tense' and then dropping them and thinking … 'how did I have my shoulders that tense?'" - C

Some of the participants discussed how their mind could affect their pain. Jade described how: "I was always expecting pain and with that I got pain." Similarly, Helen noted how she would feel tense when she thought about playing: "even thinking of looking at the oboe [I] would feel the tension enter my body." Jade and Lisa also discussed how stress would affect their pain. Jade described how: "going through a stressful like week or something, my pain will definitely be so much worse." It seemed that for most of the participants, their injuries led them to become more aware of the reciprocal relationship between the mind and body.

In summary, physically experiencing pain, developing coping strategies, seeking professional help and becoming more aware of their mind and body were ways in which the participants had to adapt to a new lifestyle due to their chronic PRMD.

2. Dealing with internal and external pressures

All of the participants discussed how their injuries added to pre-existing pressures and stresses of being a conservatoire student (Pecen et al., 2018).

2.1. Pressure to develop as a musician

Four of the participants discussed how they felt their pain affected their musical development. Jade referred to conservatoire as a "time to be flourishing" and noted that she felt pressure to consistently develop: "it's the expectations you put on yourself but also probably from your teacher and just trying to show that there is a difference between week to week, after each lesson." Helen described how her injury affected her musical potential: "I knew that like obviously I could play better than that, but my injury was hindering my potential as a musician." She also discussed how being unable to practice affected her development: "It's really frustrating as well that I couldn't practice for the amount of time that I should have been because obviously then that's stunting my growth as a musician." It seemed for these musicians that most of the expectations they felt to develop came from internal pressure.

It appeared that their internal pressure to develop was exacerbated by comparing themselves to other students. Jade noted the competitive pressures of conservatoire as such: "there's so much expected of us and we expect so much of ourselves as well, especially when we are around people who are constantly working and it's not like a normal college." Lisa discussed how she felt when she couldn't practice as much as her peers: "if the pain is bad and you have to stop your practice then that's also a bit annoying because it sort of feels like other people might be able to go on and you can't." Sarah and Lisa both noted how they felt more relaxed at home during quarantine, away from competitive pressures to develop:

> "I feel like I'm quite lucky that I can just chill out at home [now] and not be surrounded by all my friends being like, 'ah I did like 500 hours of practice today, ah I just won this competition, ah I'm doing this." - S

"you're not just surrounded by everyone who's practicing all the time and you can just chill out." – L

For these participants, the initial pressure and expectations they felt to develop was heightened by comparing themselves to others. Competitive pressures are common to many musicians, injury or not (Pecen et al., 2018). However, it seemed that being unable to practice because of their pain provoked internal pressure.

2.2. Pressure from the conservatoire

Some of the participants mentioned feeling pressured to fulfil student requirements despite being in pain. Helen reflected on a time where she had to play through an orchestral rehearsal having "so much shooting pain in my arms" and how she was accused of "not paying attention." For Helen, this experience was upsetting, and she felt as though there was "no regard for student health." Helen also discussed how she felt pressure to play if she was going to pursue a degree in performing:

"after a while they kind of get tired of you being injured and [they're] kind of like… 'yeah ok but you know this has been going on for a while and you're doing a performance degree, so you need to play'… so I felt a bit under pressure to finish the opera" - H

Jade also mentioned feeling additional pressure from the conservatoire to fulfil commitments: "it's still that added pressure of I'm sore, but I have to do this, I have no choice." Both Jade and Helen were in the same conservatoire, which they noted was small, meaning people were needed and expected to partake in multiple orchestral projects. Conversely, Sarah, who was in a bigger conservatoire, mentioned that she was able to drop out of an orchestral project last minute. However, she discussed feeling pressured in one class: "I was the only cellist in the class at the time so I kind of felt like I'm really needed to play and the teacher would say 'we really need you to come back and play.'" Their experiences highlight the pressure they felt from their conservatoire, particularly when they felt needed. This pressure seemed to lead to feelings of guilt if they were unable to fulfil these expectations.

2.3. Pressure to recover and be reliable

Some of the participants discussed how they felt pressure to recover. Helen mentioned how she felt "under pressure to not be injured." Lisa reflected on when a student missed a rehearsal due to a mental health issue and how the conductor implied that it was an "excuse." She discussed how this made her feel unable to admit when she was ill: "a few weeks later I had a migraine and I felt like I couldn't say I was ill." Similarly, both Jade and Chris mentioned a stigma around being unreliable or injured:

"there's always going to be that stigma or that fear of telling people who could potentially give you gigs" – J

"I don't think this is true… but I think there's a fear of getting labelled as someone who has backpain or who is unreliable. So, I think it's fine to have backpain or whatever and have pain… but you just can't let it affect your playing essentially. So, you just sort of put on a brave face" - C

It seemed that for Chris, having an injury was okay as long as it did not cause you to cancel gigs, which he noted he has never had to do. Lisa mentioned how other musicians relied on her in chamber music: "I would feel really bad if in a chamber rehearsal I had to stop and that meant that everyone else had to stop." She also felt that cancelling lessons frequently might label her as unreliable: "when it's your first impression with someone, you don't want them to think you're always cancelling lessons"

It seemed that pressure to recover and appear reliable led to a culture of silence for some participants. Jade discussed how she avoided talking about her injury unless it was absolutely necessary out of fear of jeopardising her lessons with a new teacher: "I don't want anything to go wrong basically so I think that's why I'm not really saying it so much." For all of the participants, needing to appear reliable and avoiding being labelled was a recurring theme. This pressure appeared to be heightened by the amount of commitments and opportunities they face as students.

2.4. Financial pressures

Chronic PRMDs caused financial pressures for some of the participants. Jade mentioned how: "It's really expensive in terms of going to physio every week and like our college doesn't have like a

physio on hand." Similarly, Helen discussed the money she had spent on physiotherapy and that the conservatoire made her "pay for redoing the exam [which] was a huge amount of money." She described having to pay for postponing her exam as a "stab in the back" and how she had to get "another doctor's note, so it was a lot of money piling up." Conversely, Sarah discussed how "Help Musicians" in the U.K. provided funding for her to go to multiple physiotherapy sessions and how this was a great financial support for her.

