

Module BMPF7008 Work based learning project

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Project Proposal

Project Title: 'How does performance anxiety effect the aging voice in both amateur and professional female voices?'

Context

Aging voice in research has been covered by the likes of Sataloff (1987), Linville (2004) and Rayapati (2008), but this has been focused around symptoms of aging voices in both male and female participants. In my practise, my clients are female students ages 50 years and older, of amateur standard. Their performance anxiety seems to increase as they get older, as per self-reports. I am looking to expand research on performance anxiety in the aging voice, and whether this differs between amateur and professional singers. I hope through this research, I will be able to investigate whether there is a way of identifying performance anxiety triggers for amateur and professional female vocalists, and offer support systems for both pathways.

As a singing teacher, the support I offer all my students needs to be knowledgeable and up to date with any existing research. The aim of the study is to research and deliver information that can assist mature female vocalists in how they tackle any performance anxiety they may encounter, to minimise loss of enjoyment and loss of earnings through performance.

Justification

The research surrounding aging voice and the symptoms associated is in depth, and constantly being updated such as Kost & Sataloff (2020). I wish to look further into this to see whether there is a direct correlation between aging voice symptoms such as breathiness, and performance anxiety. I also want to research into whether this differs for professional and amateur female singers. There is some research surrounding the aging voice solely on female singers, such as Shaheen (2006), but this project will help to identify whether further investigation into this area is needed.

Intended Impact

If aging female vocalists, both amateur and professional, could be informed on how performance anxiety can affect their singing as they age, then this could help to eradicate any fear over singing during aging. An informed training programme could be devised for both professional and amateur singers. Research has shown that a multitude of symptoms and voice problems increase significantly with age (Vaca et al, 2015). Expanding this research in an amateur environment could continue to assist performance institutions, communities and private tutors on how to deal with anxiety surrounding aging voices for female vocalists, applicable to their demographic. For professional vocalists, this could help to overcome any anxieties that could hinder professional work and therefore hopefully lessen the need to stop working, or lose on earnings. Overall, any research showing that vocal aging symptoms, and performance anxiety, can be managed will ultimately improve student welfare.

Outlined Intention

I will conduct a literature review into aging female voices and the perceived vocal symptoms. I intend to recruit 10 adult amateur female vocalists, 5 amateur vocalists and 5 professional vocalists, from my local area, social media groups, private tutoring lessons and local amateur theatre groups by using stratified sampling (Teddlie & Yu, 2007). A cover letter and consent form will be sent to participants who volunteer for this project by approximately end of April. A 20-question survey will be sent out online which will consist of a mix of closed and open questions about any symptoms of aging voice. The remaining questions will be about the participants' experiences with performance confidence currently and whether there is any correlation. Interviews will be followed with the participants if they are able to contribute to this, which will be recorded and transcribed.

I will amalgamate all the results into a report and analyse and discuss these findings, alongside my presentation.

The Ethics and Insider Research

As this research requires qualitative methods (survey and focus groups), I am aware I will be an 'insider' researcher, and this may influence the data from participants (Breen, 2007). As participants are from my local area, this might lead to a loss of objectivity (Delyser, 2001). By using a survey with closed and open questions, the answers might promote detail and a more objective approach from participants. Due to this research being work-based and understanding this project aims to give a voice to all participants' (Reed & Proctor, 1995), the interviews may also encounter insider research and ethical issues. Participants may feel as if they are overly sharing, but it is important to allow all participants to have a say. As a researcher I must remain unbiased and just observe in the focus groups. It is likely sensitive topics will be spoken about, relating to performance anxiety and confidence, and de-brief will be offered after these interviews to help manage any potential traumatic experiences recalled. All participants will have an identifier for anonymity.

Personal Learning Outcomes

- Experience in conducting research to better any future research projects into performance anxiety in aging female vocalists, and improve the process.
- Use findings to set a basis for further research into the symptoms surrounding aging voice and performance anxiety, and its applications for amateur and professional vocalists, and for my private tutoring lessons.
- Have more insight into potential differences within my student base, to see whether different curriculum is required to support both of these types of mature female vocalists.

	AUG 2024		SEP 2024				OCT 2024				NOV 2024				DEC 2024				JAN 2024	
Contemplate title and agree on module title with tutor																				
Aims and objects to be agreed and written up -																				
Lit & book Review – forming Portfolio with methodological approach																				
Survey questions formed, approved and sent out – awaiting results																				
Review & Analyse data																				
Conclude & Reflect on process																				

[illegible]

Project Report

'In mature female vocalists, how does performance anxiety affect amateur vocalists compared to professional vocalists?'

Introduction and rationale from the context of my work-based practise

The nature of the voice aging is an inevitable part of a vocalist's life. As a human being, the body ages naturally and the impacts this has on the voice throughout different stages of life can vary. For both male and female vocalists, as the body ages through childhood, puberty, adolescence, adulthood and older age, many physical and mental changes will take place (Nelson, 2008). Aging in itself, not just vocally, creates a mix of emotions, physical symptoms and mental symptoms, and the rate and severity in which individuals experience aging and its symptoms, is caused by a balance of environment and heritage (Harman, 2001). This balance is very fragile, with many external and genetic factors effecting the nature of aging in individuals from all over. Over thousands of years, the average human lifespan has increased and therefore aging has become a longer process, with a longer time for age-related symptoms to appear and develop (Kohn, 1985). When discussing aging from a vocalist's perspective, it is important to note that the aging process also effects the voice on an individual basis. Not only are there many physical symptoms associated with aging such as joint pain, mobility loss, increased fatigue, incontinence, memory loss, anxiety and depression, specifically for vocalists, there are aging laryngeal symptoms that result in a lack of vocal control, power vitality and agility (Linville & Rens, 2001).

Throughout my previous research studies, as well as exploring adolescent voices, I have looked at the symptoms during menopause and how this may link to performance anxiety in mature female singers. Females spend their entire lives dealing with hormones as they move through childhood to adolescence and finally to adulthood, and during the menopause the symptoms that relate to these hormones such as loss of power and pitch difficulties, contribute to the development of voice (Abitol et al, 1998). Moving forward again to the later stages in a female vocalists life, the symptoms during menopause such as lowered pitch, hoarseness and vocal dysfunction were due also to the imbalance in hormones that are associated with the menopause (Abitol, J 1989). The intensity and sudden change of menopause can put a lot of pressure on an individual, with no certainty of what the symptoms will be and how severe the individual will experience this. Alongside the mental and social implications of menopause, can lead to increased chances of anxiety and depression (Monteleone et al, 2018). Social implications of this aging process, which can be quite public, can lead to individuals questioning self-identity. Barefield (2012) outlined the fear that singers can experience when their voices do not align with what is considered 'normal'. This fear of unusual vocal timbre or resonance can create anxiety to sing out in groups or on their own, and a series of bad singing experiences could magnify the fearful response and create anxiety specific to this experience. Research on this show in some reports that menopause anxiety is its own experience, and should be treated as such (Sharon, 2006). Much of the research around performance anxiety in mature vocalists is outlined being a fear of failing during performance, and this in turn can affect tonality, pitching abilities and memory (Clark, 2002). This is potentially detrimental to the wellbeing of mature female vocalists, perhaps even resulting in feeling the necessity to 'quit' due to not being vocally confident or good enough. I felt it was necessary to revisit this research I previously conducted as part of my literature review (Hallam 2023), because this research project also touched upon similar topic of performance anxiety in women. The research I looked into regarding menopause would also be impactful for this research project to aid in a smooth process of analysis, and helps to demonstrate existing knowledge surrounding the topic.

For this research, I will be investigating how performance anxiety can affect mature female vocalists for both amateur and professionals, and I will be analysing whether the symptoms of performance anxiety are manageable in older female singers. During a preliminary search, I could see quite clearly that there is evidence of a gap in the literature currently, where there might be potential differences in the effects of

performance anxiety in older female singers that have not been considered in amateur and professional vocalists. A large amount of current research shows the aging symptoms having a link to performance anxiety (D'Haeseleer et al 2009, Linville & Rens, 2001, Raj et al, 2008), and I intend to explore and expand upon this research whilst still interpreting data in relation to the different levels of profession in singing. The potential differences in how performance anxiety can effect these types of vocalists, and the impact it has on their work and life balance, is a grounding start point not only for the project, but for my own practise. By investigating this further, I hope to develop a more holistic view into the life of a female vocalist past the age of menopause, giving a guide on how to navigate potentially uncertain times for both professionals and amateurs. Potentially the downfalls of this study will be the vast amount of information there is on subjects similar to my research question, but not being entirely accurate in regards to the question I am asking. Performance anxiety in itself is a broad and varied subject, and can delve into different parts of the umbrella term of anxiety itself, not all of this will be relevant to my research. Data collection and coding will be imperative and time consuming to be able to make a clear link between these two topics on the voice, as I am looking for specific phrasing and key points in regards to performance anxiety in both professional and amateur vocalists.

