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Abstract

This study investigated the health and well-being experiences of professional singers in popular music. Interpretative Phenomenological Analysis (IPA) of semi-structured interviews with five professional singers identified three main themes: (1) mental and physical experiences of health and support, (2) positive musical experiences and (3) barriers to health and well-being. Participants perceived health as important to their careers and viewed it as both physical and mental in nature. The singers relied on family and industry peers for support, whilst experiencing mental health challenges and physical health problems in the context of an emotionally intense landscape. Positive musical experiences involved the self-expression of songwriting, live music performance and relationships with fans, and barriers to health and well-being included touring, commercial challenges and a perceived lack of support. The findings suggest a need for increased awareness and understanding of the challenges faced by singers in popular music.

Keywords

health; well-being; popular musicians; singers; qualitative; interviews

Introduction

There are significant demands placed on professional musicians in the twenty-first century. Research has identified mental (Dobson 2011; Schneider and Chesky 2011; Kenny and Ackermann 2014; Nagel 1990) and physical (James 2000; Kenny and Ackermann 2014; Wynn Parry 2004) challenges that extend out to performers across musical genres (Papageorgi et al. 2012). Classical music in particular has received notable attention within the field of performance science, with research informing interventions to support musicians' health and well-being (Osborne et al. 2014; Manchester 2007; Connolly and Williamon 2004; Andersen et al. 2017).

Studies examining the experiences of popular musicians, however, are less common, despite some research suggesting that they also face significant health and well-being challenges (Cooper and Wills 1988). While some key studies describe the unique contexts faced by popular musicians (Raeburn 1999), alongside high mortality rates in the industry (Kenny 2016; Bellis et al. 2012), research in this field remains limited and mostly outdated. Meanwhile, studies into the music industry suggest that it thrives off perfectionism and insecurity (Zwaan and ter Bogt 2009), and individuals operating within it are known for their risk taking and substance abuse (Bellis

2012). Raeburn describes how 'record companies are always on the lookout for the "next big thing", and immediate financial returns often take precedence over the development of a musician's career over a lifetime' (1999: 174). This may impact on the financial health and emotional well-being of popular musicians by creating and sustaining high levels of uncertainty. Indeed, the popular music industry is also a fast-changing environment, and so the requirements and expectations of a musician in this context can change significantly within a short span of time. Lebler and Hodges describe how there is now a requirement for 'DIY' musicians who are 'self-reliant and autonomous, writing, performing, recording and producing original music' (2017: 272). This requires a level of resilience in professional life that musicians may not have previously needed and for which they may not be fully equipped.

Recognizing this changing context, popular music education is an area that has grown significantly over the past decade, with new institutions opening around the world and increased research being published into pedagogical approaches to teaching and learning. However, due to the rapid expansion of this field, there is currently a lack of research into how these students may be supported with their health and well-being, and how they may be prepared for optimal health throughout their career. In order to start examining some of these issues, exploratory studies into the health and well-being of popular musicians need to be conducted. Indeed, there has also been growing interest in professional popular musicians' health and well-being, mostly due to recent mediatization of this topic (Kale 2018; Davies 2017; Eede 2015), and there is now an urgent need to better understand the health and well-being experiences of musicians from within the commercial popular music industry.

Health and well-being in classical musicians

Due to the limited research available on the health and well-being of popular musicians, the extensive research into this topic in the classical music genre will be examined first to set the context. Numerous studies have shown a high incidence of medical problems among professional classical musicians (James 2000; Kenny and Ackermann 2014; Wynn Parry 2004). Ginsborg et al. (2012) describe how professional music making places high demands on performers, and can potentially impact their health. Physical problems include high levels of self-reported musculoskeletal pain (Ackermann and Adams 2003; Cruder et al. 2018), performance-related musculoskeletal disorders (PRMDs) (Kenny and Ackermann 2014) and hyper-mobility (Clark et al. 2013), with some instrumentalists developing career damaging problems including focal dystonia, a neurological condition that can cause involuntary spasms in musicians' hands (Jabusch et al. 2005; Brandfonbrener 1995), and partial hearing loss (Backus and Williamon 2009). Physical problems for instrumentalists are particularly common in the neck, shoulders and

back (James 2000; Williamon and Thompson 2006; Cruder et al. 2018), which suggests that the problems could be related to musicians' posture or upper body strength. Some attribute the high incidence of pain to over-practising (Wu 2007), while others discuss biomechanics (Wristen 2000), hyper-mobility (Clark et al. 2013) and psychological or psychosocial factors (Kenny 2011). The psychological impact of a physical injury for a musician's self-identity can be significant and present a major challenge in their working life (Maitlis 2009).

In addition to physical problems, classical musicians face psychological challenges throughout their careers, and studies have shown that their high-stress lifestyle (Dobson 2011) can result in emotional strain (Marchant-Haycox and Wilson 1992), experiences of anxiety (Nicholson et al. 2015), depression (Kenny and Ackermann 2014) and Music Performance Anxiety (MPA) (Schneider and Chesky 2011; Kenny et al. 2013; Kenny and Ackermann 2014; Nagel 1990; Papageorgi et al. 2012). Studies also suggest a complex relationship between depression and severity of PRMD, with those suffering from depression experiencing higher levels of PRMD (Kenny and Ackermann 2014), and internal psychological conflict manifesting as physical symptoms (Spahn and Seidenglanz 2001). Research has also shown that the transition to professional life can provide a marked challenge to well-being for musicians (Ascenso et al. 2016; MacNamara et al. 2008), but that as a whole, musicians experience higher levels of well-being than the general population associated with finding meaning and accomplishment through music (Ascenso et al. 2016).

Professional singers face particular health and well-being challenges specific to their careers. Medical problems that singers may experience include occupational disorders (muscle tension dysphonia, vocal nodules, vocal cord haemorrhage, polyps and general vocal deterioration), general health issues with vocal implications (respiratory diseases, gastric reflux, endocrine problems, medication usage), and lifestyle issues (Jahn 2009), with the main cause of vocal dysfunction being attributed to benign vocal fold lesions, and the second being muscle tension dysphonia, an imbalance in the muscles around the larynx (Cohen et al. 2007) that is caused by excessive tension. Many singers take on additional teaching, sales or restaurant jobs which require prolonged voice use (Phyland 2014), with overuse injuries and vocal fatigue resulting as a consequence (Scherer et al. 1991). Unlike other musicians, the singer is their own instrument, and the voice cannot be replaced if ruined (Titze 1992). They can be described as 'vocal athletes in the sense that they have to carry out complex phonatory manoeuvres, and require endurance, flexibility and vocal tract control that exceed the needs of the speaking voice' (Phyland 2014: 20), and as a result vocal health and longevity are of utmost importance (Titze 1992). Professional singers also face considerable physical and mental strain throughout their career, and are often expected to cope with extended rehearsals, heavy performance schedules and international

travel (Callaghan 2014). Emotional stressors include constant competition (Bennett 2007; Jahn 2009), a lack of financial security, strained interpersonal relationships and, for those travelling, the lack of 'rootedness' (Jahn 2009), which has also been observed in orchestral musicians (Steptoe 1989).

As a result of the research base, conservatoires have started to create programmes to support and prepare their students for demanding careers ahead (Manchester 2007), and a Healthy Conservatoires Network of practitioners and researchers has been set up in the United Kingdom to share information and best-practice across educational settings (Atkins 2013). Research-based interventions that have been shown to benefit musicians include Alexander Technique (Valentine 2004) and aerobic fitness (Andersen et al. 2017) alongside mental skills training (Osborne et al. 2014; Connolly and Williamon 2004) and physiological self-regulation (Gruzelier and Egner 2004). In addition to interventions, the portfolio nature of work in which many musicians engage (Hallam 2014; Teague and Smith 2015) means that strong multi-genre peer networks have also been suggested to help with well-being promotion (Creech et al. 2008), alongside mentoring to promote supportive networks in which musicians can operate (Hays et al. 2000; Gaunt et al. 2012). Nonetheless, we cannot assume that the health and well-being experiences of popular musicians, or the support that they require, will echo that of classical musicians.