Chris discussed how his "number one priority as soon as I got to conservatoire was just to get gigs. So that I could live essentially." Chris also noted that musicians "can't afford to take the time off and you can't fix the problem." He discussed the pressure he felt to perform despite pain as "there's no sick pay as a professional musician" while also noting that that he will need to keep performing to earn a living:

"as a musician I'm not going to have a pension, almost certainly and I'm going to have to perform until 80 or whatever and you know, if this pain is this bad now… It's going to be much worse" - C

It appeared that for some, having an injury caused additional financial pressure, particularly for those where funding or support was not available. However, for Chris, playing through his pain by never missing a gig was his only option for dealing with his financial pressures.

In Summary, all of the musicians experienced internal and external pressures due to having a chronic PRMD. While pressure is common in conservatoires (Pecen, 2018) it appeared that pressure to develop, pressure from the conservatoire, pressure to recover and be reliable as well as financial pressures were all exacerbated by the participants' chronic PRMDs.

3. Searching for guidance and support

The participants discussed their experiences of looking for support and guidance from others, be it peers, teachers or their conservatoire.

3.1. Finding people who can understand or relate

Some of the participants discussed having difficulties finding people who could understand or relate to them. Jade discussed her relationship with her teacher: "[my teacher] didn't really go through so many obstacles so it was hard for him to relate." Helen also discussed how her teacher was "so kind but he had no idea what was going on because he'd never been injured before." Similarly, Sarah noted that her injury caused tension between her and her teacher as he was "not unsupportive but just didn't quite get it." She mentioned that it was "hard for my teacher to comprehend because he's a lot older" and "he wasn't feeling what I was feeling." It appeared that these participants felt that because their teachers had not experienced an injury, they could not fully understand or relate to what they were going through.

Jade discussed how her peers "couldn't relate" and that "I did feel that sometimes they were happy, that I was injured." She also noted that her injury took a particular toll on her relationship with her parents: "[my parents] had no idea what was going on in the sense that they weren't living the pain or pressure of the music world." This led her to "stop talking about it at home." When prompted about other relationships, Jade mentioned: "It definitely affects my social relationships in terms of being stressed out and I guess in turn that stresses people out." Some of the participants did not feel as though their pain affected non-musical relationships and others discussed how they would "socialise to forget the pain."

Chris seemed to feel that pain was a common problem that people could relate to: "I think everyone was quite sympathetic towards it. I think most people were at some point experiencing pain themselves." Lisa described how she was the only person in pain in secondary school, whereas when she came to conservatoire, pain was a common problem which was comforting to her: "I guess in a really horrible way [it's] reassuring to me that other people are in pain too." For her, knowing that "lots of other people have playing-related pain" gave her a sense of relatedness. Their experiences highlight the difficulties some participants found in relating to others. However, others took comfort in knowing that pain is a common problem for musicians.

3.2. Being in an (un)supportive environment

Helen discussed how she felt that her conservatoire was an unsupportive environment for people with injuries: "When I went to postpone my exam, they were just like 'oh we need a doctor's note' and not 'are you ok?' or 'do you need any help?'" She noted how her conservatoire did not have facilities to help her: "It would have been a huge help if they had umm… more kind of facilities in place to help students with injuries." She mentioned being on Erasmus in Stockholm and how this new supportive environment benefited her: "When I was in Stockholm, the first hour [of practice] was actually pain free!" She discussed how this environment and being around "other people who had faced injuries" made her "a lot more optimistic" about her future as a musician. Jade similarly felt that she was in an unsupportive environment and that injuries in her conservatoire were "pushed under the rug." She alluded to a culture of silence and mentioned that: "If you have pain, you're not going to shout it from the rooftops or tell a lot of people."

Chris, on the other hand, noted that his conservatoire was supportive by letting him take time off. However, he described an unhealthy culture around injuries as his pain demonstrated hard work:

"I think unfortunately [pain is] sort of fetishised almost in conservatoires… to practice enough to be in pain… so it was almost like a good thing that I was practicing so much that I was getting a lot of pain, in a weird way" - C

Sarah discussed how her conservatoire were "quite supportive" and how the available services were easily accessible: "I had an appointment like the next day and it was, it was so quick." Similarly, Lisa felt supported and discussed how students with injuries helped each other and would "compare notes a bit and share tips." Their experiences are examples of how some participants felt isolated and in an unsupportive environment while others felt that their conservatoire supported them and had facilities for injured musicians.

3.3. Need for guidance

While some participants felt that their conservatoire was a supportive environment, they still noted that there was a lack of institutional guidance regarding how to access facilities and cope with

injuries. Chris, who had been attending regular physiotherapy sessions provided by his conservatoire felt that the conservatoire "need to do more":

"I think on the jazz course, they didn't really take it particularly seriously, it was just… well they took it seriously, but it was just a case of 'well what do you want us to do about it?' sort of thing" - C

Although his conservatoire had available services, Chris described how "you have to seek it out for yourself" and more guidance on how to avail of these services would have been helpful.

Similarly, some participants felt a lack of guidance from teachers and healthcare professionals. Jade discussed why she decided to change teacher: "I think I really needed umm… guidance and somebody to support me in having that holistic side." Helen noted how she "just felt like I'd no idea what I'm doing and nobody's helping me." It appeared that for Jade and Helen, this lack of guidance in addition to an unsupportive environment affected them psychologically. Sarah discussed how her teacher disagreed with the advice and guidance that she was given by her physiotherapist and how she had to deal with conflicting opinions from "leading people in their fields."

"It was tricky having to listen to the physio, who I trusted, and then my teacher says something completely different, but I also trust him" - S

It appeared that for Sarah, being given conflicting advice caused stress and "tension." Their experiences suggest a longing for guidance from their conservatoires and teachers.

In summary, the participants had contrasting experiences and perceptions regarding relating to other people, being in a supportive environment and receiving guidance from others. However, many of these subordinate themes were overlapping and the process of searching for guidance and support as a result of having a chronic PRMD was experienced by all of the participants.