Another important aspect of this research project, was its application to my practise and work. To assist my students in the most efficient format, it is important to have the extensive knowledge. This research project is relevant to my practise because my primary student base are cis-female singers aged between 30-60 years of age, and all my mature students are female. These students have mentioned on multiple occasions the concerns of performance anxiety increasing with age. My aims as a vocal coach are to enhance my students singing experience regardless of age or ability. With lack of knowledge surrounding performance anxiety, and its potential links to the mature female voice, many of my students have become fearful or apprehensive in how they approach repertoire for work, and for amateur dramatics. I have students that are professional and are regularly participating in paid vocal performance work, and amateurs who sing regularly recreationally in local theatre groups and choirs. The existing research could be expanded to include and explain the potential differences between professional and amateur vocalists and how they navigate physical and mental changes during the aging process. By doing this, a strategy to help combat performance anxiety in aging female vocalists could be conducted and become a regular part of the conversation surrounding aging female voices. Research that allows a 'one size fits all' approach to anxiety and

symptoms surrounding aging female voices, exclude the individual experiences of the vocalist.

Within my community there are many amateur theatre groups with a range of ages of female performers and vocalists, as well as professional cabaret vocalists within the area. By expanding the existing research to include a view of performance anxiety from both pathways (professional and amateur), and to put the findings of my research project into practical and public use, there may be a way of supporting these vocalists and creating a guide to performance anxiety. For amateur vocalists, supporting this part of the aging voice potentially could result in decreased numbers of vocalists 'retiring' from the amateur dramatics scene due to anxiety, and for professionals there may be a way to prevent a loss of earnings through 'retiring' from paid vocal work. The social implications for the general public if these scenarios took place could result in losing these groups that provide opportunities for those individuals who want to get involved in theatre, as well as losing the evenings for the public who may not get out otherwise.

Another important factor surrounding performance anxiety is the potential loss of earnings for professional vocalists. This could have a negative impact on the individuals' dependents, and lifestyle quality. Research shows that an increase in anxiety and mental health disorders, have a link to an increase in loss of earnings (Kesser & Greenberg, 2024). For professional vocalists, anything that hinders performance has the potential to hinder confidence and therefore, income. This in turn could then increase anxiety and depression, and reduce further quality of life.

There are some recent studies surrounding the discussion in performance anxiety when considering amateur and professional musicians. Castiglione et al (2018) outlined that there are individual, social and situational factors in musicians that may trigger performance anxiety. They considered that the high levels of training that professional musicians go through over many years, may create a higher level of expectation in the self and from others, and therefore the pressure to maintain this high level of quality throughout life can create anxiety surrounding performance. Kenny (2011) added to this by stating that many highly renowned musicians worldwide has suffered from high levels of performance anxiety, such as Frederic Chopin. Their research explored the potentially damaging effect performance anxiety has both physically in the music that they create, and psychologically with lack of self-esteem. I intend to explore this research further, and attempt to map out the gaps in this research relating to female voice during aging,

and whether performance anxiety is experienced differently for professional and amateur vocalists.

The application of this research project, could help to support those aging female vocalists who are professional working musicians, and allow them to extend their careers well into their later years. It could also help to support aging amateur female performers to feel confident in their abilities, and notice the signs of performance anxiety so that they can keep enjoying their hobbies and performance-related pass times. Knowledge on this subject that is easily accessible and available to all types of female performers could help to eliminate anxiety around aging, which may reduce anxiety-related symptoms that occur during menopause and the aging process.

My intended idea is to collate the information, and then if the research shows clear correlation between performance anxiety and aging, and how this differs for amateur and professional female vocalists, to put together a refined plan of vocal exercises and relaxation techniques to help fight performance anxiety in aging female vocalists.

Planned Programme of study

Learning Objectives:

- To review the current literature on performance anxiety by searching through existing literature and identifying key articles relating to these subjects.
- To understand the potential link of aging being a common factor for increased anxiety when performing, through extensive analysis of existing research and literature and creating mind maps to cross-reference the research and find a potential link.
- To create a plan to tackle these anxieties in both professional and amateur mature female vocalists., by outlining symptoms of the menopause and anxieties, and creating a programme of information for those who are suffering with anxieties through aging.

Personal Objectives:

- To widen my knowledge on performance anxiety and singing and improve my existing knowledge.
- To understand the factors involved in performance anxiety when teaching mature females who suffer from this, so that I can personalise lesson plans to work with students on tackling symptoms.
- To better my practise and lessons making myself a more inclusive coach, with potential to further my practise specifically with aging female singers, from professional and amateur backgrounds.

Throughout my research, there may be indicators to suggest themes such as ageism, confidence, and potentially psychological challenges such as shame surrounding aging symptoms, loneliness and mental health issues. I intend to explore any themes that present themselves throughout my literature review, and use these as a basis to structure my survey questions. However, it will be important to remain unbiased and also sensitive to some of these subjects with my participants. Due to this research project being primarily qualitative, the data I collect through this research project will be descriptive data based on participant experience and emotion, rather than quantitative data. Using qualitative methodologies and methods of data collection, such as mixed open and closed survey questions, I hope to create a holistic view of the experiences of mature female vocalists. This research project intends to explore the role of performance anxiety for these types of vocalists during aging, and I hope to be able to put together a guide for mature female vocalists from both professional and amateur backgrounds, to support them throughout aging.

Methodology & Methods

Methodology

For this research project I chose to use my knowledge from previous research papers, where I used mixed methods, and decided to focus more on qualitative methodologies. Using qualitative methods helps the researcher to approach topics with multiple ways of interpreting data, seeing and hearing the world, multiple ways to make sense of the world, and multiple viewpoints on what is valuable (Greene, 2008).

Due to the nature of the research project, to investigate participants' life experiences and perceptions regarding aging voice change I understood that participant's answers may potentially provide descriptive data. This type of data allows large amounts of descriptive data to be stored, on the account of the participants' experiences of the situation in question. In this instance, I looked for individual experiences of a period in female singer's lives, and whether they believed these experiences shaped their vocal perception or impacted their performance confidence. This aligns with the constructivism research paradigm, with my view that multiple experiences and realities can exist for the participant, and that information is interpreted by their subjective accounts. This allows for the participant to have full control over what they disclose and allows the data to explore participant's beliefs (Amineh & Asl, 2015).

Sampling

Sampling is an important part of the process of research as it represents a section of the population (Acharya, A.S., Prakash, A., Saxena, P. and Nigam, A., 2013). Most research studies require a fair and equal sample to represent the population, but for my research project my research sample was already quite specific as my question related to female vocalists aged 45 and over. This immediately presented me with an issue, as this research project would only be applicable to these women, and as I was sharing the project on social media local to me, it would only be applicable to the female vocalists over 45 years of age, in my area. This is a discrepancy with the validity of using a specific sample (Maddison, C.J., Tarlow, D. and Minka, T., 2014).

I chose to define my sample by age and profession, which was over 45 years of age, female vocalists who were both amateur and professional. I was looking for 10 responses for each professional status (amateur or professional) each. I defined amateur as those vocalists who took part in amateur theatre or vocal groups and who were not paid for their performances. I defined professional as vocalists who were paid for their work and frequently had vocal jobs over the course of the month (4 -5 jobs a month as minimum). I advertised this survey on social media platforms and amateur / professional support groups online. As a result my sample was restricted again to those female vocalists who were using social media, and therefore did not accurately represent the female vocalists over 45 years old in my area. The inclusion/exclusion criteria was mainly demographic. This was as follows:

Inclusion criteria	Exclusion criteria
Female-identifying persons	Male-identifying persons
Over the age of 45 years	Children/Adolescents/Young Adults
Professional or Amateur vocalists	Non-Vocalists

Although I wanted to use probability sampling, such as cluster sampling where the researcher tries to capture smaller groups of the larger population (Etikan, I. and Bala, K., 2017), due to the way I advertised my survey on particular social media groups that I was already a part of, it was really hard to keep my sample unbiased.

