Musicians as researchers – Insight or insanity?

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Abstract
Many highly-proficient musicians enrol in postgraduate research degrees, moving from being expert musicians to novice researchers. This paper investigates the reasons and motivations for this professional transition. It reports on an empirical study carried out with the members of an advanced research methods seminar class in a Conservatorium that is a faculty of an Australian university. The members of the class took on multiple roles as researchers and subjects, interviewers and interviewees, investigators and authors. The results obtained from thematic analysis of interview transcripts highlight the importance of the intrinsic aspects of personal development as a musician and the altruism of passing knowledge and experience to others, supported to a lesser extent by extrinsic motivations concerning finance and employment. In this, the results are broadly in line with those from other such studies, but further investigation with a larger and more diverse group of music researchers would be needed to confirm these indications.
Keywords: postgraduate research, music, motivations, personal development, professional development, thematic analysis

Introduction
In the current university context, many highly-proficient music performers enrol in higher education degrees by research. While at first glance those enrolled may seem to be moving from an area of expertise to an area of inexperience, in many cases the individual may in fact have already developed a range of research skills in the course of becoming highly proficient in their chosen field. Many expert musicians seek to further develop their craft through embarking on research degrees and/or seek inspiration through what they aim to discover. Research is a highly valued skill among many musicians pursuing fine music making. In this paper, we will investigate the motivations of musicians for enrolling in a higher degree by research, including the reasons why they choose research as a way of expanding their skills as performers, and the expected outcomes of their research studies.

Literature review
What is research? Musicians and research
The first aspect of the investigation is the basic question of the relationship between music and research. Shulman (1998) suggests that "for an activity to be designated as scholarship it should manifest at least three key characteristics: it should be public, susceptible to critical review and evaluation, and accessible for exchange and use by other members of one's scholarly community" (pp. 5-6). There are two distinct areas in which this can be applied to musicians.

The first area is that of performance applications of music; that is, instrumental and vocal performance, conducting and composition. These music practices fulfil the three characteristics as suggested by Shulman: musical performance is by its nature public,

constantly exposed to judgement (particularly in tertiary institutions) and recordings of performances, or particular paradigmatic performances, are often the centrepiece for discussion of interpretation and pedagogic potential. In addition, research into instrument and performance-specific technical and interpretational aspects should contribute to the relevant knowledge pool as well as to the personal development of the researchers/musicians involved.

The second area is centred on teaching and academic development in secondary and tertiary education. Teaching occupies a large component of the career portfolio for many musicians. Trigwell (2013) investigates the validity of 'Scholarship of Teaching and Learning'. He concludes that it is likely that "teachers who adopt scholarly, inquiring, reflecting, peer reviewing, student- centred approaches to teaching are likely to be achieving the purpose of improving student learning" (p. 102).

The broadening of the scope of 'legitimate' research invites new methodologies which focus on performance and lived experience. For instance, Parmer (2007, pp. 8-56) has pointed out the need for performing to "be given its due as a primary source out of which institutionally legitimate knowledge about music can arise". Specifically, a performing musician or practicing composer is able to either share their knowledge with fellow or aspiring performers, or feed their expert knowledge into scholarship; likewise a musicologist may inform either performers or other theorists. In both cases, the contribution can be made due to the researcher's expertise in music.

This expansion of research beyond strict musicological parameters invites musicians who may not typically have involved themselves in research to contribute to the pool of academic knowledge through their expertise as performers and composers. It follows that enrolling in a research degree and vocalising one's musical knowledge within academic discourse allows for the materialisation or formalisation of the research processes that have already been taking place in a musician's life.

It can be seen that this broad scope and natural overlap of music practise with research practise creates an environment which is fertile for musicians motivated to further their understanding of their craft through engaging with research.

Motivation for research – Personal or professional?

Guerin, Ranasinghe and Jayatilaka (2015) investigated students' reasons for undertaking doctoral studies. They found that motivations for higher research degrees can grouped into five main categories: family and friends; intrinsic motivation; lecturer influence; research experience; and career development. This study was carried out with 405 PhD, professional doctorate and practice-based doctorate candidates from all faculties of Australian universities (p. 34).