4. Living with stress and insecurities

The participants discussed the ways in which their chronic PRMD caused them to experience stress, negative emotions and uncertainty.

4.1. Living with concerns, stress and loss of confidence

Some of the participants voiced concerns they had about their chronic PRMD. Jade expressed how she was "always so worried that [the injury] would spiral out of control again." Sarah discussed how she does not "want to damage my body like… forever." She also mentioned various concerns she had about how her pain could affect her life: "I just want to be able to, if I have kids, be able to pick them up and play with them, stuff like that." Lisa discussed how she was concerned that if she was "ill all the time" people might start to think "are you really sure you should be here?" and that she worries whether she is "physically fit enough to be a musician."

Jade referred to the start of her injury as: "Probably the most stressful time of my life. Like, looking back…just being so passionate that [playing the violin] was my calling and like everything else was telling me that it wasn't." She described how she felt "fear of rejection and kind of not being good enough" and became "terrified of playing." Helen also noted that her injury led her to feel insecure and that it would "add another level of stress to performing."

"I have zero confidence playing at all because I just thought 'oh they know, they know that I'm injured, they know that this is a struggle for me and I don't want to look like I'm in pain but I am in so much pain" - H

For Helen and Jade it appeared their injuries affected their confidence by adding another element of stress to performing and causing them to feel inferior to other musicians, which Helen noted took a "psychological toll." Lisa and Sarah discussed how pain would not affect their performances, however being unable to practice would make them feel "underprepared" and stressed. Their experiences highlight how chronic PRMDs caused some participants to live with concerns, stress and loss of confidence.

4.2. Injury evokes negative thoughts and emotions

Some participants discussed how their chronic PRMD led them to feel negative emotions and thoughts about themselves. Jade described her emotions associated with her pain as such: "there's a bit of shame there. Umm… like sad… like I don't like when my body feels like this, it's not nice… and anger,

definitely!" She reflected on a time where she had to stop playing in a masterclass and how "it was embarrassing at the time and I felt like crap about myself." Helen described her injury as "such a burden" and that performing in pain would be very upsetting:

"I remember like coming out of my mid-year [exam] and just crying in a bathroom with my oboe because it was just so painful, and I was like almost in tears playing" – H

Helen discussed how her pain made her "feel a lot more down in my personal life" and would affect her sense of self: "it affects your performance, but it also affects your own self-image, because you can't practice and then you feel either lazy or incapable."

Sarah also discussed how her injury made her feel "quite down for a bit." Lisa described her chronic PRMD as "frustrating" and "infuriating." Whereas, Chris discussed how he just "puts up with" his pain and did not appear to associate his PRMD with emotions. He noted that he "didn't really mind it" at first but that persistent pain led him to "[take] it much more seriously." Their experiences highlight how for most musicians, chronic PRMDs led to feelings of sadness, frustration and negative thoughts which became quite upsetting for some, affecting self-image and personal life.

4.3. Living with doubts and uncertainty

Most of the participants experienced uncertainty and doubts due to their chronic PRMD. Helen would say to herself "Why am I doing this to myself? Why am I putting myself through this pain?" Sarah, Jade and Lisa all noted how their injuries made them feel doubts and uncertainty about their future careers:

"do I want to do music and hurt for the rest of my life? Or do I want to just drop out and do something else?" – S

"What am I going to do? How will I pursue a career in music if I have pain all of the time?" – J

"I'm always in pain and now I'm doing something with my life that's making me more in pain. Like, is that really something I want to do?' But then you kind of want to do it because you love it" – L

It appeared that for Lisa, love for music made the pain worth it. For the others, whose pain was solely playing-related, PRMDs made them have doubts about pursuing a career in music. Helen noted that she only continued playing because she "didn't know what else to do."

Jade was never given a diagnosis and noted that she "would have preferred if there was actually something wrong so I would know what to do." Whereas, although Sarah was diagnosed with repetitive strain injury, she mentioned that: "my hand was never x-rayed, they never, they couldn't feel anything really… so, I was never totally convinced that that was definitely what it was." Some of the musicians also discussed how they were either given multiple diagnoses or no diagnosis at all. It appeared that this lack of certainty caused doubts, frustration and confusion for some. Conversely, Chris noted that he preferred not having a formal diagnosis as he felt that being given a diagnosis allows one to "fall into a hole of thinking, 'oh I've got this and it's not going away." Their experiences highlight the various doubts and uncertainties they were faced with due to their PRMD.

In summary, many of the musicians felt stress, concerns, insecurities and negative emotions due to their chronic PRMD, as well as doubts and uncertainty about their futures and diagnoses. These experiences took a significant psychological toll for some. While for others, these experiences led to questioning whether a music career was worth pursuing.

CHAPTER 4. DISCUSSION

The purpose of this study was to holistically explore the experiences of conservatoire students with chronic PRMDs. Four key themes emerged from the data 1) Adapting to a new lifestyle 2) Dealing with internal and external pressures 3) Searching for guidance and support and 4) Living with stress and insecurities. The key findings will be discussed in relation to existing literature and the BPS model.

4.1. Discussion of key findings

Adapting to a new lifestyle. The concept of adapting to a new lifestyle has not yet been explored within PRMD literature. However, Gullacksen and Lidbeck suggested that women with chronic musculoskeletal pain move through three stages of life adjustment; 1) feeling ill, struggle, chaos 2) distress, understanding pain, new coping skills 3) gaining competence, control and a new picture of the future (Gullacksen & Lidbeck, 2004). While the musicians in this current study experienced many of these psychosocial components, they tended to move back and forth between stages, while progressing overall. For example, Jade seemed to have gained control over her pain but still expressed psychological distress. Helen discussed having a more positive outlook on her future but still referred to her pain as a burden and struggle. On the other hand, Lisa, who had hEDS in addition to a chronic PRMD, seemed to be the most competent and in control of her pain, which might suggest that Gullacksen and Lidbeck's life adjustment stages apply best to general chronic musculoskeletal pain. However, it could also be that Lisa had been experiencing life with pain for the longest time.