Methods

Survey

Typeform, which is an online questionnaire generator, allowed me to create a mix of questions. Some of the questions allowed students to type their own answers in a text box (qualitative), some were multiple choice and some were singular choice (yes or no) questions (quantitative). This mix of different types of questions helped to gain data that could be broken down and stored in graph or numerical format (quantitative), and some helped to gain expressive and descriptive data from participants to give their own insight (qualitative) (Migiro et al, 2011). I created a survey with 15 questions that surrounded Performance Anxiety for aging female vocalists. The survey questions were based around some of the existing research on aging voices and performance anxiety, but some of the initial questions were based around the sample. I tried to capture two types of sample in one survey, which was difficult to adhere to 15 questions with. Early questions asked if the vocalist was amateur or professional, and through TypeForm's analytical tools, I could follow the chain of answers for each participant, whilst all answers remaining anonymous. (See Appendix A)

The survey was put onto Facebook and Instagram, and was advertised as a questionnaire open to female singers who had been singing since both in amateur and professional formats, over the age of 45 years. I chose this age bracket as existing research showed that mature vocalists are usually marked around 55 years and above,

but from my previous research I was aware that for females, the aging process (menopausal stage) can begin as early as mid-forties. This was shared to a number of local amateur groups as well as specific Facebook community groups for professional vocalists looking for work. The survey went out on the 20st of August 2024 and was live via the Smart Survey website for one month exactly.

The questionnaire had 15 questions including a final text box to add any comments (Table 1). Typeform allowed complete anonymity with the answers given, the only answer that was not anonymous, was the final question asking for email addresses to be given only if participants were happy to contact, or needed to contact myself. All participants had to pass through a consent window to be able to take part in the quiz, this consent window outlined the study and the right to withdraw, anonymity and that post-survey contact was not a mandatory part of this study.

(Appendix A)

1	Are you an amateur (unpaid) singer or professional (paid) singer? Please state the nature of your work/performance? (Multiple Choice)
2	What is your age? (Multiple Choice)
3	How many years have you been singing? (Free text)
4	Have you ever received professional 1-1 vocal training? If yes, for how long? (free text)
5	How frequently (hours per week) do you sing/perform? (free text)
6	Performance anxiety is a symptomatic affliction surrounding performance, effecting the individual both physically and psychologically in a negative way. Have you experienced any performance related anxiety as you have got older? (free text)
7	If answered yes to the previous question – please can you outline when this anxiety began and whether it's ongoing? If not – just put N/A (free text)
8	If answered yes to the previous question – please can you outline what you believe causes this anxiety? If not – just put N/A (free text)
9	If answered yes to the previous question – please can you outline any emotional/psychological symptoms of this anxiety? if not – just put N/A (free text)

10	If answered yes to the previous question – please can you outline any physical symptoms of this anxiety? if not – just put N/A (free text)
11	If answered yes – do you believe that this anxiety has increased in intensity with age? Please give as much detail as possible. If not – just put N/A (free text)
12	If answered yes – do you have any methods of how to deal with this anxiety before or during a performance? Please include self-taught or professional methods. If not – just put N/A (free text)
13	If answered yes – does this performance related anxiety impact your performing (professional work or amateur involvement). If not – just put N/A (free text)
14	Would you be interested in more information being available to female vocalists about age-related performance anxiety? If so – please outline what you believe may help? (free text)
15	Please add any further details you believe are relevant to this survey? (free text)

For this survey, the majority of the questions had free text answers. Surveys are useful because they allow a researcher to capture responses from a large sample quickly, the survey is standardised as all the questions are asked in the same way with little deviation, and are relatively easy to code the answers for themes and key phrases that may be useful. However with open-ended answers (free text boxes) the range and variety of answers can be lengthy and complex, meaning analysing these can be difficult (Vaske, 2011).

Ethically this research project had all the correct parameters in place to be able to protect participant's identity and keep them informed of potential topics we would be discussing. Typeform allowed a completely anonymous data entry system, which meant that no names, emails or contact numbers were saved into any systems, and I wasn't able to access these at any point. My survey also had a front page that outlined the rights of the participant and what was expected of them.

"This survey is for female vocalists over the ages of 45 years of age - both professional and amateur. Please be aware that all of these questions are aimed to look at your experience as a mature vocalists, and will touch on themes of anxiety that some users may find uncomfortable. You are able to quit the survey at any time, all responses will remain anonymous via TypeForms user guide, and if there are any issues you are free to contact me at hollyhallam@outlook.com at any time."

Another weakness to surveys, is that when they are remote or postal surveys, there is no guarantee that the participant understood the question correctly. I have tried to avoid this by outlining questions clearly, and linking them to previous questions. Many of the questions are only applicable if the previous question was answered. However, the option to still answer these is available to all participants. Another weakness that is applicable to this survey is that with remote surveys, the sample had to actively participate through choice. This means that the data is only applicable to the small sample that were motivated to partake in the survey, and is not applicable to a wider more general sample of maturing female vocalists (Fricker, 2002).

Interview

The second part of my data collection was a non-compulsory interview. This interview was offered to participants who actively chose to take part in this part of the research. By making this non-compulsory, I did struggle to find anyone who would take part in the interview.

My interview questions were short follow on questions from my survey, allowing space for participants to choose to share their experience in more depth and detail to add to the qualitative data I collected through my survey.

These questions were:

- If you feel you can, can you expand on your thoughts and feelings around aging?
- If you feel you can, can you expand on your experiences as a mature female vocalist?

- If you feel able to, are there any things you felt you could have done to support yourself throughout the aging process as a vocalist?

Gil et al (2008) suggests that when considering interview questions, to start with easy questions to ease the participant into the interview, encouraging more open conversation, before hitting the harder questions. This interview was intended post survey, so there had already been simpler questions to answer, and these were just for more descriptive answers to support the information given in the survey. Similarly, Pontin (2000) suggests piloting the interview on a small sub-sample of participants to see how well the questions resonate with the participants without wasting time going through all the participants with little give back from the participant. Again, because this interview served as a post-survey expansion of description, this was not something I intended on doing.

Other factors I considered when approaching how I would conduct my interviews, was the understanding of body language. Research suggested that the non-verbal aspects of interviewer was highly impactful on the responses given by the interviewee (Frauendorfer & Mast, 2015). Nodding, smiling, use of affirming noises such as 'mm' in agreement and strategic use of listening and silence can all help a participant to open up and share information, whereas crossed arms, hard stare or talking too much caused the opposite effect (Gil et al, 2008). Also the level of feedback at the end of the interview, which allows participants to add any more detail to how they felt the process of the survey and interview went, similar to the debriefing process.

However, in this research project, none of my sample wanted to participate past the survey stage. This meant that I was unable to utilise any of the research surrounding interviews that I had looked into. This was potentially due to the interview being optional, so none of the participants felt inclined to go any further than the survey. Although this means I have less data to code than I initially planned, I still used my survey results for data coding.

Literature Review

The literature review surrounding the topics for this research project was extensive and expanded over multiple themes. This was to ensure that enough preliminary research

had been done to educate myself in order to form valid and relevant survey and interview questions, and to expand my existing knowledge on the aging voice.

The importance of a thorough literature review is evident through existing research. Even in early research such as Cooper (1988), it was outlined that literature reviews are specific to not only the research question, but the researcher themselves. Literature reviews can analyse and identify exhaustive, pivotal, representative and influential research, allowing researchers to have a complete and holistic view of the existing information surrounding their chosen research question (Torraco, 2016).

For this research project, I wanted to conduct an integrated interview, where new ideas are formed through analytical literature review on the existing topic (Torraco, 2016). These types of literature reviews are usually conducted in an area where research is rapidly growing and changing as time passes, this reason I felt like it was the best type of literature review for this research topic. This is due to the aging process for singers and how quickly things can change during this period of life. Also, performance anxiety is not a structured anxiety disorder, it can be different for each individual and doesn't follow linear patterns regarding intensity or symptoms (Jak, 2011). Literature reviews can also be used to answer a specific question, not just analyse a large amount of existing research. Kyndt & Baert (2013) stated that literature reviews can aim to provide exhaustive summaries of the data presented. I intend my literature review to be more systematic and direct, to explore the themes and topics that link to my research, whilst still allowing natural additional themes to become apparent. This could then extend my research if it is relevant to my question.

This literature review will be following a thematic method, with the themes surrounding the nature of the proposed research question being the central focus of the review (Stermann, 2001). The thematic approach still provides clarity and a coherent literature review. Additionally, by including visual aids such as mind maps, chronological timelines, can also help to synthesise new ideas surrounding the research topic. I intend to utilize these methods in my literature review, as well as in my research methods.