Health and well-being in popular musicians

In this article, when discussing musicians working in popular music genres the definition of the category is taken from Frith, who proposes that 'popular music is any music that is not of the Western art or classical tradition, and that is not folk music' (1996: 42). The main demands on these musicians include: writing, practising, performing and recording, and promotion of their music through extensive worldwide touring (Raeburn 1999). The key difference here between classical and popular genres is that many of these musicians write and perform their own music, and are therefore songwriters, as well as musicians. Additionally, the contexts and challenges they face can be different to classical musicians (Raeburn 1999), with some of the major differences being centred around the commoditized popular music industry in which they operate, the lack of employment from an organization (Raeburn 1999), and the cultural image associated with these musicians of non-conformity and risk taking, glamorising an ideal of 'live fast, burn out and die young' (Gray 1980: 176). Popular musicians are also subjected to heavy touring schedules and along with the demands of nightly performances, are required to do extensive promotional activity, as well as networking and socializing after shows (Gelfand 1998; Azzerad 1994).

With regard to physical health issues, a study into 226 popular musicians by Raeburn et al. (2003) suggested 74% experienced musculoskeletal problems. Rigg et al. (2003) looked specifically at popular music guitarists, and found that 63% of the 261 participants described some kind of playing-related pain, with frequency in the fretting hand, back and neck. Another physical issue that popular music performance are high, and need to be high in order to satisfy audiences. The amplification of music can result in hearing problems for popular musicians. In a study on hearing and hearing disorders, it was suggested that 74% of the 139 rock/jazz musicians sampled had experienced hearing problems (Kahari et al. 2003). Additionally, when compared with classical musicians, rock or alternative musicians experienced a higher rate of hearing problems (Chesky and Henock 2000). From an educational point of view, research has previously suggested that popular musicians engage in informal and self-directed learning practices with little guidance from trained instrumental teachers (Green 2002) and it is not yet known how this may impact on postural or playing habits.

Studies into the psychological challenges of popular musicians (Raeburn 1999; Raeburn 2007; Wills 2003) suggest that some of the major problems they face include depression, MPA and high levels of stress. One of the largest studies with popular musicians was conducted in 1988 by Cooper and Wills, looking at 70 male musicians. The study aims were to understand the key sources of stress in a popular musician's working life. Cooper and Wills identified that these sources of this stress included: work over-load or under-load, job satisfaction, career development, relationships at work, effects on social and family life and personality. Overall, MPA was perceived as one of the main predictors of ill health, which suggests that the participants' experience of it was debilitating. In music, it has been suggested that quality of performance depends on 'optimal arousal' that when exceeded may be perceived as debilitating (Matei and Ginsborg 2017). However, anxiety involves both physiological arousal as well as cognitive processes, and several models have suggested that anxiety can be perceived as both facilitative and debilitative depending on the level of perceived control individuals have in managing the challenges associated with a stressful event (Jones 1995; Ntoumanis and Biddle 2000). The highest stressor for musicians working purely in the pop genre came from 'coming into conflict with recording, management or agency executives who are involved in your career and who do not share your musical ideals' (Cooper and Wills 1988: 119), a factor which we currently do not see in the research with classical musicians.

The ways in which individuals mobilize their individual psychological resources to cope with the demands of an event is key for their well-being (Lazarus 2006). Despite the breadth of evidence on the prevalence of MPA among musicians, research into how musicians cope is still limited

(Araújo et al. 2017). Cooper and Wills (1988) identified the following coping strategies: positive coping strategies included humour, talking to someone you know and taking exercise. The least popular measure was leaving the work area, which suggests that popular musicians are reluctant to take time off. Potentially maladaptive coping strategies included coffee, cigarettes and having an alcoholic drink. Cannabis was also quoted as a method of relaxation. Research by Butkovic and Rancic Dopudj (2016) looking at 256 male musicians (113 working in classical music and 136 in heavy metal) has suggested differences in substance use between musical genres. Those working in the heavy metal genre were found to consume more alcohol than those working in classical music, with 85.3% of participants reporting regular use compared with 76.1% of classical musicians. Additionally, heavy metal musicians drank more frequently (76.8%) than the general population (64.9%). These data confirm anecdotal evidence that popular musicians engage in a range of substance use behaviours (Shapiro 2003). These include the use of various lifestyle, prescription or illicit drugs as a way of managing MPA (West 2004), dealing with stress (Cooper and Wills 1988), enhancing creativity (Miller and Quigley 2012), or as a way to physically or emotionally cope with the pressures of a musical career (Wesner et al. 1990).

The Cooper and Wills study (1988) is one of the largest into the well-being of popular musicians to date, and is a source of useful contextual information. However, the study is now nearly 30 years old, has a limited sample and pays little attention to singers, females or solo artists. As previously mentioned with classical singers, singers working in popular music also struggle with vocal health issues, in particular arising from vocal overload, touring demands, recording demands and inadequate amplification (Hughes et al. 2014). Singers also face additional demands as they embody their own instrument (Titze 1992). Popular music singers are exposed to prolonged voice use, as whilst touring they use their voices for promotional activity, socialising, networking and engaging with fans, often whilst consuming alcohol which can be dehydrating for the voice (Sataloff 2017). Studies have indicated that there is no significant difference between the prevalence of voice disorders in popular music singers or classical singers (Pestana et al. 2017). However, research into the specific vocal health disorders that popular music singers experience is still very limited.

In addition, little is known of the relationship between writing and performing one's own music and the well-being of popular musicians. Raeburn suggests that 'the relationship of the artist to art, or for our purposes, the musician to music, and the creative process itself, represents a deeply significant component of the psychological development and self-regulation processes of the individual' (1999: 177). This suggests that the creativity of the songwriting process could be an activity supportive of positive well-being in these professional musicians. There is limited research into the professional creation of songs (Bennett 2013; West 2016), but the therapeutic benefits of

songwriting have been examined in detail within music-therapy research (Baker and MacDonald 2013; Barba 2005; McFerran and Teggelove 2011; O'Grady 2009). In this field participants engaging with songwriting have been shown to experience positive mood changes (Baker and Ballantyne 2013), increased confidence (McFerran and Teggelove 2011) and autonomy (O'Grady 2009). The potential impact of songwriting on the well-being of those who perform it at professional level remains to be investigated.

This lack of extensive research into the health and well-being of popular musicians, especially singers, may be due to two reasons. Firstly, research has suggested that musicians may be reluctant to talk about their problems, particularly in a career that is known for the financial and job insecurity of those working within it (Dobson 2011). Secondly, the majority of studies for classical musicians have come from research departments within conservatoires, examining mainly the classical students studying within their institutions. As popular music at higher education level is still relatively new, many of the institutions where popular musicians study do not yet have research departments focusing on this topic. Additionally, to study successful professional popular musicians may not have. The lack of relevant, recent research into both the positive and negative experiences of musicians working in popular music, along with an absence of studies examining both the experiences of singers in popular music and the well-being impact of songwriting in a professional context, suggests a gap in the current literature which needs to be addressed. In response, the following research question is posed: 'What are the health and wellbeing experiences of professional solo singers in popular music?'.

This study examined the lived experiences of five professional singers working in the music industry, both positive and negative. All the singers interviewed were also songwriters, which allowed for the potential well-being impact of their songwriting creation to emerge in their responses.

Methodology and method

This study sits within a social constructionist framework and examines the health and well-being experiences of singers in popular music. Social constructionism approaches data acknowledging that there is no objective truth (Crotty 1998), and that reality is constructed, with multiple realities potentially existing at the same time. It is normally concerned with a few people at a given time, and looks at the intricacies and complexities within that group to generate meaning or a theory through interpretation of data collected by the researcher. The meanings constructed by the researcher are at the heart of social constructionist research, and the engagement with the

realities of participants' worlds is how truth, or meaning, comes into existence (Crotty 1998). Knowledge generation in this study therefore focused on the meanings of health and well-being experiences described by the participants and actively constructed from the data.