For all the participants, adapting to a new lifestyle began with the physical manifestation of pain. The most prominent locations of PRMD were the upper extremities, which supports previous literature (Wynn Parry, 2004, Cruder et al., 2018). Cruder et al. (2018) used pain mapping technologies to accurately identify pain locations and intensity in musicians. However, their study only addressed physical sensations of PRMD, overlooking psychosocial factors. They noted this limitation, particularly when assessing musicians with chronic conditions. In addition, Cruder et al.'s study solely focused on quantitatively measuring 'pain', overlooking other PRMD symptoms such as weakness, numbness, tingling and aches. This current study elaborated on Cruder et al.'s findings by generating vivid descriptions of how participants experienced PRMD in their bodies, yielding valuable insights into not only the physical manifestation of 'pain' but also other symptoms and psychosocial aspects.

Contrary to literature suggesting that music students often leave PRMDs untreated (Ioannou & Altenmuller, 2015; Savvidou & Stanek, 2019), all of the participants sought professional help and treatment. Some sought treatment immediately, while the chronicity of their PRMD is what led others eventually. Jade and Helen also sought psychological help for their PRMD, which has been noted as an effective treatment for chronic PRMDs (Rickert et al., 2014b) and chronic pain (Ebert et al., 2011). Similar to previous studies (Wood, 2014; Rickert et al., 2014b), the participants expressed a need for a specialised healthcare professional who understands musicians' injuries. Healthcare practitioners who specialise in musicians' injuries should be carefully considered when suggesting possible healthcare for students.

The finding that the majority of the participants were most satisfied with AT as a form of professional help supports previous findings (Wood, 2014). AT also appeared to be the most holistic treatment approach, developing participants' awareness of the mind and body. The benefits of mind and body awareness have been demonstrated in general chronic pain studies, particularly in conjunction with the BPS model (Jackson, 2005; Morone & Greco, 2007). However, further investigation into the connection between the mind and body with injured musicians is needed. In addition, while some participants noted self-medicating and changing practice routines, Jade and Lisa described how acceptance and self-compassion were their best coping strategies, which have shown to be particularly effective for chronic pain sufferers (Carvalho et al., 2018).

Regarding the BPS model, adapting to a new lifestyle demonstrated physical and psychosocial aspects of participants' experiences. For example, Helen discussed how her physical pain affected her emotionally, leading her to seek psychological help and socialise to forget the pain. On the other hand, Jade's physical pain affected menial day to day tasks and social relationships which led to psychological issues. While physical aspects were certainly prominent, the participants' experiences of adapting to a new lifestyle involved predominantly psychosocial aspects, which is consistent with chronic pain literature (Gullacksen & Lidbeck, 2004).

Dealing with internal and external pressures. While the challenges and pressures of conservatoire have been documented (Pecen et al., 2016; Pecen et al., 2018), the relationship between pressure and PRMDs is underrepresented. However, Bragge et al.'s qualitative study demonstrated that pressure was a key finding among elite pianists with PRMDs (Bragge et al., 2006). Perhaps surprisingly, pressure was not a prominent finding in Guptill's qualitative study of professional musicians with

PRMDs (Guptill, 2011). This might suggest that while pressures are not exclusive to conservatoire students (Rickert et al., 2014a), students may perceive more pressure than professionals. It may also be because many of the pressures discussed are unique to students such as complex student-teacher relationship and pressure to prepare for lessons and exams.

Pressure to recover has not been addressed in previous studies, perhaps because this feeling may be more prominent in musicians with *chronic* PRMDs. However, the participants' experiences demonstrated how pressure to recover and be reliable led some to conceal injuries. As mentioned, stigma and concealing injuries are common problems among injured musicians (Bragge et al., 2006; Guptill, 2011; Rickert et al., 2014a, 2014b). This is a particularly pressing concern for conservatoires, as Rickert et al. (2014b) argued that concealment of injuries is what leads to chronic conditions. In addition, three of the participants discussed feeling under pressure from their conservatoire to perform despite being in pain. This 'lack of choice' appeared to take a significant psychological toll on two of the participants. Furthermore, the finding that some of the participants preferred quarantining instead of being in conservatoire highlighted the competitive pressures of conservatoire. Competitive pressures are not a new finding (Pecen et al., 2018). However, the participants experiences demonstrated how competitive pressures were amplified for injured musicians as they felt physically unable to practice as much as their peers.

Their experiences of dealing with internal and external pressures due to their chronic PRMD demonstrated psychological, social and physical aspects of the BPS model. For example, Jade felt pressure to improve from week to week, which then led to stress surrounding her lessons, affecting her relationships with her teacher and parents. On the other hand, Chris emphasised that financial concerns led to additional pressure to be reliable for gigs which caused him to play in pain, affecting him physically. Further investigation into the relationship between psychosocial pressures and injuries is needed to support musicians' physical and mental health.

Searching for guidance and support. Consistent with previous literature (Guptill, 2011), the participants had mixed opinions regarding relating to other people. Four of the participants felt as though their teacher could not understand or give appropriate advice. This issue needs addressing in conservatoires as students often turn to their teacher first for health-related issues (Ioannou & Altenmuller, 2015; Savvidou & Stanek, 2019). Furthermore, the participants' injuries appeared to add additional stress to the already complex social relationship between a teacher and student (Pecen,

2018). This suggests the need for teachers to be made aware of how to advise and approach a student with an injury.

Contrasting experiences of searching for guidance and accessing support services are consistent with previous findings (Perkins et al., 2017) and highlight the idiosyncratic and contextual needs of the individuals. Considering the BPS model, searching for guidance and support demonstrated various interconnected social, environmental and psychological aspects of the participants' experiences. For example, Helen felt unsupported by her conservatoire which eventually took a financial and psychological toll. Conversely, Sarah and Chris, felt supported by their conservatoires but still noted a lack of guidance and advice which appeared to cause stress. Lastly, Jade discussed how her conservatoire's unsupportive environment created a culture of silence, affecting her emotionally and socially. Their contrasting experiences pose a challenge for conservatoires to provide efficient healthcare for musicians' injuries. However, their differing experiences support the need for a holistic, multidisciplinary approach to assessing musicians' PRMDs (Manchester, 2011).