Torraco et al (2005), stated that there were two parts of a literature review that should be used to focus the review and to arrive at specific conclusions surrounding the research topics. These two focus points are critical analysis and synthesis. With careful critical analysis, some of the data that might be taken for granted previously, comes under new critique and review. This helps the researcher to lay down a strong

methodological viewpoint to approach their research question with. Through critical analysis, potential gaps in the research are identified, as well as areas where new and up to date knowledge is needed. Synthesis is the formation of new ideas and beliefs surrounding the research project. Focusing on synthesis allows the literature review to link together and review the research, not just report the existing data. I intend to amalgamate all these different strengths to my literature review methodology. In doing this, I should be able to extend any existing research and synthesise new ideas for the areas where some of the more specific data is lacking.

Literature Review

Introduction

Aging as a human is an inevitable part of life. We go through many stages as an individual, and as a vocalist. Throughout my research projects over the last few years, I have looked at multiple aspects of the life of a vocalist from childhood, through adolescence, surrounding menopause and now, the aging voice (Hallam, 2023). I have been drawn to explore and analyse the psychological and physiological journey of the vocalist throughout these stages, and how these have impacts on many different aspects of the individuals' life such as social interactions, anxiety and the impact of physical symptoms on emotional experience (Hallam, 2023).

By exploring the changes that female vocalists endure throughout their lives, we can create a holistic map surrounding female voice change for every stage. Much of the existing research shows thorough investigation into male voice change, particularly during adolescence (Harries et al 1997, Stupple 2007, Fisher 2014), but the female vocal map could be useful in assisting budding vocalists and prepare them for a lifelong learning curve with the relationship with their voice. Existing research for female voice change is recently evolving and expanding, thanks to researchers such as Gackle (1991), Abitol et al (1999, 2019) and Sweet (2015, 2020), where the research is being updated constantly. Covering the change at adolescence, through pregnancy, the menopause and the elderly voice is the start of mapping the changes that a female vocalist goes through both physically and psychologically. The implications of this research could extend to updated education in government support programmes, extensive information in local health services and early advice for all ages through

institutions, universities and community projects. Potentially by creating a 'life map' of the female voice throughout the life cycle of a female vocalist, could shape how institutions approach the voice, and how singers deal with the inevitable changes. This could reduce fear, reduce loss of income, reduce self-esteem issues and reduce performance confidence.

In this literature review I will be looking at performance anxiety and its effects relating to the aging female vocalist, briefly looking at the role of hormones, and ageism within theatre and the workplace. I hope to expand the research that already exists in this field, and to find any connections between the level of performance anxiety experienced in older female singers, both amateur and professional. The existing research surrounding musical performance anxiety (MPA) in professionals and amateurs already shows some evidence that there is a slight difference, such as Stothert (2012). This study included an in depth survey using a variety of question types (multiple choice, scale-like and open text) to delve into participants MPA using a varying degrees of anxiety (low, medium, chronic). The professional participants were identified as scoring lower in anxiety than the amateur participants. However, this research is for varying ages from 17-45 years in both male and female. I have focused specifically for the age bracket of 45 years and above, for mainly women.

Other research relevant to my literature review is the relevance of MPA and how aging vocalists view themselves in the eye of the public. On interview, singer Phil Collins noticed a difference in voice quality during aging, in a very public setting, and the mental hurdles he faced during this process (Collins 2016). Other popular musicians also commented that this decline of voice can be a crisis of self-identity, with the pressure of letting down audiences and record labels (Sloggy & Rowles, 2019). The fact that many vocalists, both professional and amateur, have usually been performing to a variety of audiences for some time, and that these audiences expect a certain quality of voice from that performer – as aging occurs, it can become increasingly difficult to maintain this vocal quality (King & Ritz, 2011). This existing research is relevant and visible for aging vocalists, but most is applicable to male and female counterparts. I hope to expand the focus on the aging female voice, and the specific connections to MPA, as well as looking at the potential differences for professional and amateur vocalists.

Aging Female Voice

For female vocalists there is an abundance of evidence that as we age, our vocal mechanism ages too. Most research shows a positive correlation between aging, and symptomatic changes in the female voice. Rens and Linville (2001) found that women demonstrate a substantial lowering of the voice, and evidence of age-related lengthening of the supraglottic tract. Women showing a lower habitual fundamental frequency when aging past 40 years of age, and after acoustic analysis, and vocal restriction with aging (D'Haeseleer, 2012). In a longitudinal study which focused on 20 female vocalists, where recordings of the same song were taken over a period between 20-60 years of age, there were clear correlation of vibrato frequency decline and increase of age (Sundberg et al, 1998). Other physical symptoms on aging on the voice such as vocal accuracy, endurance, agility and stability have also been recorded, as well as cartilage such as that of the larynx slowly turning to bone causing loss of elasticity (Milton, 2022). These symptoms result in a thinner, stiffer and shrill sound that is usually irreversible (Milton, 2022).

However, even though these changes in female voices over 50 years may be cause for concern, when looking at the mature female singer compared to the mature female non-singer, the larynx is perceived as marginally more healthy and agile in vocalists (Prakup, 2012). Changes in frequencies seem less obvious with aging in singers than non-singers (Eichorn et al, 2018), and less thyroid deformation was shown in singers compared to non-singers (Unteregger et al, 2019), which presents as stiffness and ossification, where bone is present in soft tissue where it shouldn't be (Garvin, 2008). Although not relevant to my research question, it is important to consider that any performance related anxieties experienced by mature female vocalists, are not necessarily shared with non-singer, even though non-singer experience the physical symptoms of aging more than vocalists. This could help singers to keep the impact of aging in the voice, and its symptoms in perspective (D'haeseleer et al 2017).

Performance Anxiety for singers

Anxiety in itself is a wide subject, one that could be extensively analysed and researched for this literature review, however the anxiety I am focusing on is music performance anxiety (MPA). The scope of MPA research is extensive, and covers all ages, genders and backgrounds (Clark 2002, Kenny 2005, Elliot 2010). Performance

anxiety can have many psychological and physical effects on singers, such as intonation issues, reduced steadiness and poor breath management (Barefield, 2012). A shift in the overall quality output of the singer, changes in vocal fold vibration parameters and changes in vocal quality are all recorded symptoms of performance anxiety for singers (Sloggy & Rowles, 2019). Other noted physical symptoms that make singing more difficult than usual circumstances are sweating, dryness of throat and increased heart rate (Goode, 2004). These behaviours cause a state of stress and then lead to complicated performances such as being flat or off key, missing notes or words and inducing 'stage fright' (Lee, 2007, p.37).

Physical symptoms lead to psychological effects on the individual too that can inhibit a singers vocal ability, and create a circle of self-doubt (Clark, 2002). The physical symptoms causing worries about the individuals' ability, and even potentially increasing the intensity of the symptoms experienced (Elliot, 2010). Some research has even pointed to symptoms of MPA causing a version of social phobia (Franklin & Osbourne, 2010).

To understand why performance anxiety is so common in vocalists, there is a necessity to understand how performance anxiety manifests in vocalists. Music performance anxiety can sometimes be referred to as "stage fright" or "stage fear", as well as being linked to trait anxiety (the tendency to feel anxiety across many situations) (Bertain, 2023). MPA is associated with the hormone adrenaline, which activates the fight or flight response in individuals (Winter & Winter, 2011). Long exposure to adrenaline can lead to the production of cortisol, a long-term anxiety hormone with lasting effects on the human body (Mayo, 1999). Further research by Mayo (1999) suggested that extended exposure cortisol caused the adrenal glands to begin to decline, which not only maintain the stress levels in the body, but also maintain the consistency of hormones such as oestrogen and progesterone. This causes extensive stress on singers, which can lead to heightened symptoms of MPA for singers. Also for female vocalists, especially aging ones, this unbalance of hormones also contributes to the likes of menopause and the aging process (D'haeseleer et al 2017).

MPA for mature female vocalists

Anxiety in performance can have profound effects on the individual, such as intonation, increased tonal freedom, reduced steadiness, and breath management (Barefield,

2012). As well as these physical symptoms, there is research that suggests that the mental toll that music performance anxiety can take on singers is due to honing a specific skill such as singing, under immense pressure and stress (Salmon, 1990). Additionally, music performance anxiety doesn't just affect inexperienced or young performers (Salmon, 1990) but also veteran singers and performers with years of experience on stage (Kenny, 2010). Music performance anxiety can sometimes be referred to as "stage fright" or "stage fear", as well as being linked to trait anxiety (the tendency to feel anxiety across many situations) (Bertain, 2023). Fear and anxiety have the potential to cause limits in a singers' ability through the onset of physical menopausal symptoms, and create more self-doubt, therefore creating a cycle of sense of failure in the individual (Clark, 2002). Clark (2002) noted that fear causes subjects in hearing tests to be unable to make fine distinctions in pitch. Other symptoms of anxiety in performance can be a tight-ness in the neck or throat, shallow or unsteady breath, swallow or cough sensations, or other physical manifestations (Clark, 2002). These types of symptoms can potentially cause negative thoughts such as, "I'll never be able to do this," "I always get so nervous," "I'm not a good singer." (Elliot, 2010, p.8). This outlines a potential chain of events and link between the physical symptoms and the mental symptoms such as negative self-talk.