Harrison (2011) and Draper and Harrison (2013) carried out a similar investigation in the field of music. They identified four motivations for enrolling in higher degrees in music and music education: love of learning; access to resources; connection to the subject matter; and altruism. These themes have significant overlap and all point towards a personal relationship with research and subject material, a love of learning, connection to the subject matter and to a lesser extent, altruism. The findings of Abuhamdeh, Csikszentmihalyi and Jahal (2015) further reinforce the importance of intrinsic motivations for study, arguing that students focus closely on process-centred enjoyment.

Comparing these studies indicates that musicians are more likely to embark on a higher degree by research for personal, intrinsic reasons. On the other hand, other studies have demonstrated that external, career-focussed attitudes are also prevalent in student motivations for undergoing training in research. Throsby and Zednik (2011) confirm the importance of a portfolio approach for the careers of professional artists, most of whom regularly supplement their income through work outside of the creative arts. They report a

trend, especially among younger professional artists, to widen the number of components in career portfolios.

Manturzewska (1990) also articulates these anxieties within performing musicians. In her life-span development study, she notes clear demarcations between performance and teaching periods of musicians' careers. Gembris and Heye (2014) mirror these findings in their study of aging German orchestras: a relatively brief peak performance period followed by a lengthy teaching career. The timing of the peak teaching phase and the fact that many musicians retire late in life articulate an anxiety regarding the timing of research studies at university. Do musicians undertake further education to supplement their peak teaching? Do younger musicians feel that they are compromising their peak periods of performance by undertaking further university study during this period?

However, Harrison, Draper, Barrett, Burnard and McPherson (2010) find that in relation to a musician's reasons for undertaking a research degree, "jobs, salary and promotion are seemingly unrelated to motivation to undertake a doctoral program". The question of prevalence of career-centred motivation or personal motivation has yet to be entirely resolved.

While career development and intrinsic motivations are important for understanding the choices of research students, structural factors may limit student choice, or impair student motivation in undertaking high-level study. One of these is the external demand for research and research degrees. The Australian Government is supportive of higher research degrees, providing extensive funding under the Research Training Scheme (RTS) and Australian Postgraduate Award (APA) scheme. Universities are also supportive, as more research leads potentially to more funding and maybe higher rankings.

In spite of the increasingly commonplace requirement of doctoral qualifications for employment in tertiary education, there is an oversupply of candidates. Shaw (2011) notes that in 2006, only 15 percent of recent PhD graduates had 'tenure-track' positions within six years of completing their degree, compared with 55 percent in 1973. There is little demand for research degrees in a majority of employment sectors in the creative arts, beyond the academic arena; for instance, as Draper and Harrison (2011) point out, "there is little need for a research degree to play in an orchestra".

Methodology

Participants

Participants were all students enrolled in the graduate seminar 'Thinking Research', a mandatory course for post-graduate research students at the Conservatorium of Music, University of Sydney. Students in this class are generally highly-trained practitioners in some aspect of the performing arts; they are performers, composers, conductors, music educators and musicologists studying a broad range of subjects with a variety of research methodologies. However, most students were relatively new to research.

Data collection

A series of interviews was conducted with all participants. Initial questions were developed by all members of the class jointly and were designed to investigate the reasons for enrolling in a research degree and how research skills may benefit artistic practice. The questions are available in Appendix A. Participants were invited to ask follow-up questions and to discuss ideas that surfaced. Interviews were conducted in groups of three students, each taking on a particular role – interviewer, interviewee, scribe – and rotating these roles for subsequent interviews. Participants were invited over the following week to add to their transcribed interviews if they felt they had not contributed as completely as they wished. Since all participants are members of the research team and authors of this paper, external ethics

approval was not obtained, though the ethical aspects of running such a project were discussed by the group before starting the project (they were offered the option of not participating in the interviews, though they all declined this option).

It is important to note that the questions asked only gathered data from one point in the development of research skills – most students were relatively early in the process of their own research studies. As noted by Langley (1999) theoretical findings drawn from qualitative data have the potential to change markedly as data and participants change over time. Accordingly, it is important to acknowledge that this research does not intend to ascertain how research skills may benefit musicianship as participants develop during the course of a degree program.