Living with stress & insecurities. Chronic PRMDs caused a significant psychological toll for Jade and Helen. It is important to note that the researcher knew Jade and Helen prior to this study, which appeared to be an advantage as they spoke more openly about their psychological issues. The finding that PRMD affected Jade and Helen's self-confidence and performance anxiety supports and elaborates on previous literature (Kenny & Ackermann, 2015) by generating detailed descriptions of how PRMD affected their MPA and psychological state. The other participants discussed negative emotions and thoughts related to their pain but did not go into as much detail. Further contact with these participants, perhaps in the form of a longitudinal study, may have led to more insights. However, that was beyond the scope of this research project. Jade and Helen's heightened psychological distress could also be attributed to multiple socioenvironmental factors, for example they were both in the same conservatoire, had less access to healthcare and felt unsupported.

All of the participants had doubts and concerns about the impact of their PRMD on their future careers in music, which is consistent with previous findings (Guptill, 2011). This sense of uncertainty and doubts seemed to be exacerbated by the lack of clarity regarding their diagnoses. Three participants alluded to psychological distress regarding their diagnosis or lack thereof, which is common with nondiagnosable or psychosomatic pain (Al Busaidi, 2019). However, none of the participants attributed their pain to a psychological or somatic cause. This may be due to unfamiliarity with somatic issues or

because their pain was initiated by a physical or biomechanical factor. Further discussion and awareness of the power of somatisation among music students could help musicians understand and cope with uncertain or contradictory diagnoses.

Regarding the BPS model, living with stress and insecurities demonstrated psychosocial, emotional and physical aspects which were more prominent for some participants than others. For example, Jade and Helen discussed how their chronic PRMD affected their confidence and sense of self, leading to psychological and social issues. On the other hand, Sarah felt more frustrated and concerned about her pain, causing her to feel low and have doubts about her future. Lastly, three of the participants noted the reciprocal relationship between stress and physical pain, which supports previous literature (Davies & Mangion, 2002; Wynn Parry, 2004).

4.2. The use of the BPS model as a conceptual framework

Using the BPS model as a conceptual guide when designing the interview schedule allowed for pain to be explored in a holistic way. As discussed above, key themes involved various combinations of physical, psychological and social aspects, which applied differently to each participant based on their individual experiences and circumstances. Slotting the participants equally into each element of the BPS model as an analytical approach was not the goal as crucially, the BPS model recognises that each person's pain experience is unique. Using IPA together with the BPS model allowed for these individual experiences to emerge. It has been argued that the BPS model can place too much emphasis on psychosocial factors which may further stigmatise people with chronic pain and place excessive blame on others for lack of support (Adams & Turk, 2018). Furthermore, previous studies that have addressed psychosocial injury experiences have often overlooked physical elements of living with a PRMD (Guptill, 2011; Rickert et al., 2014a, 2014b). While this study addressed physical and psychosocial aspects of chronic PRMDs, it should be noted that not all of the participants may have discussed these areas without being prompted. If the researcher felt a participant might have been led, as was the case with questions regarding a place associated with pain and how time was experienced in pain, the data was not included in the analysis. Overall, the use of the BPS model in this study ensured that crucial aspects of the participants' chronic PRMD experiences were addressed which may have been overlooked otherwise.

4.3. Limitations and implications for future research

This study had a small sample size meaning the results are not generalisable to a wider population. However, the aim of phenomenological research is not to generalise (Peat et al., 2019) but to focus on individual experiences which using a smaller sample size allowed for (Williamon et al., in press). Generating detailed qualitative data provided new and insightful findings which would not have been achieved in a large-scale quantitative study. Future research could build on these findings by employing quantitative methods with a larger population to produce more generalisable results.

In addition, four of the five participants were female. This uneven ratio may have been because women are more likely to develop a PRMD (Wynn Parry, 2004) or that women felt more comfortable talking about their PRMD. Chris seemed to have the most contrasting experiences to the other participants which could be because he was the only male, the only jazz musician and/or he was the only graduate. It is possible that Chris's experiences were too contrasting to the other participants. However, these differences yielded valuable insights and justified using IPA as an analytical approach. Further research could investigate a more gender-balanced, cohesive sample while looking at different populations such as other musical genres and graduates.

Perhaps surprisingly, given the high percentages of conservatoire students with PRMDs (Ioannou & Altenmuller, 2015; Savvidou & Stanek, 2019), recruitment was slow initially which could have been due to multiple reasons (i.e. the current pandemic). However, once the term 'chronic PRMD' was further explained, more students got in touch. This may have been because initially students did not want to label themselves with a 'chronic' condition or that the word chronic is seldom used in relation to PRMDs. Future research should carefully consider how the word chronic is defined and emphasised during the recruitment process.

The participants' experiences highlighted the complex relationship between student and teacher and the need for institutional guidance, even in perceived supportive conservatoire environments. Future research could explore the experiences of teachers who have students with PRMDs to address the challenges that teachers in this position face. In addition, Lisa shared many psychosocial experiences with the other participants but seemed to be more competent in dealing with her pain due to her previous diagnosis and management of hEDS. It appeared that experiencing chronic pain in both her broader life and the medical sphere gave her coping strategies that she could transfer into musical contexts. This suggests the importance of approaching chronic PRMDs from a chronic pain

perspective. Future research could investigate the effectiveness of a psychosocial intervention in addition to physical coping strategies for students with chronic PRMDs. This could help to inform PRMD management in conservatoires at an institutional level while in keeping with the BPS model and chronic pain management strategies (Kerns et al., 2011; Carvalho et al., 2018).