It should be noted that much of the existing research shows that females experience MPA more often than their male counterparts (Kenny, 2006). This information combined with the research surrounding menopause and its connections to performance anxiety gives some correlation between increases in performance anxiety for female vocalists as aging occurs. As per my previous research projects (Menopause Hormones and Performance Anxiety, Hallam, 2024) there is already some evidence of the link between menopause for female singers and performance anxiety. Many of the symptoms of performance anxiety and the symptoms of menopause have some similarities, such as hot flushes, increased heartrate (Freeman et al, 2005). There is also evidence of an increased chance of performance anxiety through the menopause for mature female vocalists (Van Veen, 2009).

Looking at the physical symptoms of MPA and its links to aging female vocalists, we can look at the evidence through Sloggy & Rowles (2019) study, which showed that in the later stages of life there is indications of truncation of their upper range, including loss of vocal quality. It was noted in this study that many professional vocalists go through a very public aging process with their voice, and often have to enhance other areas of

their performance other than just vocals. This may lead to higher expectations of vocal quality from the individual, where they begin to recognise vocal limitations, leading to anxiety in performance.

However it is important to note that MPA can occur in all age ranges and genders, not just elderly or mature female voices (Kenny, 2006). Limitations in vocal performance can cause added stresses to all vocalists, whether due to aging or illness, but this was most frequent in mature female vocalists (Salmon, 1990).

Performance anxiety is associated to the hormone adrenaline, which is released in a 'fight or flight response' (Winter & Winter 2011). Hannan (1927) did a preliminary study on menopausal women who experienced the very common trait of 'flushing' or 'hot flushes', and that direct injections of adrenaline chloride caused immediate flushing that was identical to the occurrences that happened spontaneously at menopause. Applying a synthetic version of oestrogen, caused a sudden decline in the flushing. This study outlined the potential of menopausal-type symptoms that adrenaline can have on individuals, and that the additional synthetic oestrogen alleviated these symptoms.

Prolonged exposure to adrenaline for an individual can result in the production of the stress hormones, cortisol (Mayo, 1999). A study by Mayo (1999) outlined that during menopause, the adrenal glands that excrete androgens which control hormones balances, start to decline. Not only does the adrenal gland maintain the consistency of hormones such as testosterone and oestrogen, it also maintains the body's ability to adapt to stress. During times of extreme stress, regulatory hormones excreted from the adrenal glands dip as the adrenal gland moves the concentration of these hormones away from oestrogens and androgens, and towards cortisol. Again, although a dated study, this could be analysed as more evidence to support the link between menopause and anxiety, and that increased anxiety, heightens the symptoms of menopause. However the downfall to these studies is that they are long overdue an update, and could be investigated further to increase the validity of their conclusions.

General Anxiety in Mature women

To understand MPA for mature female singers we also have to consider the heightened state of general anxiety that research has shown increases with age (Kirmizioglu et al, 2009). There is evidence to show that as age increases, so does general anxiety, and this is usually linked to the individual's fear of aging itself. It was found in one study, that elderly women had higher levels of anxiety and depression than their male counterparts

(Teixeira et al, 2013). It was also found that elderly women were at a higher risk of death following an anxiety disorder diagnosis in later life (Carriere et al, 2013). This is difficult sometimes to differentiate from other disorders and symptoms related to health conditions that can occur naturally for elderly women (Zhang et al, 2015).

This increase in anxiety could contribute to the research relating to MPA in elderly or mature female singers. This naturally higher predisposition for anxiety in elderly women could result in a higher likelihood for mature female singers developing performance anxiety in their hobbies and careers. Anxiety surrounding aging, death and other self-esteem issues, could cross-over to other types of anxiety, such as dental, performance and health related anxiety (Andreescu et al, 2020).

It's important to consider than generalised anxiety in women can be caused and heightened by lots of different life stressors, and not necessarily due to just performance. Other external stressors such as post-partum, work-related anxiety, relationship anxiety, menopausal anxiety and many other types of generalised anxiety can also be the cause of feelings of stress in females (Howard et al, 2001).

Performance Anxiety: Professional vs Amateur

Castiglione et al (2018) looked at the rate of performance anxiety in professionals and amateurs, and the parameters they used to investigate this was based around quality of performance and self-esteem. They outlined that a higher quality of training, created higher self-expectations regarding performance and perceived self, and therefore were more likely to experience performance anxiety than their amateur counterparts. They thought as amateurs were performing socially and for their own amusement, the pressure on them to be a high standard was much less. Tarbosky (2007) supported this by stating that contrary to belief, although years of practise and training might encourage less performance anxiety due to being well skilled and rehearsed, it seems that the pressure for perfection was higher.

This was supported by Osbourne and Kenny (2005) who stated that the higher the professionalism or training of a performer, the higher the chance of that performer experiencing MPA. Although the findings for professional performers seems quite consistent, it's the amateur performer that seems to have varying levels of MPA. Papageorgi et al (2007) investigated the levels of MPA that amateur performers experience in specific performance-related situations, and found no strong correlation

between MPA in any one sample of amateur performers, it was highly varied. This then provoked questions of whether it was experience-related or whether existing anxiety in the amateur individuals made them more susceptible to higher levels of MPA. Barros et al (2022) looked at these possible factors for MPA in amateur performers, and found that a number of external social and individual factors could potentially result in higher levels of MPA.

It seems that there is a potential area for development when looking into MPA and amateur performers and vocalists, most research relates to musicians rather than vocalists. Expanding this knowledge could allow the research to incorporate amateur musical societies and amateur choirs or institutions.

Ageism in the workplace

The societal pressure and emphasis of ability during aging, may also have a link to anxiety in elderly individuals. Ageism in the workplace is another sector of research that could highlight important themes that may impact mature and elderly female individuals. Age discrimination is prevalent still within working environments, and is harmful to health and wellbeing of the individual (World Health Organisation, 2021). Ageism is usually defined as a range of stereotypical ideals surrounding a specific age group that causes prejudice and discrimination.

Some research has suggested that men and women do experience ageism in the workplace and society very differently (Jyrkinen, 2014). This can include women not succeeding or progressing within the workplace or their professional field as quickly as men, and prejudice against women being influenced to retire earlier.

This ageism can also be felt within the musical theatre and singing profession, as musicals and performers are usually associated with young female performers (Rigopoulou, 2024). The forefront of musicals and performers being young and the terminology outlining a negativity surround aging within performance, many of this phrasing can lead to prejudice and stagnant creative decisions (Straus, 2024). As we understand that aging is a sensitive subject, especially for maturing females, it is likely that the prejudice within workplace and theatre felt by women, is causing a level of anxiety within their professions. This anxiety can be caused by loss of earnings, loss of career to a younger counterpart, loss of confidence within the individuals' professional field (Ilmarinen, 2005).

What's the next step?

As part of the literature review, and of this research project, I endeavoured to look into steps to reduce MPA for performers both professional and amateur. Some recorded exploration of potential ways to reduce MPA for aging vocalists has been conducted, but this is usually generalised to both male and female vocalists.

Tay et al (2012) expressed the important and effectiveness of encouraging aging vocalists to join choral societies or choirs within their area. This active continuation of community singing not only helps to maintain a mode of training for aging vocalists, but also helps to reduce MPA by taking away self-critique and increases community and social fulfilment using the voice. These findings were continually explored and supported by Sager et al (2020) who noted that their pilot study provided evidence that regular singing for senior vocalists in community choral societies, could actively assist in preserving aging individuals speaking voice, not just singing voice. The practical implications of this could relate to the decline in general anxiety, as well as MPA, surrounding aging itself.

Barbeau (2017) noted that the prevalence of MPA is higher in young musicians than older musicians aged 50 and older, but this was a study significant to Canada, and cannot be relevant to the UK. However, interestingly the findings for senior musicians showed that lack of music in their later lives did increase MPA compared to those who actively continued to perform.

These findings indicate that there is more room for developing strategies to assist mature singers and performers in how to tackle anxiety and MPA in later years. More exploration on female-specific vocalists and their relationship with MPA in senior years would be helpful for smaller communities where research may be limited.