Some of the interview questions seem to make an assumption that the development of research will benefit artistic practice. However, they were developed by participants themselves, and so contain a reflection of their own ideas about research in music. De Hoyos and Barnes (2012) argue that such a preconception risks ignoring conflicting responses; however, it was apparent in the interviews that these assumptions were strongly contested by some participants, mitigating their influence on the results.

Analysis

The investigation of the transcripts was carried out by a subsection of the class undertaking a thematic analysis of all of the interviews. The qualitative software package NVivo10 was a very useful tool in this process. Such analysis of themes is a basic form of qualitative analysis (Boyatzis, 1998), aiming to identify common ideas from the shared concerns and emphases put forward by participants. The analysts identified similarities in the reasoning and motivations which participants articulated in their interviews, as well as the core values of the participants in relation to research.

Results

There were five key themes that emerged from the investigation of the interview transcripts: What is research?; Financial aspects; Professional development; Personal development; and Altruism or Contribution to knowledge. Each of these themes will be described in more detail, and supported by quotes from the interview transcripts. Participants expressed a wish to remain anonymous. As such, they have been assigned a number based on the order in which they appear in this paper.

How do students understand research?

All participants were asked to provide their definition of the term “research”. Generally the definitions offered involved some notion of the acquisition of knowledge or understanding; “Seeking knowledge in order to discover new directions and methods and gain new ideas in general” (1); “research is finding things out that you didn't know beforehand” (2). For some subjects this definition could be further refined to describe academic research, as a type of research they considered distinct from other forms; “academic research has particular characteristics, including a systematic approach, a utilisation of the previous investigations of others, and a presentation of your findings for others to critique” (2).

Answers varied as to the degree to which interviewees considered research and musical practice to be related. While some subjects considered research to be an integral part of musical practice; “research is about the feedback loop between theory and performance practice” (3); or “I am fully of the belief that practice should inform research just as research should inform practice” (4); others considered their research as a separate and distinct activity from their musical practice; “Conceptualizing the music in language as a very different way of understanding music” (5). An intermediary position supported by the majority of responses

considered academic research to be distinct from, yet nevertheless largely influential on, musical practice: “My research will change a specific area of my practice and probably inform other aspects. There are always flow on effects” (6). For these respondents, the distinction between “research” and “practice” meant that it was possible to conceive of practicing musicians who did not engage in research; “Research may help the musician to know the context of his/her profession better than the musician who does not do research” (7). The existence of these differing definitions of “research” was explicitly recognized by one interviewee as follows: “Over the course of my academic career my understanding of research has moved from a traditional view that academic musicologists were the ‘researchers’ to a broader view that research is valid for musicians who are also performers, educators, composers etc.” (8).

While the majority of respondents considered their interest in research to be their primary reason for undertaking postgraduate study, some respondents suggested they were mainly motivated by the practical side of their careers as musicians; “The original-research aspect of my degree is only part of a greater whole which I'm pursuing” (9); “Research is important – but personally to me it is more important to play the cello” (10); “Being a student allows more flexibility and freedom than full-time work, this makes it easier to better yourself as a freelance musician” (11).

Some respondents gave answers that suggested their feelings on the subject had changed since beginning academic study and that their interest in research had increased; “When I first started the degree it [research] wasn’t really [important to me], but I’m discovering a whole new world. It’s really exciting, and I’m finding it very relevant to what I am doing with my playing and also interesting in and of itself, which I hadn’t really expected” (12).

Some of the respondents whose main reason for undertaking the degree was their interest in research expressed a desire to continue their research after finishing their degrees irrespective of employment outcomes, while other respondents expressed a desire to seek employment in a tertiary institution.

Financial aspects

Economic considerations for taking up a higher research degree were a factor for many participants. Some participants mentioned government-sponsored enrolment as reason for taking up the degree: “Economically, a research degree that didn’t attract fees was a feasible way of approaching this aim” (9). There was a sense of foreboding in two references: “Do it while it’s still free” (13); “Because I’m concerned about the change of government funding for HDR and wanting to finish my HDR before it becomes very expensive” (11).