Conclusion

This was the first known study to exclusively explore the experiences of conservatoire students with chronic PRMDs. Four key themes emerged from the research question "what are the experiences of conservatoire students with chronic PRMDs?" 1) Adapting to a new lifestyle 2) Dealing with internal and external pressures 3) Searching for guidance and support 4) Living with stress and insecurities. The key findings support and elaborated on the limited qualitative studies of musicians' PRMD experiences (Bragge et al., 2006; Guptill, 2011; Rickert et al., 2013, 2014a, 2014b). This study took an approach informed by the BPS model which, used in conjunction with IPA, allowed for idiosyncratic experiences to emerge within a holistic framework for understanding chronic PRMDs. Doing so reflected many physical and psychosocial issues that are often neglected in the PRMD literature. While all elements of the BPS might not apply equally to each participant, exploring pain in a holistic way ensured that aspects of the participants' chronic PRMD experiences were not overlooked. Building upon Manchester's (2011) suggestion, this study proposes assessing PRMDs in musicians through a BPS perspective. Doing so would generate a comprehensive understanding of musicians' individual experiences of PRMDs, allowing them to receive appropriate treatment that caters for their individual needs. The findings of this study are valuable to not only musicians suffering from a chronic PRMD but also to musicians, teachers, conservatoires and healthcare professionals. Dissemination of this knowledge is needed to spread awareness and normalise the issue of chronic PRMDs in conservatoires.

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APPENDIX 1: PARTICIPANT INFORMATION SHEET

Title: An exploration of the experiences of conservatoire students with chronic playing-related pain

Date: 06/05/20

Invitation
You are being invited to take part in my 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 others if you wish. Ask me 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. You will be given this information sheet to keep. Thank you for reading this.

Project
The aim of this project is to gain an understanding of what life is like for conservatoire students who suffer from chronic playing-related pain. This study involves online face-to-face interviews at an agreed time. The interviews will be audio recorded and deleted once they have been transcribed.

Characteristics of participants
You have been asked to take part in this project as you are/were a conservatoire student who reports yourself to be suffering from chronic playing-related pain. There will be approximately four other participants.

Voluntary participation
It is up to you to decide if you want to take part in my project or not. If you don't want to take part, or you change your mind about taking part, having agreed to do so, you won't be penalized in any way. 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 any reason. You can withdraw either by physically leaving and/or by withdrawing consent for me to use whatever contribution you have already made to the research. You also do not need to answer every question that is asked. Again, you won't be penalized in any way.

Nature of participation
The interview will last approximately 45-60 minutes. You will be required to do one interview with a possible follow up interview in the following two weeks. This will be agreed with you in advance if a follow up is necessary. In the interview you will be invited to answer questions about your playing-related pain. You are free to pause or terminate the interview at any stage and do not need to answer every question.

Lifestyle restrictions
You are not likely to experience any lifestyle restrictions.

Potential risks to participants
There are no foreseeable risks for taking part in this research. However, if anything we discuss becomes distressing or uncomfortable, you are free to take a break or terminate the interview at any point. If this happens, the following sources may be of use:

BAPAM: https://www.bapam.org.uk/
Big White Wall: https://www.bigwhitewall.com/
Student Nightline: (+44) 207 631 0101
[Appropriate student services, e.g. for the RCM]: StudentServices@rcm.ac.uk
NHS counselling: https://www.nhs.uk/conditions/counselling/
HSE counselling: https://www.hse.ie/eng/services/list/4/mental-health-services/national-counselling-service/
Your GP

Potential benefits to participants
While you are unlikely to experience any personal benefits as a result of taking part in this study, I hope my research will shed light on the experiences of conservatoire students suffering from chronic playing-related pain. I hope this in turn changes the way we understand and view pain in conservatoires.

Possible termination of research
If my project has to be terminated for any reason and if you and/or the contribution you have made are no longer required for the research, you will be told and told why.

Confidentiality and anonymity
Information that is collected about you, for the purposes of the research, will be kept strictly confidential unless you disclose risk or harm to yourself or others. Information you provide will only be attributed to you by name with your explicit permission.

Storing personal data and information
Your personal data and any information that you provide for the purposes of the research will be stored securely for 10 years. If I wish to re-use it within this time period, I will seek your permission to do so. At the end of the period it will be destroyed.

Outputs
Your contribution to this project will be shared only with supervisors in the form of a master's thesis and potentially in future conferences and articles.

Ethical approval
The CUK Research Ethics Committee (REC) has reviewed my project and granted ethical approval for it to be carried out.

Contact details
Claire Austen
Royal College of Music
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Supervisor: Dr. Rosie Perkins
Royal College of Music
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Thank you
Thank you for reading to the end of the participant information sheet.

APPENDIX 2: CONSENT FORM

Title of project: An exploration of the experiences of conservatoire students with chronic PRMD

Name of researcher: Claire Austen

1.	I confirm that I have read and understood the participant information sheet dated 2/6/20 for the research project in which I have been asked to take part and have had the opportunity to ask questions.	☐
2.	I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason.	☐
3.	I give the researcher permission to collect information about me and from me for the purposes of the research project provided all information about me will be kept confidential as outlined in the participant information sheet, stored securely and destroyed after 10 years.	☐
4.	I DO give permission for information from me to be attributed to me by name.	☐
5.	I give permission for the interview to be audio-recorded and I understand the audio recording will be destroyed after an anonymous transcription has been produced	☐
6.	I agree to take part in the above-named project.	☐

_____	_____	_____
Name of participant	**Date**	**Signature**
_____	_____	_____
Name of person taking consent *(if different from lead researcher)*	**Date**	**Signature**
_____	_____	_____
Researcher	**Date**	**Signature**

APPENDIX 3: EXTRACT OF IPA ANNOTATED TRANSCRIPT

R = RESEARCHER P = PARTICIPANT

R: you mentioned you were doing an opera and that's when the pain got worse... can you tell me a bit more about what that opera was like and what you had to do?

LONG REHEARSALS

P: Well it was kind of um a 10-5 rehearsal situation from like Monday to Sunday or whatever it was like 10-5 or 2-9 kind of thing. Umm so it was 7 days of straight rehearsals and then a week of performances on top of kind of your daily college life. So, it was a lot more playing than I had ever done before because the most I'd ever done really was kind of an orchestra week. So, it was a lot more than that. Umm... and I found like really bad pain halfway through the performance week like really just struggling at all to kind of, after about half an hour it was really a lot of pain. Umm and then I went to the physio and they were like oh yeah you have a trapped nerve that's what the pain is. So, I basically got a trapped nerve from doing the opera.