Within the study, 'health' is defined according to the World Health Organization (WHO) as 'a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity' (WHO 2006: 1). It thus incorporates well-being, referred to as a balance between the psychological, social and physical challenges that individuals face and their ability to mobilize the required resources to meet those challenges (Dodge et al. 2012). Keyes (2002) suggests the concept of 'mental flourishing' described as the co-existence of optimal mental health experiences with high levels of well-being. Another relevant framework is the PERMA model (Seligman 2011), which states that well-being is comprised of the following five aspects: (P) positive emotions, which include feelings, and an appraisal of the situation, (E) engagement, which refers to a 'psychological state in which individuals report being absorbed by what they are doing' (Forgeard et al. 2011: 84), (R) relationship involves the idea of being loved or cared for, (M) meaning is linked to having a sense of purpose and knowing that what one does is worthwhile and (A) accomplishment is based around the idea that an individual achieves intrinsically meaningful goals, whether or not they are impressive to the outside world. Acknowledging, though, that one of the potential limitations of PERMA is its lack of ability to examine negative aspects of well-being, this study aims to explore well-being as a continuum, recognizing both positive and negative health experiences for singers in popular music.

Participants

Five professional solo singers aged between 21 and 51 years, working full-time as popular musicians took part in this study. These singers were also instrumentalists, and accompanied themselves whilst performing in solo or band contexts. Solo singers were chosen who wrote and performed their own music (also known as 'artists'), as these singers experience different challenges to backing singers who are hired for specific gigs and are often told what to sing. The sample size was chosen within a qualitative research framework to allow for an in-depth, sustained and intensive engagement with each individual (Creswell 2009).

Two of the five participants also had a part-time job, but the majority of their income came from music-making. The participants were chosen using convenience sampling to represent different popular music genres, different funding methods and a variety of ages. Participants were either solo singers or the lead singer in a band, and all wrote their own music. There were three women

and two men. Detailed data on participants' age, genre, nationality, gender and funding status can be found in Table 1. Pseudonyms have been used to preserve anonymity.

Name	Genre(s)	Age	Years	Nationality	Funding
			professional		status
Louise	Рор	21	5	British	Major label
Robert	Rock	25	10	British	Major label
Naomi	Latin / Jazz	51	30	Canadian	Self-managed
Hannah	Blues / Folk / Jazz / Pop	31	15	British	Self-managed
Zane	R&B / Soul	23	7	British	Major label

Table 1: Participants' background information.

Procedure

The study was conducted by the first author, with the remaining authors acting in supervisory roles to co-design the research, analysis and write-up. The participants were recruited through contacts established via management companies, record labels and personal contacts of the first author. Social media promotion of the study by organizations such as the British Association of Performing Arts Medicine (BAPAM) and the Musician's Union (MU) also assisted with recruitment. Data were collected through one semi-structured interview, conducted by the first author between January and April 2017. The interviews were conducted in a natural setting, either in person, on the phone or over the Internet using FaceTime and Skype. The duration of the interviews was between 45 and 60 minutes. The audio was recorded on an Apple MacBook using Sonocent Audio Notetaker and transcribed verbatim.

Ethical approval was granted by the Research Ethics Committee of Conservatoires UK in January 2017. Participants gave written, informed consent and were provided with a 'participant help sheet' which provided key points of contact where they could go for further information or support, including the charities Help Musicians UK, BAPAM, the MU and Mind.

Method: Semi-structured interviews

Semi-structured interviews provide an ideal framework from which to conduct exploratory research, simultaneously focusing on specific health and well-being topics whilst allowing the

participants to explore aspects of the subject that were important to them (Seidman 2013). The interview schedule looked at the perceived role of health and well-being to a solo singer's career, experiences of (ill) health and well-being, barriers to health and well-being and strategies to engage in health promoting behaviours. The interview schedule (Appendix 1) included open-ended questions such as 'tell me about your health and wellbeing experiences as a person', and 'how important is your health and wellbeing to you and your career as a singer?'. The interview schedule was firstly piloted with two solo singers, and then minor alterations were made, including reducing the number of questions in the schedule to allow more space for the experiences of the participant to emerge.

Analysis

Interpretative Phenomenological Analysis (IPA) is an inductive method which examines the meanings that particular experiences, events and states hold for the participants involved (Smith and Osborn 2003), and was used to analyse the interview transcriptions. Analysis did not begin until all the interviews had been conducted and transcribed. During the process of IPA analysis for this study (Smith and Osborn 2003), the transcripts were read through several times, with emergent codes being noted in the left-hand margin. On further readings, these themes were grouped together into subordinate themes that were noted in the right-hand margin. All of the subordinate themes were then grouped together for each individual, and compared with the rest of the sample, resulting in superordinate themes that were applicable for the data set of the whole group.

Trustworthiness

Trustworthiness was ensured in a number of ways. Firstly, as a subjective account of the participants' experience was actively sought, the fact that they may have controlled the interview somewhat was not problematic. The interviewer also used guiding questions to steer back the topic of conversation if it digressed, and probing questions if a participant gave a short or incomplete answer. This ensured that the interview stayed on track. To avoid interviewer bias, the author team checked the interview questions to make sure they were not leading, and the interviewer ensured that additional questions throughout the interview were as open as possible. Finally, sub-themes and themes were discussed and cross-checked by the authors to ensure that they were representative of the data.

Results

Analysis revealed three main superordinate themes: (1) mental and physical experiences of health and support, (2) positive musical experiences and (3) barriers to health and well-being. Results will be presented with reference to the number of participants that contributed to the theme and supported by quotes. A summary of the over-arching and sub-themes can be seen in Table 2, with an expanded table of results available in Appendix 2.

Over-arching themes	Sub-themes	
Mental and physical experiences of health	1.1 Health perceptions	
and support	1.2 Health experiences	
	1.3 Support	
Positive musical experiences	2.1 Creative process	
	2.2 Live performance experiences	
	2.3 Relationship with fans	
Barriers to health and well-being	3.1 Touring	
	3.2 Commercial challenges	
	3.3 Artist character ('loss' of identity)	
	3.4 Lack of support	

Table 2: Over-arching and sub-themes that emerged from the data.

Mental and physical experiences of health and support (Theme 1) (n=5)

Three main sub-themes emerged from the data within this category: health perceptions, health experiences and support.

Health perceptions (Theme 1.1) (n=5)

Overall, health was perceived as an important factor in the career of all participants interviewed (n=5) with health-promoting behaviours playing a key role in its management (n=4):

It's sort of like the bottom line you know, health and wellbeing, it's the most important thing, it's the most important thing in my life. Absolutely. (Naomi)

This is a potentially surprising finding as results from previous studies have suggested characteristics un-supporting of health-promoting behaviours in popular musicians (Bellis et al. 2012), and may signify a change in education and awareness, or potential differences between perceptions and actual behaviours towards health. Health was also perceived as consisting of both mental and physical health experiences, in some cases with the two aspects impacting on each other (n=4):

If you're mentally drained you're probably going to become physically ill, and then you're not going to be able to tour or work, which is going to make you more depressed, and then it's like a cycle. (Louise)

Internal psychological conflict manifesting as physical symptoms has been investigated in classical musicians (Kenny and Ackermann 2014), but the impact of mental health on physical complaints is under-researched in popular music.

Health experiences (Theme 1.2) (n=5)

Health experiences described were both mental and physical in nature, and included the emotional intensity of the role. Participants spoke of mental health challenges (n=4) including depression (n=2) and anxiety (n=2), which backed up Raeburn's (1999) study identifying these as the most prevalent and disruptive psychological issues for popular musicians.

Interviewer: 'Do you consider yourself healthy?'

Zane: 'Um. Mentally right now I'd say no, but I think that's because I've suffered with depression a lot of my life'.

MPA was present (n=3), but participants' experiences were that this did not impair performance. One musician even found it to be a positive experience:

It's amazing so it gives you that adrenaline and then you start smiling. (Zane)

Cooper and Wills' (1988) study identified MPA as one of the main sources of stress for a popular musician. However, the specific experiences of anxiety among popular singers and its potential debilitative or facilitative impact remain under-investigated. The nature of the MPA experienced by participants, however, corresponded with previous research suggesting that popular musicians' experience of anxiety peaks before the concert, and then reduces significantly once the performance has begun (Papageorgi et al. 2012). It has been suggested by Papageorgi et al. (2012) that musicians in different musical genres may experience MPA in qualitatively and

quantitatively different ways, and this may be due to the musical standard expected by audience members and critics or the level of importance individuals place on their performances. Further research is required to establish how the specific MPA experiences of popular musicians differ or not from those in the classical genre, so that they may be fully supported in their experiences. Physical issues reported comprised of musculoskeletal complaints (n=3) and issues affecting vocal health (n=4). Participants also experienced a high frequency of ill-health episodes (n=3) related to touring.