Government-sponsored positions in research degrees also provided participants with resources they would not have been able to afford otherwise. The resources mentioned included access to instrumental lessons with a chosen teacher, access to research material, papers and infrastructure: “The reason why I am doing a research degree is because I don’t have the guidance myself, or the infrastructure, or the facilities” (4). Access to free education in combination with a scholarship allowed one participant to fully concentrate on her practice without the time constraints of outside employment: “I would not have to work for two years leaving me with more practice time … Being a student allows more flexibility and freedom than full-time work. This makes it easier to better yourself” (11).

A brief intermission – The expert musician

The notion of an “expert musician” is a core feature of both of the following themes; achieving a certain level of musicianship had motivating factors which corresponded to both personal and professional spheres.

Many participants answered that they did not feel that they can be classed as expert musicians. One participant felt uncomfortable with the question and chose not to answer. Of those who felt as though they were not expert musicians, most described themselves working towards that status: "I wouldn't describe myself as an expert musician at this stage, but I'm moving closer towards it" (2); "I'm hoping that at the end of my degree though I will have developed some expertise" (12). Some participants were not comfortable with the term 'expert' and felt that the term didn't fit their view of self: "I certainly don't feel that I'm an expert musician. It's hard to define because – how do you narrow the field of expertise? I'm pretty good at playing jazz bass but does that make me an expert musician? Or just an expert at jazz, or an expert bassist? All those things imply a different kind of 'expert' and I don't feel like I truly fit into any of those 'expert' categories" (14).

Professional experience over many years, peer recognition and the "ability to demonstrate sophisticated principles and practice in the pertinent areas" (15) are the main defining reasons for those participants who clearly classed themselves as 'experts'. They also agreed that the learning process is ongoing, or as one participant articulated: "Perhaps an expert is just someone who doesn't stop learning". Other participants suggested that having gained a degree was the defining factor of being an 'expert' and the view was expressed that "Everybody is an expert – so am I" (16).

Both groups, 'experts' and 'non-experts' had similar views on what attributes define the term 'expert': specialised knowledge and experience in all areas of musicianship, longevity in the work force (time was a factor for all but one participant), peer recognition, knowledge through professional employment, confidence in their own knowledge and abilities, the ability to pass on knowledge through teaching, never stops learning.

Professional development

The opportunity for continuing professional development was a significant motivating factor for respondents to enrol in a research higher degree. While respondents were at various stages of their professional careers, many perceived a research degree as the next logical step in their own professional development. Seeking recognition of experience was also a significant motivating factor for respondents to enrol in a research higher degree. A post graduate academic qualification is increasingly seen as a necessary pathway to acknowledge many years of professional industry experience and to ensure current and future employment.

The opportunity for networking was identified by some respondents as an important factor, though not as often as the opportunity for professional development and the recognition of experience. Some participants believed that postgraduate studies increased their likelihood of acquiring an industry-related job: "To increase my market value through increased skills and knowledge also played a part" (9); "it is imperative for future employment opportunities" (17).

One participant expressed this view with more detail: "Having a DMA after my name is an outside validation that I achieved something in my life. A research degree is not a warranty for successful job applications but, in my experience, not having this degree presents a definite disadvantage for future employment possibilities" (18).

Some participants stated that the skills they were learning in research degrees were directly applicable to their future careers: "I intend to use my newly-acquired knowledge very concretely in my professional life. It has even after a short time already begun to influence and change my existing practices, both in the way I play, as well in the quality and content of my teaching/coaching" (9).

However, for others, positive effects on a career path were recognised as a possible benefit of self-improvement, but did not appear to be the main motivating factor; "to shed ideas that have been haunting me; to have the space and time to try and fail and to hone my

skills and ideas; to meet new people and experiment with new ideas; to improve as a writer and as a speaker; and to extend the possibilities for employment" (19).

Personal motivations

Participants tended to respond more strongly when asked about personal motivations for undergoing research based study. These took a variety of forms, from the abstract passion for learning and understanding to more concrete benefits in the improvement of the craft which many participants valued.