NOT USED TO THAT MUCH PLAYING

PAIN DURING REHEARSALS

DIAGNOSED WITH A TRAPPED NERVE

COLLEGE COMMITMENTS

LONG REHEARSALS CAUSED PAIN

R: and were you able to continue with the opera?

P: I finished it. Umm which was a mistake because I probably shouldn't have because I was kind of screwed for a couple, well, since, since then really (laughs). Umm but... yeah I, felt like I had to because umm... while the college is kind of understanding, I think it's the same for everywhere where after a while they kind of get tired of you being injured and it's kind of like... 'yeah ok... but you know this has been going on for a while and you're doing a performance degree, so you need to play' (laughs). So, umm... I kind of felt a bit under pressure to finish the opera...

FINISHED OPERA

PEOPLE EXPECT HER TO PLAY

DOING A PERFORMANCE DEGREE = NEED TO PLAY

UNDER PRESSURE TO PLAY

PLAYING THROUGH PAIN

R: yes... and when was this?

P: I think I was 20 at that point. Yeah. Umm... but... yeah, I think like then, you know with... I had to postpone my mid-year exam, so I had to go get a doctor's note and then there was like a performance week or something... I can't remember what it was but there was something really close, within a months-time and I had to go and get another doctor's note so it was like a lot of money piling up to try and... kind of postpone it and then also you have to pay to redo your midyear and it was quite stressful because it was supposed to be at the beginning of February and they said 'you can do it in September' and then they told me 'actually it's in April'...so... it was quite... difficult to kind of pull that together and I remember like, I knew that I had to do something because I remember like coming out of my midyear and just crying in a bathroom with my oboe

HAD TO POST-PONE EXAM

DOCTORS NOT WAS REQUIRED

EXPENSIVE AND STRESSFUL

EXAM WAS SOONER THAN EXPECTED

CRYING AFTER EXAM

DOCTOR'S NOTES CAUSED FINANCIAL PRESSURE

PERFORMING WAS UPSETTING

PLAYING IN PAIN WAS UPSETTING

FEELING PRESSURED TO GET BETTER

because it was just so painful and I was like almost in tears playing and it was just kind of like ugh I need to get my stuff together... with this. It was really... yeah... difficult. Because even, you know people get tired of you saying 'oh... I'm injured' (laughs), after a couple months it... yeah... and I feel then, you know, you kind of feel under pressure to not be injured, which is... yeah...

PRESSURE TO RECOVER

R: mmm. And, in that sense would you say that pain affects any non-musical areas of your life?

PAIN → FEELING DOWN. MUSIC IS CENTRAL PART OF LIFE

WORRIED ABOUT SEEMING INJURED OR INFERIOR

CRYING AFTER PLAYING

MISSING NOTES WAS EMBARRASSING

INJURY GETTING IN THE WAY

P: yes, definitely. I felt a lot more down in my personal life because of it because obviously when you're doing a music degree its 80% if not 90% of your entire life. Because umm just with the amount of commitments you have, so it really did kind of have an effect on my confidence definitely. Like, I have zero confidence playing at all because I just thought 'oh they know, they know that I'm injured, they know that this is a struggle for me and I don't want to look like I'm in pain but I am in so much pain' (laughs). Yeah... like definitely like after my first year recital because it was 30 minutes and it was the longest time I'd ever played as a soloist and I (laughs) stepped off the stage and immediately tears, immediately because I just couldn't feel half of my body (laughs) because it was, and like, I'd missed runs at the end of the last piece because I couldn't feel my fingers and it was just embarrassing. Because, I knew that like obviously I could play better than that, but my injury was hindering my potential as a musician. So... yeah...

FEELING DOWN

LOSS OF CONFIDENCE

FEAR OF SEEMING INJURED

INJURY HINDERS MUSICAL GROWTH

R: ... and what would you say your body feels like even when you're not playing?

PAIN CAUSES TENSION. RECIPROCAL RELATIONSHIP

FEELING TENSE OUTSIDE OF MUSIC

P: umm... well that's kind of what I was tackling with alexander technique but generally before that it was a lot of... I was holding onto a lot of tension because of the pain and because of the stress of trying to get out of the pain. It was kind of a circle of stress (laughs). Umm... so yeah, I was definitely carrying it with me outside of music.

INJURY CAUSES STRESS & TENSION (RECIPROCAL RELATIONSHIP)

R: mmm... so what are your social relationships like then when you were in pain?

SOCIALISING HELPS TO FORGET/ DISTRACT

P: I mean. It's... I try to kind of socialise to forget the pain because you know if I was drinking (laughs) with my friends it would quickly fade so that was kind of a nice relief. Umm... and I kind of, I lived with one of my friends, who's another student in the

COPING/ MANAGING PAIN

FRIEND WAS A GOOD SUPPORT

SENSITIVE ABOUT PAIN

FEELING UNDER PRESSURE

BAD EXPERIENCE

NO CHOICE

INJURY WAS GETTING WORSE

WASN'T ALLOWED TO STOP

PLAYING THROUGH PAIN WAS UPSETTING

BLAMED FOR NOT BEING ABLE TO PLAY

conservatoire and umm it was kind of nice to... yeah I guess, he wouldn't talk to me about it, in the sense that he wouldn't bring it up unless I did because obviously, I was very sensitive at the time about it (laughs). So, my friends were good, but I just felt a little bit of pressure almost from the college...umm...yeah, because I did have a bad experience in my second year. [There was a conducting student] and he was a part-time lecturer and umm I remember we had a spotlight week that we were kind of thrown into to help him and we weren't asked about it. It was basically his conducting exam and we weren't asked to do it and they just kind of made us do it and it was umm...serenade ensemble so we were doing two pieces and umm it was like, 10-5 rehearsals, for just woodwinds, every day. It was crazy and my injury was flaring up big time and I think it was like the second last day or... it was somewhere kind of towards the end and I said...I was like heading for the end of the week, the end of the day and I [said to him] 'I can't play anymore, I'm just going to sit and listen and write anything in that I need to' and he was like 'no it's fine. You only have an hour left' and he like gave me no leeway he was like no you have to play. (sighs) So, that was like really kind of almost upsetting because I had so much shooting pain in my arms, I was playing and I kept dropping out because I physically couldn't play anymore and he'd kind of stop the rehearsals and say 'you're not paying attention, you're not...' yeah... it was rough (laughs). And at the end of the rehearsals he came up and said you should mix some flour and vinegar and put it on your arm and then you'll be fine...