Musculoskeletal problems included playing-related finger pain (n=1) and muscle tension and neck ache (n=3).

I always have an achy neck, and from carrying a PA [heavy audio equipment], like putting a speaker above your head onto a speaker stand, like that motion of lifting. (Hannah)

An additional physical concern for those interviewed was that of vocal health, and staying vocally 'well' emerged as an important concept for all participants:

I think just the vulnerability of losing your voice. That's a big deal. (Hannah)

This is confirmed by Titze (1992) who suggests that vocal health is of the utmost importance to singers. Participants experienced sore throats (n=2) and loss of voice (n=2), supporting research suggesting that these are common complaints among singers (Hughes et al. 2014), and general health issues with vocal implications presented included gastric reflux (n=1), an issue that was highlighted by Jahn (2009). There were no mentions of the polyps, nodules or other serious vocal issues that were highlighted by Jahn's research (2009), although this may be due to the young age of the majority of participants, as they may have not yet had sufficient vocal use to warrant more complex problems.

One notable absence from the physical health complaints mentioned was that of hearing problems. Kahari et al. (2003) reported that 74 per cent of rock/jazz musicians had some kind of hearing issue, and rock or alternative musicians have been known to experience higher rates of hearing problems than classical musicians (Chesky and Henoch 2000). Surprisingly, in this sample there were no issues reported. This could be due to the low ages of participants interviewed, or as a result of increased awareness of problems and usage of earplugs when playing.

The job of a singer emerged as being all consuming, with emotional intensity caused by extreme experiences in the role, described as 'highs and lows' (n=4). Particular intensity was centred around touring, with performing live and being on tour as key contributing factors:

You go from kind of chilling then you're onstage to 2000 people for like an hour [...] it's all crazy, loads of attention, and then you're back at the hotel, no one. [...] It's like one extreme to the next. You're on such a high and then it's just so low again. (Robert)

For those playing larger shows on major tours (n=2), there were also descriptions of how returning from the tour provided a challenge to well-being:

It can be really strange going from having the high of playing a show every night, that sort of come down, the mini come down after each show, and then the real come down when you get home from the tour. (Louise)

Support (Theme 1.3) (n=5)

Key emotional support was provided through relationships with family members (n=4), in particular from parents and industry peers:

Every time I feel a bit sad before a gig, say I'm like overtired or feeling down for whatever reason, like if I, I usually moan at my mum to be honest. She's the best person to talk to. (Hannah)

Spousal and romantic relationships were also mentioned and seem to provide support with health and well-being challenges (n=2), encouraging health-promoting behaviours (n=1) and overcoming maladaptive lifestyle behaviours (e.g. substance abuse) (n=1). As a participant mentioned 'I think my girlfriend brought me out of that' (Zane). This was in agreement with Cooper and Wills' (1988) study that suggested that popular musicians talk to someone they know to deal with stress.

The team around the individual ('industry peers') were described as key for effective support in higher profile singers (n=3), with self-managers (n=2) not placing the same importance on this network. Those performing with other musicians (n=4) found that the working relationships they provided were also important, and good relationships reflected positive touring experiences:

I was also very lucky in that my band are still great friends of mine so we just had fun, and I got on with everybody on the tour, so it was like being surrounded by friends. (Louise) In terms of expectations of support, participants perceived the existing support within the industry to be mostly absent and suggested support services that they felt would help them with their health and well-being experiences. These ranged from peer to peer support (n=3) to increased education and awareness of problems (n=3), and professional led support for issues arising from being a singer (n=3):

A few hours with a sort of coach to help you deal with nerves if that's something you struggled with, and [...] a vocal coach who taught you how to warm up your voice properly, and how to breathe during shows correctly. I think that could change so much, cos I just didn't know what I was doing, I was just kind of winging it the whole time. (Louise)

To summarize, the musicians interviewed highly valued health and well-being but also described experiences of mental health issues alongside physical challenges related to vocal and musculoskeletal health. Family members, industry peers and spousal /romantic relationships provided support, and the participants described how they felt there is more to be done within the industry to support them with their health and well-being problems.

Positive musical experiences (Theme 2) (n=5)

Self-expression through the creative process, live musical experiences and relationships with fans emerged as key contributors of positive musical experiences.

Creative process (Theme 2.1) (n=5)

Songwriting and creating one's own music emerged as a method of self-expression (n=5):

I picked up a guitar and started playing songs, and started doing live performances and I remember the first time my nan saw me she cried, because she just never saw me express myself for who I am before. (Zane)

It also contributed to a sense of authenticity (n=3):

When you find your thing that's authentic for you, and that, when I say that I mean in my case my own music and being able to write and record and express my own music, it's such a feeling of relief, and completion and clarity. (Naomi)

The participants considered the creative process important in itself, but also when associated with an actual product at the end (n=4). Factors that were important included audience members liking the songs, giving good feedback and singing along with the songs at concerts:

The creativity, but to a concrete end, like not just these little sparks, but the match of coming into fruition. [...] All the pieces go together and then create the whole picture, and then that product goes and then has good feedback. So yes, just getting it all out there. (Hannah)

Live performance experiences (Theme 2.2) (n=4)

Live performance emerged as being a mostly positive experience (n=4):

It's a really incredible natural high that is unexplainable [...]. it's a sort of very fleeting moment of ecstasy. (Louise)

Positive emotions experienced were linked with audience enjoyment of the concert (n=3), and performing songs written by the singers themselves generated a heightened sense of meaning in this context:

Playing the songs that we've written, and hearing people sing it back, and just like seeing them like just having a good time and going crazy is what we've always wanted, and that's what we really did it for. (Robert)

Relationship with fans (Theme 2.3) (n=5)

Overall participants described a positive relationship with their fans (n=4), and enjoyed the feedback and connection a fan base gave them, which seemed to contribute to overall experiences of positive well-being:

I absolutely loved my fan-base, I loved the connection I had with them. We had like, a real community, it felt like a safe space, I never felt like overwhelmed by it, in terms of the fan-base or anything. (Louise)

The well-being implications of the musician–fan relationship are under-researched. This theme highlights the positive experiences of musicians associated with the process of songwriting and

connection with fans. It appears that the creative process and positive feedback from fans may be related to developing meaning and a sense of accomplishment as described by the PERMA model (Ascenso et al. 2016).

Barriers to health and well-being (Theme 3) (n=5)

Numerous barriers to health and well-being were present in this study: touring, commercial challenges, the artist character and lack of support.

Touring (Theme 3.1) (n=4)

Touring emerged as a barrier to health and well-being for participants. For those who toured (n=4), key issues that emerged were lack of access to good food (n=4), substance use (e.g. alcohol) (n=4), lack of ability to exercise (n=4), and tendencies towards ill-health on tour (n=4). A lack of available time to source good food, and the prevalence of service stations as food providers resulted in a poor diet on tour (n=4):

Every time you'd stop at a service station and all there is there is KFC, Burger King, it's all like crap. [...] If you're on tour for a couple of weeks or whatever and you're doing that every day, that's so bad. (Robert)

Pleasure seeking on tour was described as hedonistic in nature, with frequent substance use (e.g. alcohol and drugs) being perceived as normal behaviour in musicians and industry professionals (n=4):

They're all usual you know, tendencies of drugs and alcohol and parties and staying up all night and travelling and long hours and that sort of thing. (Naomi)

Due to busy tour schedules, finding time to exercise was problematic (n=4):

I think it's just like you don't really have time to get into a good eating pattern, sleeping pattern, you don't have time to exercise, or socialize. (Hannah)

Staying healthy on tour was perceived as difficult, with participants describing regular ill-health occurrences (n=4):

I have been getting ill quite a bit from tour, like every tour that we go on I'll get ill at some point. Just kind of like colds, but that really affects me because I sing. (Robert) Participants experienced challenging travel schedules on tour (n=3). Flights, long car journeys, and traffic were all cited as difficult aspects of travelling:

I've done eight flights in one month, and one of them was 16 hours long, and I got really sick. [...] The travelling is so hard, it's so hard. (Naomi)

As discussed previously, returning home after touring was also problematic to well-being (n=3):

So I'm just sitting at home on my own, like going from being with the band, and everyone on tour and all that madness, and one day waking up and there's no one, just you, and it's completely quiet. It's such a high to a low. (Robert)

The touring challenges faced by musicians seem to have an impact on their health and wellbeing. Previous research (Cooper and Wills 1988; Steptoe 1989) identified travelling and associated 'work overload / underload' as major sources of stress among musicians, and it is worth considering how musicians could be better supported with this challenge in their careers.