Findings

For my research project I had intended to have a survey that consisted of questions surrounding performance anxiety for aging female vocalists. My survey went out on social media via Facebook, Instagram and over Whatsapp to groups I am apart of (amateur and professional singers). I was looking for twenty responses, half professional and half amateur. Although I had sent this out in plenty of time, it should be noted that these findings are not balanced in data for responses. For my amateur sample, I got the

full ten responses, and all participants were over the age of 45 years of age and had been singing in an amateur setting either through musical theatre societies, band projects or in individual circumstances. For my professional sample, I only managed to receive four responses and four active participants, all over the age of 45 years.

Limitations

My method of sharing the survey was restricted to social media, and I shared within these platforms on specific pages and groups that were for professional vocalists and amateur vocalists. However, it was dependent on the participant wanting to take part and having to actively click on the link and take part in my survey. This could have been overlooked by professionals more, if they felt they didn't have the time or needed to be a part of this. There also could be less female mature vocalists online using social media or being a part of these platforms at the time of posting this.

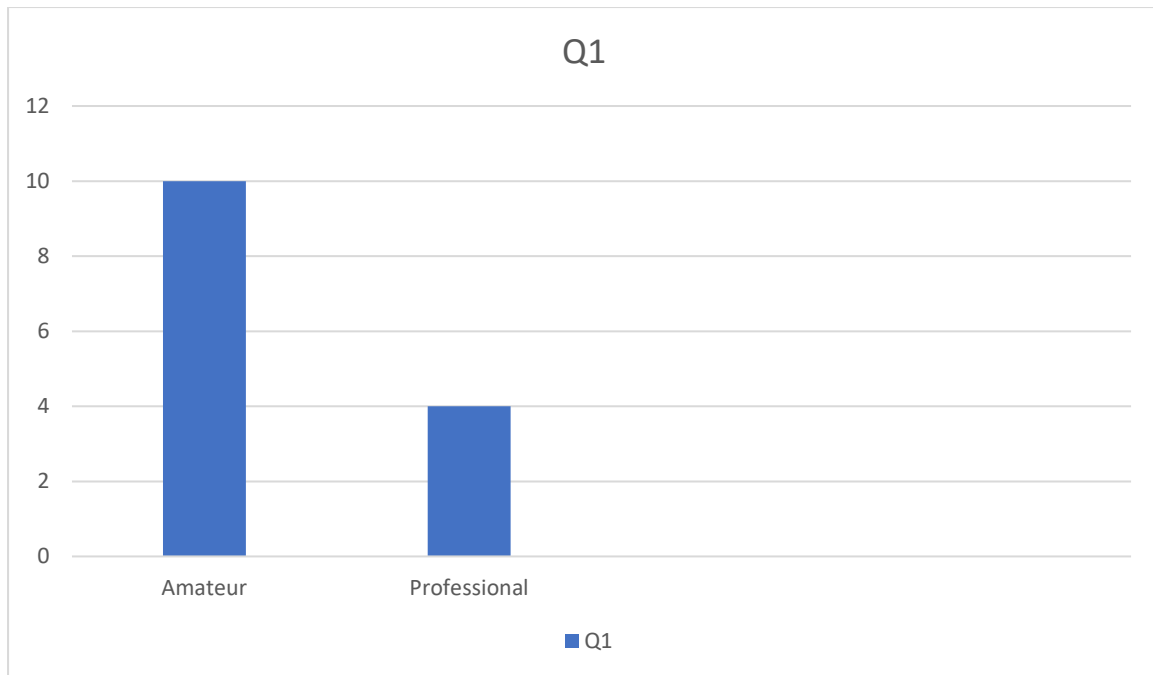
Although this didn't affect my research as such, as there is substantial existing research surrounding MPA in mature female professionals, it became difficult to cross-reference when coding both sets of samples for themes and trends in the results.

Data Analysis

To start the analysis of my survey data, I outlined my sample within the participant's answers so that these were easier to link to my following questions, Typeform had an anonymous way of showing individual participants answers in one submission and also comparing them to the other participant's submissions. This was useful to be able to cross reference answers and compare results.

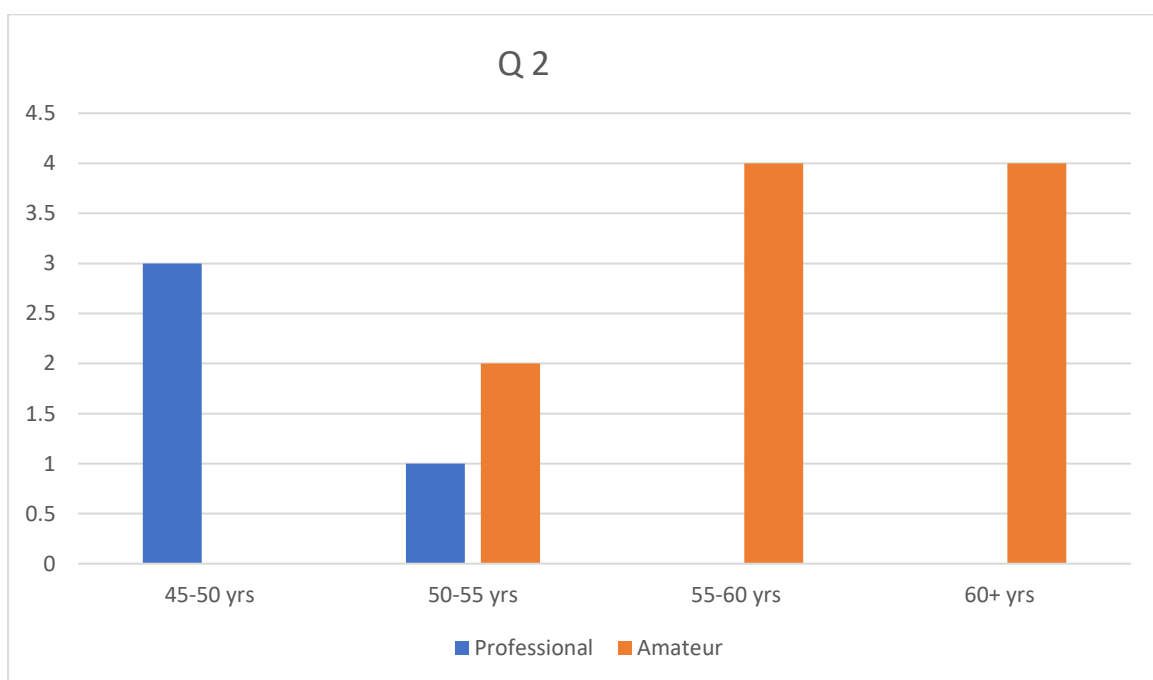
Key Quantitative Findings

Figure 1 shows how many participants were professional and how many were amateur vocalists.



(fig 1)

Analysis was undertaken with regards to the age bracket that these participants were in. My sample inclusion criteria specified participants identified as female and were over the age of 45 years. I split this into smaller subcategories as per below, to see whether the performance anxiety symptoms and self-esteem issues I had initially sought to identify were different for the age brackets. Figure 2 shows the four age categories and breaks down which of the participants in each age category are professional and which are amateur.



(fig 2)

I also asked participants how many years they had sung for, as states that the longer the vocal history, the less likely for MPA to be experienced (Salmon, 1990). The information was varied between amateur and professional. All professional participants seemed to have had an average of 20 years of singing, whilst amateur vocalists spanned up to 60 years, with an average across the submissions of 40 years of singing. Although this was interesting to see how long participants had been singing, this was not necessarily an accurate representation. Although amateur vocalists on average had sung for more years, it became apparent that professional vocalists may only count their professional singing careers as their answers, not including any singing for amateur purposes, schools or training. - If refining the question design in future research I would have included follow up question to generate richer data here.

Question 4 and 5, were both designed to generate a greater depth of response, asking about vocal training and how many hours a week the individual sang for. Interestingly all professional participants had received 1-1 professional vocal training, which aligned with existing research as many professional vocalists seek training to support their voice for their trade (Hazlett, Duffy & Moorhead, 2011). Both professional and amateur stated their 1-1 vocal training ranged from 6 months to ten years. There was no obvious correlation between length of 1-1 vocal lessons and whether the vocalist is professional or amateur. For the hours spent singing per week, there was a much more defined split between the two samples. Amateur vocalists on average spent 2-3 hours a week singing and performing, with some of them not performing at all anymore since having a family. Whereas professional vocalists on average spent 10-20 hours a week singing and performing.

Qualitative Data Analysis

When looking at the analysis of my survey questionnaire, I wanted to make sure I could code for qualitative data correctly. To help ensure this was clear, I used Saldanas Coding Manual for Qualitative Information (Saldana, 2021) and decided to use value coding to interpret the data. Coding is an important way to analyse data by summarising large amounts of information into themes or codes. I wanted to look for similarities, differences and causation if possible through the coding process. Coding qualitative data leaves all the information subjective to the researchers' interpretation.