SUPPORTIVE FRIENDS

PRESSURE / EXPECTATIONS FROM CONSERVA-TOIRE

HAD TO KEEP PLAYING IN PAIN - NO CHOICE

R: ... So, what did that feel like? That experience?

FEELING UPSET / FRUSTRATED

NO AWARE-NESS OF STUDENT HEALTH

CONSTANT BATTLE

P: It was almost offensive (laughs) like really frustrating and really, I just felt like, no awareness for student health, at all. Umm I did say it to somebody in the college and they were kind of like 'oh yeah, that's not great' but nothing was really done about it. Umm... so... yeah, I mean, it's... it's frustrating as well because he was like 'oh... I was injured before' and I was like well you should know... not to say something like that (laughs). Yeah... it's just like because basically I've been injured more than I haven't been injured playing. So, it's been this constant kind of battle.

NEGATIVE EMOTIONS

FEELING UNSUPPORTED

INJURY IS A STRUGGLE / BATTLE

APPENDIX 4: EXAMPLE OF INDIVIDUAL IPA TABLE

Superordinate themes	Subordinate themes	Examples of quotations
1. Coping with chronic PRMD	1.1. Physical manifestation of pain	"it's the shooting pain up the arm. It's kind of like I can't feel these two fingers" "If I'm using these fingers, suddenly it's like 'oh crap I can't feel anything!" "It's a lot better now that it was but it is like an everyday situation"
	1.2. Managing pain	"I started wearing a support for my thumb" "I played on easier reeds which took a lot of tension out of my body then" "I try to kind of socialise to forget the pain"
	1.3. Seeking specialised help	"[Alexander Technique] was a really eye-opening experience" "she just made subtle changes to my shoulders and then all of the sudden there was no pain!" "It was like magic! was like 'what is happening?' I just felt like it was voodoo or something! (laughs)"
2. Loss of confidence, sense of self and musical development	2.1. Injury causes stress and tension	"I was holding a lot of tension because of the pain and because of the stress of trying to get out of the pain. It was kind of a circle of stress" "I felt almost sort of trapped maybe, in that profession and in the fact that I felt I'd invested too much money" "even thinking of looking at the oboe [I] would feel the tension enter my body"
	2.2. Injury affects sense of self	"I felt a lot more down in my personal life because of [the injury]" "It affects your performance, but it also affects your own self-image, because you can't practice and then you feel either lazy or incapable" "I had somebody refer to me as lazy once because I wasn't practicing as much. Um… so that kind of stuck with me a little bit, I was like 'oh I'm lazy, I'm not a good oboist' "
	2.3. Injury creates uncertainty	"Why am I doing this to myself? Why am I putting myself through this pain?"

		"I was quite terrified honestly because [the physio] was like 'yeah this could end your career'…"
	2.4. Pain makes performing upsetting	"it adds like another level of stress to performing" "I remember like coming out of my mid-year [exam] and just crying in a bathroom with my oboe because it was just so painful, and I was like almost in tears playing" "I (laughs) stepped off the stage and immediately tears, immediately because I couldn't feel half of my body"
	2.5. Loss of confidence	"Like, I have zero confidence playing at all because I just thought 'oh they know, they know that I'm injured, they know that this is a struggle for me and I don't want to look like I'm in pain but I am in so much pain" "I'd missed runs at the end of the last piece because I couldn't feel my fingers and it was just embarrassing" "My confidence was non-existent, so that was really taking a toll psychologically"
	2.6. Injury hinders musical potential	"I felt like I just wasn't getting anywhere because the injury wasn't going away, it was getting worse" "I knew that like obviously I could play better than that, but my injury was hindering my potential as a musician" "It's really frustrating as well that I couldn't practice for the amount of time that I should have been because obviously then that's stunting my growth as a musician"
3. Dealing with expectations and pressures	3.1. Expected to fulfil college commitments	"after a while they kind of get tired of you being injured and [they're] kind of like… 'yeah ok but you know this has been going on for a while and you're doing a performance degree, so you need to play'… so I felt a bit under pressure to finish the opera" "I had so much shooting pain I my arms, I was playing, and I kept dropping out because I physically couldn't play anymore and [the conductor would] stop the rehearsals and say, 'you're not paying attention!'"
	3.2. Pressure to recover	"If you're still injured, why are you doing a performance degree?" "you kind of feel under pressure to not be injured" "people get tired of you saying 'oh I'm injured' after a couple months"

	3.3. Time pressures	"You feel like you needed a break after the mid-year [exam] but you don't get it and it's just kind of barrelling to the end of the year" "the tension of trying to get this many things done that it seems just seems impossible"
4. Longing for understanding and institutional support	4.1. Lack of financial support	"I had to go and get another doctor's note, so it was a lot of money piling up" "making you pay for redoing the exam was a huge amount of money"
	4.2. Lack of sympathy and guidance from conservatoire	"I just felt like I'd no idea what I'm doing and nobody's helping me" "no awareness for student health at all" "When I went to postpone my exam, they were just like 'oh we need a doctor's note' and not 'are you ok?' or 'do you need any help?'" "It would have been a huge help if they had umm… more kind of facilities in place to help students with injuries"
	4.3. Difficult for people to understand	"I didn't really want to um… talk in circles about it because I did try in the beginning but then I found I wasn't really getting anywhere" "a lot of them are sympathetic but they don't really understand the toll it takes on your body and your mind" "[my teacher is] so kind but he had no idea what was going on because he'd never been injured before"
	4.4. Changing environment helped mindset	"When I was in Stockholm [on Erasmus], the first hour [of practice] was actually pain free!" "having a class of oboists and having other people who had faced injuries or just the general struggle of oboe life" "I'm a lot more optimistic now."