Expanding knowledge was an important factor for many participants. "Very importantly for me, I undertook this to fulfil a dream, the result of a passion which hadn't yet developed at the time of my undergrad degree but became gradually clearer the longer I worked professionally in my field ... it has great symbolic value for me too to embark on this" (9).

Other respondents acknowledged that research was in some ways refreshing and stimulating for the mind: "I wanted to stimulate myself intellectually (and aesthetically) after years in the profession" (9), "I find it refreshes me, reconnects me, gives me a different outlook and takes me out of myself" (17).

Participants felt strongly that research allowed them to contribute to their own knowledge by improving their skill base and becoming better musicians or researchers in the process: "My phrasing, expression and structural understanding has already widened and I hope this will solidify" (9); and "Research may help the musician to know the context of his/her profession better than the musician who does not research" (7).

The desire to learn was explicitly expressed by some participants: "I think I have a passion for understanding and trying to know. Research is the formalised outcome of that informal desire" (4); and "I had encountered unanswered questions in my readings, which I felt the need to answer or at least explore myself" (1). The idea of expanding one's knowledge base to further related areas of research proved important to some participants: "I was intrigued to be able to continue investigations in the topic of sustainability, but in an area that I had not previously investigated – music" (2).

A desire for self-improvement was a strong motivating factor for undertaking the degree, and this desire was evident in answers of all research subjects. In some cases, self-improvement was an end in and of itself: "I love learning and feel that I want to broaden my education. … I find it refreshes me, reconnects me, gives me a different outlook and takes me out of myself" (18); and "Having the opportunity to study with expert teachers (and take classes) forces me to think outside my current field of knowledge and challenge myself in new ways" (14). For others, the desire for self improvement was linked with the desire to master a specific skill or creative practice: "I'd like to become a better cellist" (20); "As a jazz/improvising musician, research offers an opportunity to pursue an original 'concept' which will become a unique tool in my toolbox of ways of understanding and improvising music" (14).

This self-improvement was most often explored by participants in terms of the ways in which research benefitted their musicianship. Respondents who defined themselves primarily as music performers, composers, educators or creative artists, and who are enrolled in a practice-led research degree responded favourably when asked how they expected research studies would change their musicianship. The majority of these respondents indicated that their musicianship had already been influenced in a positive way since their enrolment in the research degree and also believed that their musicianship would continue to develop considerably over the duration of their research degree. However, respondents who defined themselves primarily as music researchers or musicologists, where research output is not directly related to musical output as a performer, composer or creative artist, contested the

relationship between practise and research. One respondent clarified their response by stating that their primary goal was not to improve their musicianship but rather "research to understand people" in the context of ethnomusicology or ethnography (4).

Altruism/contribution to knowledge

Two major viewpoints emerged from the collected data about how the participants understood the meaning of 'contribution to knowledge'. The participants expressed the need to contribute to their own knowledge base, which can be described as betterment of self, and also a strong need to contribute to the knowledge base of their expert community or the public in a broader sense, which can be described as giving back to others. Betterment of self was seen as prerequisite for giving back to others.

Many participants felt a deeper sense of purpose to benefit and inform society in a broader sense: "but what I do, I feel as though it has some level meaning, it's not lost in thesis land, I think it's a far cry but I feel it could benefit society in practise" (21); "What I'm hoping it will do is give me the opportunity to perform repertoire, to perform music like this newly discovered composer. So it will increase new repertoire and in turn I will hopefully be able to introduce that repertoire to other people, organizations, orchestras" (22).

One participant felt particularly strong about educating the public and removing popular and scholarly misconceptions about the stigmatised music culture of a particular music scene: "The main reason why I did research was because… the people that who represent the music and the culture that I know really well were constantly being misrepresented" (4).

Participants wanted to contribute to the existing knowledge base of their expert community by closing gaps within existing knowledge: "After research I will have thought about different ways of doing things and may be able to offer alternatives to the current practices in band methodology" (1); "By bringing a solid knowledge base to a particular area of my professional life… which otherwise receives very little scholarly attention and is exercised without much historically structured knowledge in the wider profession worldwide" (9).

Passing on knowledge through teaching was also a common aspect of what participants wanted to achieve with the knowledge they gained: "Devising exercises for transition between baroque and classical instruments. Also helping her with strategies to help students move between systems" (11); and "informs my role as a teacher, especially regarding career development of my students" (18).