Using the coding process for qualitative data, I decided to use value coding to try and extrapolate the data to group into themes surrounding performance anxiety and aging for female vocalists. Value coding is where the researcher codes based on the value within the information given to the participant (Saldana, 2021). This way the experiences of the participant guided the themes that presented themselves. Through this process I was met with a lot of information and words that related to “Self Esteem” and “Anxiety” (Fig 3.)

Coding Table (Fig 3)

Catergory	Subcatergory	Code	Frequency(out of 14)
Self-Esteem	Confidence Self-Value	Nervous	6
		Lack of confidence	10
		Inadequacy	4
		Not Good enough	8
Symptoms	MPA Aging	Tension	12
		Shaking	6
		Memory Loss	8
		Sweating	3
Age	Decreasing ability	Worse over time	7
		Experiences over the years	4

Key Qualitative Findings

The findings in my study were that participants did experience MPA more as they aged, and that they believed this was affecting their vocal quality. This resulted in reducing performing frequency, and preventing themselves from taking part in paid work or community work.

Discussion

The current research project was looking specifically for any patterns and correlations relating from performance anxiety to professional and amateur female vocalist over the age of 45 years of age. This project covered multiple research areas to get to understand before I could successfully and coherently analyse the data collected from my survey questionnaires for my sample. This project required intense time management, focus and relevance of topic to prevent too much unnecessary information being accumulated. The existing research surrounding aging, performance anxiety and mature female vocalists was a wide scope of information and took the largest portion of time when doing this research project.

The responses were varied and did add some more discussion points to my coded themes consider for this research project. No strong correlations or biases came forward during analysis of these answers, but there are a few points here that could be discussed further. For example, participant 7 felt that performing for so long in front of people had resulted in anxiety so high that they have decided to not perform anymore. Although participant 7 performed in an amateur setting and therefore there's no direct loss of earnings, it could be that stopping performing may decrease life value and quality. However, Participant 9 stated the opposite, and that the more they had sung in front of others, then the less anxious they felt. This could also be an advocating point for increasing performance to directly decrease anxiety in female performers over 45 years of age. Participant 10 stated they believed that the performance anxiety was a direct link to their peri-menopausal stages of life. We can see throughout research that this can be the case, with the findings of additional symptoms during perimenopause (Raj et al, 2010) and how this might lead to an increase of anxiety around this time for vocalists. Participant 5 felt as if their voice would never be good enough, and this negativity surrounding self-talk could also have a direct correlation to performance anxiety (Elliot et al, 2010).

The literature that I looked through had extensive research papers on performance anxiety, and the aging female voice, and aging itself. However, there was little specific literature tying the three areas of research together. This made finding research specific literature difficult and increased the workload. The research surrounding performance anxiety was the largest area to cover. Much of the literature surrounding the physical and psychological symptoms of performance anxieties, as well as their triggers and causes, was relevant but not specific to this research project. However, having a general

understanding of the symptoms surrounding performance anxiety (Clark, 2002), and the potential reasons behind why performers may feel these due to stress, responsibility and external pressures (Elliot, 2010) assisted in the analysis of participants answers.

Although I was looking for any potential significant differences between what professional vocalists and amateur vocalists experienced during aging, it was also beneficial for me to refresh my existing knowledge on these symptoms and understand why we can experience these.

For this next section, I will be discussing the information collated for the rest of the questions in my survey by theme rather by question.

Self Esteem

Through my coding, the first theme that became apparent through the process, was a lot of phrases that related to self-esteem. These consisted of words and phrases such as 'nervous', 'lack of confidence' and 'inadequacy'. Due to the fact question 6 – 15 were highly qualitative questions, and encouraged participants to elaborate in their own terms, I coded all these similar phrases under 'self-esteem' to try and incorporate an umbrella theme for identification. Many of the participants seem to bring up this theme in multiple answers. Throughout the information given by participants, it seemed as though the amateur participants experienced increasing performance anxiety with age, which decreased self-esteem. This sits in line with the existing literature, where MPA was increased with age and resulted in a lack of confidence (Kenny, 2010).

“Feel my voice will never be good enough” – Participant 5 (Amateur)

Many participants frequently mentioned being nervous about pitching and breaks in the voice, and this worry being due to lack of belief in their ability. Many of them mentioned that performance anxiety as they got older had made them feel inadequate and feel as if they would give an inconsistent performance, and not being able to engage the audiences. One participant mentioned “I feel my PA is due to perfectionism, and being in an overly critical musical environment”. The pressure in letting others down due to aging symptoms of the voice, can trigger performance anxiety, and this is in line with the research (Sloggy & Rowles, 2019). This overall decrease in quality in the output of a vocalist, can create the psychological and physical symptoms of performance anxiety. This in turn creates further self-doubt and self-esteem issues. Other responses when asked what the participants believed causes the performance anxiety were lack of confidence, lack of knowledge and over-thinking their own abilities.

“I’ve been performing for over 40 years but now don’t feel that I can cope with the anxiety so have decided not to put myself through this anymore.” – Participant 7 (Amateur)

Professional participants did report some feelings of negativity surrounding self-esteem, reporting that it was getting worse with age. However, only half of professional participants reported feelings of not feeling good enough, and feeling low in self-esteem compared to a staggering 90% of the amateur participants feeling these overwhelming negative feelings relating to self-esteem. Castiglione et al (2018) research outlined that professional vocalists with a higher level of training would have higher standards for themselves, and therefore have higher self-esteem. This would increase the likelihood for performance anxiety. This is not the case for this research, however, due to lack of participants that completed the survey for professional participants, the data might be somewhat biased.

One point of interest under the theme of self-esteem, was related to the impact of MPA for participants. One of the professional participants stated they would refuse to do gigs if they thought it would cause them too much anxiety to perform. This would result of a loss of income for that individual, and although the amateur participants also reported a negative impact on their performance, they did not elaborate on whether they would lose income opportunities or performance opportunities through this.

For an individual who relies on performance for income, MPA could be a hindrance to their way of making money. Although amateur participants may also be negatively impacted through MPA in a social or psychological way, there isn’t necessarily the additional concern of losing money. Barros et al (2022) touched upon the importance of external factors also increasing an individual’s MPA or anxiety disorder. We might assume that a loss of earnings could in turn cause more anxiety for the performer and then becomes a cycle that could decrease mental health and increase MPA.

Symptoms

Symptoms of MPA and of anxiety-related disorders became a frequent theme. There were many accounts throughout the data received relating to symptoms that all matched the existing literature surrounding MPA and aging. Within my survey I had wanted to touch on the symptoms of MPA experienced in mature female vocalists to see if there

were any crossovers with the symptoms experienced in aging for female vocalists. If there was a direct correlation, it could potentially show that the symptoms masked each other or were often found together in both performers and just mature females. I split this into mental/psychological symptoms and physical symptoms. Many symptoms came up during all the data given by participants, both amateur and professional. I made these a theme because they were frequent in the relevant symptom questions and in questions not surrounding symptoms.

The phrases such as 'tension', 'shaking' and 'memory loss' were some of the most frequent when looking at symptoms. Amateur performers were far more descriptive when talking about symptoms, listing maybe 3 or 4 in an answer, and then referring to these in subsequent questions. Professional participants also noted shaking as their most noted symptom of performance anxiety. One participant said they dealt with gastrointestinal symptoms such as bloating and indigestion when a performance was coming up, and this made them want to cancel the paid work. These key words I managed to cross reference back to the research on the physical symptoms of performance anxiety in my literature review such as Barefield (2012) who reported intonation issues, tension, rapid breathing and shaking. However, none of the symptoms reported were specific to the aging voice, just performance anxiety. As this research project aimed to focus on performance anxiety for aging vocalists, I made sure to include research around physical symptoms of the aging voice. Although physical symptoms of aging voice can vary from individual to individual, there was no mention of any lack of accuracy, power or stability in the voice by any participants (Milton, 2022).