Commercial challenges (Theme 3.2) (n=5)

Aspects inherent to the commercial nature of the job provided participants with further barriers to their health and well-being. Those interviewed worked long and antisocial hours, and their reluctance to take time off mirrored Cooper and Wills' (1988) findings of an expectation to work long hours (n=5). For those artists with a higher profile (n=3), there was little evidence of a work–life balance:

Interviewer: 'So you don't get weekends off?' Robert: 'No, it's literally all the time. It's not like, 9-5, it's like 9 to just whenever. [...] It just consumes us'.

Working hours appeared to be anti-social (n=5), with participants unable to maintain an active social life due to work commitments (n=4):

My problem also is that I don't really have much of a social scene, I do struggle to have like friends who I can do things with, because on those social nights of the week I'm gigging. (Hannah)

The anti-social nature of this workload may also contribute over time to negative implications for relationships, as identified by research conducted by Teague and Smith (2015).

Self-managers (n=2) appear to have experienced more stress during tours than those signed to major labels, and it emerged that their workload involved a large amount of computer work, as well as the work expected of them as a musician:

There's a tremendous amount of stress for artists these days to take care of all their social media accounts. [...] It's more hours spent online than it is at the piano or singing. (Naomi)

This emergence of some participants as self-managers is reflected in research suggesting the portfolio and multifaceted nature of work that musicians engage in (Hallam 2014; Teague and Smith 2015).

Participants described how the world in which they were working was competitive (n=5), either from other artists, for marketing purposes or for getting gigs.

Interviewer: 'Is it quite competitive then?'

Louise: 'Yeah, definitely. There's limited space in the music world, you know? People are forgotten about very quickly, especially with new streaming services. Everything becomes so quick'.

These findings echoed existing research (Bennett 2007; Jahn 2009) on the competitive nature of the job.

The ability for members of the public to contact the singers directly through social media built relationships with fans, as was discussed in Theme 2.3, but it also enabled negative comments. Participants experienced demands and abuse from individuals, which translated into unhealthy experiences with the public with impact on their perceived well-being (n=3):

When we were doing the first album I went on Twitter and there was this like big post that a guy had done, I had no idea who he was. And he was basically just hating us and I don't know why. (Robert) Cooper and Wills (1988) describe how fans are known for their extreme behaviours but their specific impact on the well-being of popular musicians requires further examination, particularly in the context of the recent rise of social media platforms.

The context within which these individuals operated also provided significant challenges to health and well-being. The industry culture in which the participants worked was described as being centred around drinking alcohol at gigs and rehearsals (n=4):

You end up drinking every day [...] people want to show their gratitude, they're like 'ah you were really good, can I get you a drink?' [...] So you can end up drinking every night of the week as a musician. (Hannah)

Additionally, participants also described the emotional intensity they face within this context (Raeburn 1999), and a key mental demand was the pressure placed on them to create a hit record. The pressure of creating songs to deadlines and writing hits emerged as a mental demand for major label signed singers (n=3):

I would say the pressure really takes its toll sometimes. [...] The pressure to always write that next big hit. (Zane)

The singers described difficulties of working purely on their own (n=4), including during live performance experiences:

You're thinking 'you are the centre of attention, everything's reliant on you' [...] some days I'm not sure I can deliver. [...] So yeah, I think there's, it's quite high pressure I would say. (Hannah)

Despite this, the concept that solo performers experience more anxiety than singers in bands as highlighted by Papageorgi et al. (2012) was not evident here, but this may be due to the limited sample size.

Artist character ('loss' of identity) (Theme 3.3) (n=3)

Developing an artist character (n=3) emerged as a protective way for participants to display a more charismatic, positive version of themselves at all times, which was cited as a necessary requirement for the job. This process seemed to result in a loss of 'identity' for individuals over time, and took its toll psychologically:

You're trying to stay positive, trying to be that character that everyone wants you to be and sometimes you can't do that and you can't be that character. (Zane)

The 'artist character' emerged as resulting in a loss of identity overall and there seems to be scant literature that discusses this. It emerged in this study as a psychological protection mechanism that appeared maladaptive in nature, due to the lack of authenticity and integrity felt by participants when engaging with it. Further research is needed to assess the psychological impact of the construction of an 'artist character' and how musicians can be better supported with it.

Lack of support (Theme 3.4) (n=5)

Participants described how sometimes friends were unable to provide adequate support due to different current life experiences (n=4):

If you go back to them and go 'my manager isn't doing what I wanted', and they go 'poor you, you've got a manager and a publishing deal, and you've got all this money'. So yeah, they don't really see it well. (Zane)

It emerged that participants were unaware of the health and well-being support services available to them within the music industry (n=5):

Interviewer: 'Do you find any health and wellbeing support in the music industry?' Robert: 'No. Until I saw that [the participant help sheet] I haven't seen anything'.

There were also examples of a total lack of perceived support:

I don't have any support for health and wellbeing. I really don't [...]. (Naomi)

The perceived lack of support from friends and the music industry as well as the lack of awareness in relation to existing support seems to be a major barrier to health and well-being, suggesting that much is yet to be done to improve provision in this area. Extensive research has improved support services for musicians in classical music through health and well-being programmes as identified earlier (Manchester 2007), yet little is known of how similar programmes may be available to popular musicians and singers.

Discussion

This study examined the health and well-being experiences of singers in popular music. The main themes that emerged from the data were: (1) mental and physical experiences of health and support, (2) positive musical experiences and (3) barriers to health and well-being. Health was an important factor in the singers' careers, being viewed as comprising both physical and mental health, with the two elements interrelated. Individuals were found to rely on family and industry peers for support, whilst experiencing mental and physical health challenges in the context of an emotionally intense landscape. Positive musical experiences were present and involved the self-expression of songwriting, live music performance and relationships with fans. On the other hand, some of these experiences also had a negative impact, such as the projected artist 'character' expected resulting in a 'loss' of identity. Barriers to health and well-being included touring, commercial challenges and a perceived lack of support overall.

A general picture of the overall health and well-being functioning of these participants may be found by examining their experiences in the context of the PERMA model (Seligman 2011). Firstly, positive emotions are present as a result of the creative process of songwriting and the musical engagement experienced through live performance. Engagement could be said to be experienced during the songwriting process, in studio sessions and whilst performing live. Relationships with family members and other musicians are positive and supportive. Meaning is derived from the creative process and connection with fans and audience members, and the process of putting a song out into the commercial arena provides the participants with a sense of accomplishment. Previous research has indicated that live performance may provide the main source of positive emotions and meaning for classical musicians (Ascenso et al. 2016). Although the act of live performance generated similar peak experiences in this study, it was the performance and audience connection with music that the singers had written themselves that emerged as most meaningful.

The potential limitations of PERMA, as previously discussed, may be seen here. Where there were positive emotions, there were also negative experiences, through mental health challenges and emotional intensity (or 'highs and lows'). Social relationships were sometimes unsupportive from friends not in the industry, and accomplishment was low if the singer was in conflict with industry professionals. Using Dodge et al.'s (2012) definition of well-being reasserts that the overall well-being experiences of the singers interviewed here are low. In this sample, mental and physical health challenges faced were significant, and co-existed with a lack of resources and support to address the professional challenges. The participants suggested that their ability to cope may be limited, as relatively low levels of support were mentioned overall, along with regular substance use and mental disengagement strategies such as the use of an 'artist character' to

cope with psychological demands. Coping skills were not specifically examined in the interview, but adaptive strategies that emerged included the emotional support gained by talking with family and peers for support. This was coherent with Cooper and Wills' (1988) findings that suggested the important role of social support as a coping mechanism. Maladaptive strategies identified by Cooper and Wills included substance use, and this was an activity that was also present in this sample. A recent study by Araújo et al. (2017) has suggested that music students overall have significantly fewer coping skills than the general population, but further investigation into the specific coping skills of popular professional musicians and vocalists would help to inform this subject further. It also remains to be clarified if these perceptions and experiences result from an actual lack of support available or from a lack of awareness and engagement in health-related behaviours.