Discussion

In common discourse there are clear distinctions between intrinsic motivations and extrinsic motivations. Extrinsic describes motivation that comes from outer, external sources. For example, a paid gig at a wedding is an example of extrinsic motivation because the focus is not on personal accomplishment, but rather on the monetary reward. Conversely, intrinsic refers to motivation that originates from internal sources. Learning how a car engine works out of sheer curiosity and/or interest is an example of intrinsic motivation. In the scholarship on motivation, however, Self Determination Theory (SDT) classifies motivation as both intrinsic and extrinsic, and acknowledges that both types of motivation can co-exist with each other. For instance, if a clarinet student practiced her scales daily in her preparation for a scholarship examination, then her motivation could be both intrinsic and extrinsic – to increase her musical abilities and to win the scholarship. In order to acknowledge the occurrence of intrinsic and extrinsic motivation co-existing together, SDT situates these types of motivations on a continuum, with a-motivation on one end of the pole, extrinsic motivation

in the middle of the same pole and intrinsic motivation at the opposite end of the pole (Ryan & Deci, 2000).

In the responses for the interviews conducted, participants tended to express intrinsic rather than extrinsic motivations for undertaking a research degree: “That’s why I’m doing it. You are constantly learning, it’s a lifetime ambition. This is another part of the learning process” (23). The idea of life-long learning, curiosity and personal interest were mentioned at many points in the interviews. It is telling that the largest section of the findings was concerned with intrinsic motivation and personal development. This agrees with the findings of Guerin et al. (2015) and Harrison (2011) which stress the importance of personal, intrinsic motivation for students undertaking further study.

The separation between professional and personal development is not entirely clear-cut when it comes to musicians. Because of the very personal nature of their craft, and the importance of its quality for their future employment, the difference between professional development and personal development can seem arbitrary at times. A musician who strives to improve themselves as a musician is also improving their career prospects as a musician: the same act has multiple benefits from its outcome, and thus may conceivably have multiple motivations.

The motivators of professional development are varied. Some students must engage in full-time study to maintain a financial scholarship. Others need a higher research degree to gain or maintain employment, or to advance in their workplace. Then there are less concrete factors including broadening experience in the industry and increasing one’s network of contacts. While students acknowledged the benefits and limitations in the professional sphere of undertaking research degrees, many did not cite these factors as governing their decisions to undertake research degrees. In fact, as the results for the financial theme of the previous section demonstrates, participants were more likely to be limited by financial aspects, and less concerned with potential future financial gains.

From data collected in this study we see that musicians contemplating a research degree are strongly influenced by their individual pursuits of self discovery and intellectual stimulus. These are intrinsically internal motivations for undertaking research. Most participants seemed fascinated by and drawn to the complexity and creativity of musical achievement, and found themselves nourished and challenged by the rigours of an academic discipline of a research degree. Some musicians, as a direct result of their research studies, discover a marked improvement in their own creative expression and disciplines.

The results found by Harrison (2011) in his study of music students categorised altruism as one of the four main motivations of musicians undertaking a research degree, an aspect that is also reflected in our results. This also relates to the ability of performing musicians sharing their knowledge with fellow or aspiring musicians, or feed their expert knowledge into scholarship, as outlined by Parmer (2007). It is interesting to note that in the wider disciplinary context of the study by Guerin et al. (2015), altruism was not identified as a motivating factor for undertaking doctoral studies in a variety of faculties of Australian universities.

An interesting conclusion from this study, then, is that the motivations for people to undertake higher degree research studies in the field of music may show some significant differences from the motivations of people in other disciplinary areas. Further study of a larger and more varied group of research students would be one way of investigating this intriguing question.

Acknowledgement
This paper was the joint efforts of 24 Masters, DMA and PhD students from the Sydney Conservatorium of music who were participating in Anna Reid’s advanced research seminar

class, “Thinking Research”, which aims to develop students’ ways of thinking about research. The research project and the preparation of this article gave participants an authentic experience of research directly relevant to their higher degrees. All members of the class were involved in the complete process, and learned at firsthand about the joys (and the challenges) of collaborative endeavour.