Another side of this theme that I coded were the ways participants dealt with these symptoms. My survey touched upon whether participants had any recommended or home remedies to help with symptoms of MPA when they experienced them. Although the answers were sparse and less descriptive than the previous questions, it was apparent that some participants had investigated some remedies for anxiety. The reason I used the code "symptoms" for this data as the participants were looking for these remedies to rectify the physical and emotional symptoms of MPA. All participants that answered mentioned or included the key phrase 'breathing techniques'. Breathing techniques are frequently used as an effective regulation for anxiety and MPA (Lewis et al, 2012). This was the most prevalent use of methods to deal with anxiety before or during a performance. One of the professional participants mentioned they had been recommended ACT coaching. ACT coaching is Acceptance and Commitment therapy,

which is a theory driven practise that helps individuals to assess and evaluate their life stressors and then use tools and frameworks to minimise and rationalise negative thoughts (Anstiss, T., 2020). This is a widely practised form of anxiety relief and is an adapted model from Cognitive Behavioural Therapy (CBT) (Hayes & Hoffman, 2018). I also noted that many of the amateur participants did not know any techniques or had not tried any ways of calming their anxiety, either through methods or medicine. This could be an interesting point, that those performers that had not been exposed to vocal coaching or professional support, may not be aware they need to combat performance anxiety, or may not have been shown any methods of how to. This could then lead to more shame surrounding their own self-perception of the voice.

Age

Age was a theme I had expected to be more prevalent within the data from my survey, however many of my participants did not notice any correlation between their MPA and their age. Participants disclosed answers that showed some did experience an increase in MPA with age, and some did not. One amateur participant detailed that they felt it more now they were older surrounding auditions and performing, so much so they have decided to no longer perform. This participant was in the 50-55 years of age bracket and had also reported the greatest number of symptoms both physically and emotionally surrounding performance anxiety.

“Some of my anxiety is also a symptom of peri menopause.” – Participant 10 (Amateur)

In review, the survey questions did not focus on age related symptoms or age-related concerns and I believe this is why when coding my data, I found little references or phrases surrounding age. However, all my participants were mature female vocalists, and they were experiencing increases and decreases in symptoms and emotions when aging. Participants used phrases such as “Started many years ago” and “anxiety getting worse over time”. This indicates participants are experiencing these symptoms as they age and are aware of this process. In contradiction there were also phrases such as “getting better the more I sing” and all participants did answer yes when asked if they thought performance anxiety was increasing with age.

Participant 10 was the only participant to clearly mention perimenopause, which is the pre-stage of menopause in older women (Santoro, 2016). The most common peri-

menopausal or menopausal symptom is hot flashes, but none of my participants outlined this symptom in conjunction with the symptoms they felt around MPA.

The data I collected was interesting and descriptive, but not necessarily conclusive or definitive. Whether this was due to an imbalance of sample participants or that the research question itself was not defined enough to incite specific answers. Overall, it seemed that with aging, participants did experience an increase in performance anxiety. This supported existing evidence by Kenny (2006), and the fact that the aging process directly linked to aging symptoms, supported Rens & Linville (2001). However, there was more evidence through this research project to support performance anxiety symptoms, than specifically aging symptoms. All participants who suffered from performance anxiety did have most of the recorded symptoms of this (shakiness, breathing difficulty, panic) but not so much of the recorded symptoms of the aging voice (difficulty pitching, loss of power, loss of voice quality). Additionally, there was not much differentiate in participants answers for professional or amateur participants. All participants who experienced MPA reported the relevant symptoms, and also all participants who responded spoke about this linking to either past experience or feeling under pressure to meet specific standards of vocalisation.

There was a clear divide between professional and amateur participants as to whether performance anxiety was impacting their performing careers and personal lives as they got older. It appears professional participants thought that this was not the case, whereas amateur participants noted they felt that performance anxiety was preventing them from being onstage or singing publicly. This one part of the research which I felt did not match with existing research that I conducted through my literature review. Existing research suggested that higher levels of training would result in higher quality performances, and therefore more pressure for performers (Kenny & Osbourne, 2005). Other existing research such as Papageorgi, Hallam & Welch (2007) suggested that amateur performers showed no correlation between performing at older ages and performance anxiety. In this study, the opposite situation seemed to be the case, as amateur participants noted that as they got older they were experiencing more intense or new bouts of performance anxiety which was impacting their performing lives.

It appears nearly all amateur participants were keen to have more information surrounding aging and performance anxiety, whereas the professional participants did

not see this as necessary. Looking back over participants answers, I felt the professional participants had all received some sort of 1-1 professional vocal training for any number of years, and many of the amateur participants had experienced little to no 1-1 vocal training at all. As a vocal coach, I am always keen to research the different stages of a vocalists' life cycle, so that I can help to support them through the changes in the voice as they age. If a vocalist has not sought out training from a professional vocal coach in their performing lives, they may not have been made aware of the different stages in life for vocalists, and how the hormones impact this, as well as the symptoms to watch out for surrounding this aging process. With the correct training and support, then vocalists can practise the correct format of exercises and vocal techniques to assist themselves through these phases of life.

Study Limitations

When looking at my sample and data collection methods, there were a few things to note. My sample was not the full number of participants I would have liked to have been able to conduct this research project with. Originally, I wanted to have 10 amateur participants and 10 professional participants. I sent out my survey via online platforms, which was capped at 10 participants. My amateur sample finished the survey within a couple weeks of release, however I only managed to obtain 4 professional participants. Although I could still use these as a professional sample, it did mean that I didn't get the full sample for professional participants and therefore not as much data was collected from this sample. This didn't give a full holistic view of professional participants in relation to my amateur participants. All professional participants answered the full survey, but as my percentage of professionals versus amateurs was unbiased, this wasn't necessarily an accurate study.

This also meant that for methods, I didn't manage to obtain any interviews. I had hoped that the survey would have allowed participants to volunteer for interviews as a follow up. Unfortunately, like similar previous research projects I have conducted, nobody came forward, so I was unable to conduct any interviews as a second method for data collection. Although my survey was mainly open questions, so there was plenty of opportunity for participants to give elaborate and detailed answers, so that I could code these answers and find keywords to cross-reference between the two samples.

Recommendations for Future Research

Much of the data surrounding the aging voice for female vocalists is based around hormonal changes, so the link to menopause is strong. By combining research projects and existing research, creating a programme for the aging female vocalists that includes techniques, exercises and extensive knowledge could help to minimise the increase of performance anxiety in older age. Tay et al (2012) noted strongly the importance of vocalists over 50 years of age being included in community music or choral projects to increase quality of life and wellbeing for mature individuals. I believe that this coupled with a programme personalised for professionals or amateurs could support a longer career or performing life for individuals, and early knowledge at these types of communities can raise awareness of the types of change that mature vocalists will go through.

Conclusion

Aims

The aim of this study was to outline performance anxiety in aging female vocalists, and to see whether there was any patterns of differences between professional and amateur vocalists. This was to highlight the difference needs of the two vocational types of performers in older years, so to offer a support system that was personalised to each type of performer. Aging and performance anxiety was the focus of the literature review, with the idea to understand as much existing research as possible, to be able to deduce and code the data from surveys and interviews on a sample of mature female vocalists.

Key findings

The key findings of this study were that mature female vocalists do experience increasing MPA, with a range of symptoms both physical and psychological. The study showed some indication that amateur vocalists did experience increased performance anxiety as they aged, and the symptoms that came with it. Whereas professional participants reported a decrease in performance anxiety with age. This was contradictory to the existing research obtained through the literature review, such as Osbourne and

Kenny (2005) who stated that the higher the professionalism or training of a performer, the higher the chance of that performer experiencing MPA.

Limitations

The limitations of this research study was evident in the sample I managed to accommodate through advertising my voluntary survey. I had hoped for ten participants for both professional and amateur, but managed to acquire 10 amateur participants and only 4 professional participants. This resulted in an uneven level of data, making comparison between the two vocations difficult. With such little data for the professional participants it was difficult to reference the existing literature and coding was inconsistent for this sample of participants. Due to the time limits of this study I was unable to find more participants for this sample. I also had a voluntary second data collection method of a voluntary interview, but no participants came forward for this, so I was unable to extract deeper meaning from participants' answers. This resulted in not being able to analyse the data thoroughly or make any correlations between the data and the existing literature.

Recommendations

Moving forward, if I were to recreate this study, I would make sure that I had more time to be able to obtain the sample of participants I required for a balanced research project. I could also make sure that my survey was advertised across multiple platforms to ensure maximum coverage for voluntary participants. By having the correct number of participants for both vocational samples I would have more balanced data and I'd be able to code both samples and analyse the data for any correlations. I would also create a more in depth survey and allow more time to be able to conduct interviews. This could encourage more information from participants, more data to cross reference between professional and amateur participants, and a further insight into the experiences mature female vocalists have.

This research area could have further studies about professional and amateur experiences in vocalists, as well as the aging process. There is more opportunity here to create a support system for these individuals, to increase knowledge surrounding the subject and to allow support to be personalised and tapered towards the needs of the individual. Through this, researchers could help to prevent loss of earnings, loss of quality of life and loss of vocal quality through aging. Reducing symptoms performance

anxiety to support performers in all stages of the life cycle, could have a wider impact for communities and institutions.

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