Limitations and future research

Due to the size and nature of this project, it is not possible to speculate to what extent these findings are applicable to the wider community of popular musicians. The individual experiences of singers in popular music may differ according to the size of their fan base, the length of their career, their nationality, territory, gender, the musical genres or subgenres they work in and many other factors besides. However, this project was qualitative in nature, and focused on the lived experiences of each individual and was, therefore, subjective in its essence. The interviews provided a rich source of phenomenological data, and participants ranged across a variety of musical genres, ages and locations. Recruitment procedures can often affect trustworthiness, and in this case the participants who agreed to be interviewed may have been individuals for whom health and well-being was an important topic, thereby overstating the importance of health or health-promoting behaviours in their lives.

However, the study has contributed new knowledge of an area that had previously not been examined and, in doing so, has brought to light a number of topics for further investigation. First, the role of songwriting as well-being facilitator in professional musicians needs further examination. Findings suggest that it may be a source of creative self-expression separate to, although linked with, musical performance. Second, an additional avenue for research includes examining the MPA experiences of popular singers in more detail so as to establish whether, and in what conditions, it may be experienced as facilitative. It would also be beneficial to extend this study by investigating the experiences of emerging popular music vocalists compared to established vocalists. This would generate greater understanding of the factors that may impact on the well-being experiences of popular music singers at different stages of their careers, especially considering the relationship with larger audiences, greater social scrutiny and potentially heightened levels of stress. Additionally, it would be relevant to investigate other emotional experiences of popular singers following the emotional intensity identified by these participants and how these emotions impact upon perceived health and well-being.

Further research into the specific physical problems of popular musicians could increase the support available to them, and would help to establish to what extent hearing issues are a problem. As the Cooper and Wills study (1988) only examined male popular musicians, it would also be interesting to expand this study to a larger and more diverse sample, in order to examine whether there are any differences between genders and whether women require individually tailored support. Finally, understanding the psychological experiences of popular musicians through in-depth research could assist with education and awareness of challenges, and would benefit from including investigations into the musician–fan relationship and the concept of the artist-character. Additionally, the current study would merit being extended out into a larger mixed-methods study, creating a questionnaire based around the emergent themes in order to assess to what extent the findings are applicable to a wider sample.

Conclusions

This article set out to examine the health and well-being experiences of solo singers in popular music, and has shed light on some of the experiences, perceptions, positive musical experiences and barriers to health and well-being of the participants interviewed. Overall, the singers in this sample faced an array of health and well-being challenges, which existed alongside a lack of resources including support and education. The challenges experienced had implications for their overall well-being and positive functioning. On the other hand, results point out the positive impact of a supportive network (friends, peers, family) as well as a supportive audience. Both popular music educational institutions and commercial popular music industry organizations may benefit from tailor-made health and well-being programmes, in order to educate and support popular musicians. Our findings can provide a catalyst for discussions between industry professionals, educational staff and students, supporting musicians and those who work with them to consider their health and well-being needs and required sources of support from early in the educational pathway. Furthermore, a 'Healthy Conservatoires' style network of practitioners and researchers (Atkins 2013) would be welcomed within popular music to share information and contribute to best-practice in a field where there is currently a lack of consistent research-based education and support. Finally, the findings may have implications for music industry charities, enabling them to increase education and awareness of issues faced, informed by key emerging topics presented here. Similarly, the research may also inform industry organizations such as record labels, management companies and agents, starting discussions around the need to

increase health and well-being support and education within the industry overall. This study may provide a springboard from which conversations and developments such as these may develop. With high mortality rates, levels of substance abuse and mental health experiences present within the industry, the subject of health and well-being can no longer be ignored in popular musicians. The overall lack of focus on the popular music genre within the field of performance science needs to change, so that professional and student popular musicians may benefit from increased education, awareness and research-informed support of issues, enabling them to thrive and flourish throughout healthy careers.

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References

Ackermann, B. and Adams, R. (2003), 'Physical characteristics and pain patterns of skilled violinists', Medical Problems of Performing Artists, 18:2, pp. 65–71.

Andersen, L. N., Mann, S., Juul-Kristensen, B. and Søgaard, K. (2017), 'Comparing the impact of specific strength training vs general fitness training on professional symphony orchestra musicians', Medical Problems of Performing Artists, 32:2, pp. 94–100.

Araújo, L. S., Wasley, D., Perkins, R., Atkins, L., Redding, E., Ginsborg, J. and Williamon, A. (2017), 'Fit to perform: An investigation of higher education music students' perceptions, attitudes, and behaviors towards health', Frontiers in Psychology.

Ascenso, S., Williamon, A. and Perkins, R. (2016), 'Understanding the wellbeing of professional musicians through the lens of positive psychology', Psychology of Music, 45:1, pp. 65-81.

Atkins, L. (2013), 'Occupational health and wellbeing in the UK conservatoire sector: Staff perspectives' in A.Williamon and W.Goebl (eds) Proceedings of the International Symposium on Performance Science, Vienna, Austria, 23– 31 August, Utrecht: European Association of Conservatoires, 243–248.

Azerrad, M. (1994), Come as You Are: The Story of Nirvana, New York: Doubleday. Backus, B. C. and Williamon, A. (2009), 'Evidence of noise-induced hearing loss among orchestral musicians', in A. Williamon and D. Coimbra (eds), Proceedings of the International Symposium on Performance Science 2007, Porto, Portugal, 22-23 November, Utrecht: European Association of Conservatoires, pp. 23–28.

Baker, F. A. and Ballantyne, J. (2013), "You've got to accentuate the positive": Group songwriting to promote a life of enjoyment, engagement and meaning in aging Australians', Nordic Journal of Music Therapy, 22:1, pp. 7–24.

Baker, F. A. and MacDonald, R. A. R. (2013), 'Flow, identity, achievement, satisfaction and ownership during therapeutic songwriting experiences with university students and retirees', Musicae Scientiae, 17:2, pp. 131–46.

Barba, H. N. (2005), 'Songwriting and self-discovery: A heuristic study grounded in the arts and supported by the theories of Carl Jung and James Hillman', Ph.D. thesis, Cincinnati: Union Institute and University.

Bellis, M. A., Hughes, K., Sharples, O., Hennell, T. and Hardcastle, K. A. (2012), 'Dying to be famous: Retrospective cohort study of rock and pop star mortality and its association with adverse childhood experiences', British Medical Journal open, 2:e002089

Bennett, D. (2007), 'Utopia for music performance graduates. Is it achievable, and how should it be defined?', British Journal of Music Education, 24:2, p. 179.

Bennett, J. (2013), "You won't see me": In search of an epistemology of collaborative songwriting', Journal of the Art of Record Production, 8.

Brandfonbrener, A. G. (1995), 'Musicians with focal dystonia: A report of 58 cases seen during a ten-year period at a performing arts medicine clinic', Medical Problems of Performing Artists, 10:4, pp. 121–27.

Butkovic, A. and Rancic Dopudj, D. (2016), 'Personality traits and alcohol consumption of classical and heavy metal musicians', Psychology of Music, 45:2, pp. 246–56.

Callaghan, J. (2014), 'Teaching the professional singer', in G. Welch, D. Howard and J. Nix (eds), The Oxford Handbook of Singing, pp. 1–22. Oxford University Press.

Chesky, K. and Henoch, M. A. (2000), 'Instrument-specific reports of hearing loss: Differences between classical and non-classical musicians', Medical Problems of Performing Artists, 15:1, pp. 35–39.

Clark, T., Holmes, P., Feeley, G. and Redding, E. (2013), 'Pointing to performance ability: Examining hypermobility and proprioception in musicians', in A. Williamon and W. Goebl (eds), Proceedings of the International Symposium on Performance Science 2013, Vienna, Austria, 23rd – 31st August, Utrecht, The Netherlands: European Association of Conservatoires, pp. 605– 10.

Cohen, S. M., Jacobsen, B. H., Garrett, C. G., Noordzij, J. P., Stewart, M. G., Attia, A., Ossoff, R. H. and Cleveland, T. F. (2007), 'Creation and validation of the singing voice handicap index', Annals of Otology, Rhinology & Laryngology, 116:6, pp. 402–06.

Connolly, C. and Williamon, A. (2004), 'Mental skills training', in A. Williamon (ed.), Musical Excellence: Strategies and Techniques to Enhance Performance, Oxford: Oxford University Press, pp. 221–45.