References

Abuhamdeh, S., Csikszentmihalyi, M., & Jalal, B. (2015). Enjoying the possibility of defeat: Outcome uncertainty, suspense, and intrinsic motivation. *Motivation and Emotion, 39*(1), 1-10. doi:10.1007/s11031-014-9425-2

Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development.* Sage, London, UK.

De Hoyos, M., & Barnes, S. (2015). *Analysing interview data*. Warwick Institute for Employment Research. Retrieved from http://www2.warwick.ac.uk/fac/cross_fac/esrcdtc/coretrainingmodules/quals/analysing_interview_data_1_-_w6.pdf .

Draper, P., & Harrison, S. (2013). Artistic research training in music: Perspectives on pedagogy, higher degrees and professional practice. *Edulearn 13*. Retrieved from http://www.researchgate.net/profile/Paul_Draper/publication/274898488_Artistic_Research_Training_In_Music_Perspectives_On_Pedagogy_Higher_Degrees_And_Professional_Practice/links/552c49970cf21acb0920c6aa.pdf.

Draper, P., & Harrison, S. D. (2011). Through the eye of a needle: The emergence of practice-led doctorates in music. *British Journal of Music Education, 28*, 87-102.

Gembris, H., & Heye, A. (2014). Growing older in a symphony orchestra: The development of the age-related self-concept and the self-estimated performance of professional musicians in a lifespan perspective. *Musicae Scientiae*, *18*(4), 371–391. Retrieved from http://doi.org/10.1177/1029864914548912

Guerin, C., Ranasinghe, D., & Jayatilaka, A. (2015). Why start a higher degree by research? An exploratory factor analysis of motivations to undertake doctoral studies. *Higher Education Research and Development, 34*(1), 89-104.

Harrison, S. D. (2011). There's a fine line between pleasure and pain: Why students enrol in higher degrees in music and music education. *Australian Journal of Music Education*, (1), 66-75.

Harrison, S. D., Draper, P., Barrett, M., Burnard, P., & McPherson, G. (2010, 1-6 August). *Supervising practice-based research higher degrees in music.* Symposium at the 29th International Society for Music Education (ISME) World Conference, Beijing, China.

Langley, A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, *24*(4), 691-710.

Manturzewska, M. (1990). A biographical study of the life-span development of professional musicians. *Psychology of Music, 18*(2), 112–139. doi.org/10.1177/0305735690182002

Parmer, D. R. (2007). Musicology as epiphenomenon: Derivative disciplinarity, performing, and the deconstruction of the musical work. *Repercussions*, *10*, 8-56.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology, 25*, 54-67.

Shaw, K. (2011). The PhD problem: Are we giving out too many degrees? Retrieved from http://arstechnica.com/science/news/2011/04/the-phd-problem-what-do-you-do-with-too-many-doctorates.ars .

Shulman L.S. (1998). Course anatomy: The dissection and analysis of knowledge through teaching. In P. Hutchings (Ed.), *The course portfolio: How faculty can examine their*

teaching to advance practice and improve student learning (pp. 1-18). Washington, DC: American Association for Higher Education.
Throsby, D., & Zednik, A. (2011). Multiple job-holding and artistic careers: Some empirical evidence. *Cultural Trends, 20*(1), 9-24. doi.org/10.1080/09548963.2011.540809
Trigwell, K. (2013). Evidence of the impact of scholarship of teaching and learning purposes. *Teaching and Learning Inquiry: The ISSOTL Journal*, *1*(1), 95–105. Retrieved from https://muse-jhu edu.ezproxy1.library.usyd.edu.au/journals/teaching_and_learning_inquiry__the_issotl_journal/v001/1.1.trigwell.html .

Appendix A

Q1. Why do a research degree as expert (professional) musician?
Q2. What does research mean to you?
Q3. Why did you enrol?
Q4. What do you want to do when you finish? How will your research experience help?
Q5a. Do you feel that you are an expert musician? How do you define that?
Q5b. How do you think your practice will change because of research?
Q6. Is research important to you and why?
Q7. How will research inform your area of expertise how do you expect your research?