Cooper, C. L. and Wills, G. I. (1988), Pressure Sensitive: Popular Musicians under Stress, London: Sage.

Creech, A., Papageorgi, I., Duffy, C., Morton, F., Haddon, E., Potter, J. and Welch, G. (2008), 'From music student to professional: The process of transition', British Journal of Music Education, 25:3, p. 315.

Creswell, J. (2009), Research Design: Qualitative, Quantitative and Mixed-Methods Approaches, 3rd ed., Thousand Oaks, CA: SAGE.

Crotty, M. (1998), The Foundations of Social Research: Meaning and Perspective in the Research Process, London and Thousand Oaks, CA: Sage Publications.

Cruder, C., Falla, D., Mangili, F., Azzimonti, L., Araújo, L. S., Williamon, A. and Barbero, M. (2018), 'Profiling the location and extent of musicians' pain using digital pain drawings', Pain Practice, 18:1, pp. 53–66.

Davies, H. (2017), 'London grammar: "We were hanging by a thread", The Guardian, 8th June, 2017. https://www.theguardian.com/music/2017/jun/08/london-grammar-we-were-hanging-by-a-thread. Accessed 8 April 2019.

Dibble, K. (1995), 'Hearing loss and music', Journal of the Audio Engineering Society, 43:4, pp. 251–66.

Dobson, M. C. (2011), 'Insecurity, professional sociability, and alcohol: Young freelance musicians' perspectives on work and life in the music profession', Psychology of Music, 39:2, pp. 240–60.

Dodge, R., Daly, A. P., Huyton, J. and Sanders, L. D. (2012), 'The challenge of defining wellbeing', International Journal of Wellbeing, 2:3, pp. 222–35.

Eede, C. (2015), 'Benga opens up about mental health', The Quietus, 16th September, 2015. http://thequietus.com/articles/18781-benga-opens-up-about-mental-health. Accessed 8 April 2019.

Frith, S. (1996), Performing Rites: Evaluating Popular Music, New York: Oxford University Press Inc.

Forgeard, M. J. C., Jayawickreme, E., Kern, M. L. and Seligman, M. E. P. (2011), 'Doing the right thing: Measuring well-being for public policy', International Journal of Wellbeing, 1:1, pp. 79–106. Gaunt, H., Creech, A., Long, M. and Hallam, S. (2012), 'Supporting conservatoire students towards professional integration: One-to-one tuition and the potential of mentoring', Music Education Research, 14:1, pp. 25–43.

Gelfand, M. (1998), cited in Raeburn, S. D. (1999), 'Psychological issues and treatment strategies in popular musicians: A review, Part I', Medical Problems of Performing Artists, 14:4, pp. 171–79.

Ginsborg, J., Spahn, S. and Williamon, A. (2012), 'Health promotion in higher music education', in R. MacDonald, G. Kreutz and L. Mitchell (eds), Music, Health, and Wellbeing, Oxford: Oxford University Press, pp. 356–66.

Gray, J. P. (1980), 'Rock as a chaos model ritual', Popular Music and Society, 7:2, pp. 176-81.

Green, L. (2002), How Popular Musicians Learn: A Way ahead for Music Education, Aldershot, Hants: Ashgate.

Gruzelier, J. and Egner, T. (2004), 'Physiological self-regulation: Biofeedback and neurofeedback', in A. Williamon (ed.), Musical Excellence: Strategies and Techniques to Enhance Performance, Oxford: Oxford University Press, pp. 197–220.

Hallam, S. (2014), 'Developing and maintaining motivation in advanced music performers', in I. Papageorgi and G. Welch (eds), Advanced Musical Performance: Investigations in Higher Education Learning, pp.333-348. London: Ashgate Publishing.

Hays, T., Minichiello, V. and Wright, P. (2000), 'Mentorship: The meaning of the relationship for musicians', Research Studies in Music Education, 15:1, pp. 3–14.

Hughes, D. (2014), 'Contemporary vocal artistry in popular culture musics: Perceptions, observations and lived experiences', in S. Harrison and J. O'Bryan (eds), Teaching Singing in the 21st Century, New York: Springer, pp. 287–302.

Jabusch, H., Zschucke, D., Schmidt, A., Schuele, S. and Altenmüller, E. (2005), 'Focal dystonia in musicians: Treatment strategies and long-term outcome in 144 patients', Movement Disorders, 20:12, pp. 1623–26.

Jahn, A. F. (2009), 'Medical management of the professional singer', Medical Problems of Performing Artists, 24:1, pp. 3–9.

James, I. M. (2000), 'Survey of orchestras', in R. Tubiana and P. C. Amadio (eds), Medical Problems of the Instrumentalist Musician, London: Martin Dunitz, pp. 195–201. Jones, G. (1995), 'More than just a game: Research developments and issues in competitive anxiety in sport', British Journal of Psychology, 86:4, pp. 449–78.

Kahari, K., Eklof, M., Sandsjo, L., Zachau, G. and Moller, C. (2003). Associations between hearing and psychosocial working conditions in rock/jazz musicians. Medical Problems of Performing Artists, 18(3), pp. 98–106.

Kale, S. (2018), 'How has the music industry learned from Avicii's death?', Mixmag, https://mixmag.net/feature/avicii-tragedy-music-industry. Accessed 8 April 2019. Kenny, D. T. (2011), The Psychology of Music Performance Anxiety, Oxford: Oxford University Press.

Kenny, D. and Ackermann, B. (2014), 'Performance-related musculoskeletal pain, depression and music performance anxiety in professional orchestral musicians: A population study', Psychology of Music, 43:1, pp. 43–60.

Kenny, D. T. and Asher, A. (2016), 'Life expectancy and cause of death in popular musicians: Is the popular musician lifestyle the road to ruin', Medical Problems of Performing Artists, 31:1, pp. 37–44.

Kenny, D. T., Fortune, J. M. and Ackermann, B. (2013), 'Predictors of music performance anxiety during skilled performance in tertiary flute players', Psychology of Music, 41:3, pp. 306–28. Keyes, C. L. M. (2002), 'The mental health continuum: From languishing to flourishing in life', Journal of Health and Social Research, 43:2, pp. 207–22.

Lazarus, R. S. (2006), Stress and Emotion: A New Synthesis-2nd Edition, New York: Springer Publishing.

Lebler, D. and Hodges, N. (2017), 'Popular music pedagogy: Dual perspectives on DIY musicianship', in G. D. Smith, Z. Moir, M. Brennan, S. Rambarran and P. Kirkman (eds), The Routledge Research Companion to Popular Music Education, Abingdon: Routledge, pp. 272–85.

MacNamara, A., Holmes, P. and Collins, D. (2008), 'Negotiating transitions in musical development: The role of psychological characteristics of developing excellence', Psychology of Music, 36:3, pp. 335–52.

Maitlis, S. (2009), 'Who am I now? Sensemaking and identity in posttraumatic growth'. In: Roberts, Laura Morgan and Dutton, Jane E., (eds.) Exploring Positive Identities and Organizations: Building a Theoretical and Research Foundation. Psychology Press, New York, pp. 47-76.

Manchester, R. (2007), 'Health promotion courses for music students: Part 1', Medical Problems of Performing Artists, 22:1, pp. 26–30.

Marchant-Haycox, S. E. and Wilson, G. D. (1992), 'Personality and stress in performing artists', Personality and Individual Differences, 13:10, pp. 1061-1068.

Matei, R. and Ginsborg, J. (2017), 'Music performance anxiety in classical musicians –What we know about what works', BJPsych. International, 14:2, pp. 33–35.

McFerran, K. and Teggelove, T. (2011), 'Music therapy with young people in schools: After the Black Saturday Fires', Voices: A World Forum for Music Therapy, 11:1.

Miller, K. E. and Quigley, B. M. (2012), 'Sensation-seeking, performance genres and substance use among musicians', Psychology of Music, 40:4, pp. 389–410.

Nagel, J. J. (1990). 'Performance anxiety and the performing musician: A fear of failure or a fear of success', Medical Problems of Performing Artists, 5:1, pp. 37–40.

Nicholson, D. R., Cody, M. W. and Beck, J. G. (2015), 'Anxiety in musicians: On and off stage', Psychology of Music, 43:3, pp. 438–49.

Ntoumanis, N. and Biddle, S. J. (2000), 'Relationship of intensity and direction of competitive anxiety with coping strategies', The Sport Psychologist, 14:4, pp. 360–71.

O'Grady, L. (2009), 'Therapeutic potentials of creating and performing music with women in prison: A qualitative case study', unpublished doctoral thesis, Melbourne: The University of Melbourne.

Osborne, M. S., Greene, D. J. and Immel, D. T. (2014), 'Managing performance anxiety and improving mental skills in conservatoire students through performance psychology training: A pilot study', Psychology of Well-Being, 4:1, p. 18.

Papageorgi, I., Creech, A. and Welch, G. (2012), 'Perceived performance anxiety in advanced musicians specializing in different musical genres', Psychology of Music, 41:1, pp. 18–41.

Pestana, P., Vaz-Freitas, S. and Manso, M. (2017), 'Prevalence of voice disorders in singers: Systematic review and meta-analysis', Journal of Voice, 31:6, pp. 722–27.

Phyland, D. J. (2014), 'The impact of vocal load on the vocal function of professional music theatre singers', Ph.D. thesis, Australia: Monash University, Faculty of Medicine, Nursing and Allied Health.

Raeburn, S. D. (1999), 'Psychological issues and treatment strategies in popular musicians: A review, Part I', Medical Problems of Performing Artists, 14:4, pp. 171–79.

Raeburn, S. D. (2007), 'The ring of fire: Shame, fame, and Rock "n" Roll', Medical Problems of Performing Artists, 22:1, p. 3.

Raeburn, S. D., Hipple, J., Delaney, W. and Chesky, K. (2003), 'Surveying popular musicians' health status using convenience samples', Medical Problems of Performing Artists, 18:3, pp. 113–19.

Rigg, J. L., Marrinan, R. and Thomas, M. A. (2003), 'Playing-related injury in guitarists playing popular music', Medical Problems of Performing Artists, 18:4, pp. 150–52.

Sataloff, R. (2017), Professional Voice: The Science and Art of Clinical Care, 4th ed., 3-Volume Set, Sandiago, CA: Plural Publishing.

Scherer, R. C., Titze, I. R., Raphael, B. N., Wood, R. P., Ramig, L. A. and Blager, R. F. (1991), 'Vocal fatigue in a trained and an untrained voice user', in T. Baer, C. Sasaki, K. Harris (eds), Laryngeal Function in Phonation and Respiration, San Diego, CA: Singular Publishing Group, pp. 533–55.

Schneider, E. and Chesky, K. (2011), 'Social support and performance anxiety of college music students', Medical Problems of Performing Artists, 26:3, p. 157.

Seidman, I. (2013), Interviewing as Qualitative Research: A Guide for Researchers in Education and the Social Sciences, 4th ed., New York: Teachers' College Press.

Seligman, M. E. P. (2011), Flourish: A New Understanding of Happiness and Well-Being and How to Achieve Them, London: Nicholas Brealey Publishing.

Shapiro, H. (2003), Waiting for the Man: The Story of Drugs and Popular Music, London: Helter Skelter.

Smith J. A. and Osborn, M. (2003), 'Interpretive phenomenological analysis', in J. A. Smith (ed.), Qualitative Psychology: A Practical Guide to Research Methods, London: Sage, pp. 53–80. Spahn, C., Ell, N. and Seidenglanz, K. (2001), 'Psychosomatic findings in musician patients at a department of hand surgery', Medical Problems of Performing Artists, 16:4, pp. 24–31. Steptoe, A. (1989), 'Stress, coping and stage fright in professional musicians', Psychology of Music, 17:1, pp. 3–11.

Teague, A. and Smith, G. D. (2015), 'Portfolio careers and work-life balance among musicians: An initial study into implications for higher music education', British Journal of Music Education, 32:2, pp. 177–93.

Titze, I. R. (1992), 'Vocal efficiency', Journal of Voice, 6:2, pp. 135-8.

Valentine, E. (2004), 'Alexander technique', in A. Williamon (ed.), Musical Excellence: Strategies and Techniques to Enhance Performance, Oxford: Oxford University Press, pp. 179–95.

Wesner, R. B., Noyes, R. and Davis, T. L. (1990), 'The occurrence of performance anxiety among musicians', Journal of Affective Disorders, 18:3, pp. 177–85.

West, R. (2004), 'Drugs and musical performance', in A. Williamon (ed.), Musical Excellence: Strategies and Techniques to Enhance Performance, Oxford: Oxford University Press, pp. 271– 90.

West, R. (2016), The Art of Songwriting, London: Bloomsbury Publishing.WHO (2006), 'Constitution of the World Health Organization', October, 2006.http://www.who.int/governance/eb/who_constitution_en.pdf. Accessed 20 May 2017.

Williamon, A. and Thompson, S. (2006), 'Awareness and incidence of health problems among conservatoire students', Psychology of Music, 34:4, pp. 411–30.

Wills, G. I. (2003), 'Forty lives in the bebop business: Mental health in a group of eminent jazz musicians', The British Journal of Psychiatry, 183:3, pp. 255–59.

Wristen, B. (2000), 'Avoiding piano-related injury: A proposed theoretical procedure for biomechanical analysis of piano technique', Medical Problems of Performing Artists, 15:2, pp. 55–64.

Wu, S. J. (2007), 'Occupational risk factors for musculoskeletal disorders in musicians: A systematic review', Medical Problems of Performing Artists, 22:2, 43–51.

Wynn Parry, C. (2004), 'Managing the physical demands of musical performance', in A. Williamon (ed.), Musical Excellence: Strategies and Techniques to Enhance Performance, Oxford: Oxford University Press, pp. 41–60.

Zwaan, K. and ter Bogt, T. F. M. (2009), 'Research note: Breaking into the popular record industry: An insider's view on the career entry of pop musicians', European Journal of Communication, 24:1, pp. 89–101.

Appendix 1: Interview schedule

What are the health and well-being experiences of singers in popular music?'

Introduction

- Tell me about your career so far, and how you got into music.
- Tell me a bit about your day to day life as a singer.

Perceptions of health and well-being

- What comes to mind when you think of health and well-being?
- How important is your health and well-being to you and your career as a singer?

Strategies to engage in health-promoting behaviours

- Do you consider yourself healthy? What do you do to stay healthy?

Experiences of (ill-)health and well-being

- Tell me about your general health and well-being experiences as a person.
- Do you have any physical problems? If so, how do you deal with those problems?
- Do you face any mental demands in your career? If so how do you deal with these demands?
- Do you feel that working in the music industry affects your health and well-being? If so, how?
- Where do you go for support with your health and well-being?
- What kind of health and well-being support do you find in the music industry?
- Is there anything more in your opinion that the music industry could do to support your health and well-being?
- How does touring affect your health and well-being?

Barriers to health and well-being

- What kind of barriers to health and well-being do you experience as a singer?
- Tell me about your psychological experience of performing live.

Final stage

- What do you love about your life as a singer?
- Is there anything else you would like to add?
- Thank the participant and debrief.

Appendix 2: Expanded results table

Over-arching themes	Sub-themes	Quotes
Mental and physical	1.1 Perceptions	1.1.1 Health as important for career
experiences of health and support		1.1.2 Mental and physical health
Support	1.2 Experiences	1.2.1 Mental health
		1.2.2 Physical complaints
		1.2.3 Emotional intensity
	1.3 Support	1.3.1 Family
		1.3.2 Industry peers
		1.3.3 Expectations of support
Positive musical experiences	2.1 Creative process	2.1.1 Self-expression
	2.2 Live performance	
	experiences	
	2.3 Relationship with	
	fans	
Barriers to health and well-	3.1 Touring	3.1.1 Bad eating habits
being		3.1.2 Drugs / alcohol use
		3.1.3 Lack of exercise
		3.1.4 III from touring
		3.1.5 Travelling
	3.2 Commercial	3.2.1 Antisocial / long hours
	challenges	3.2.2 Self-managers
		3.2.3 Competition
		3.2.4 Unhealthy relationships with the public
		3.2.5 Industry culture
		3.2.6 Mental demands
	3.3 Artist character	
	('loss' of identity)	
	3.4 Lack of support	3.4.1 Friends
		3.4.2 Perceived lack of support services