

Student name : Chrysa Tsaltampasi, student number : 2029618

BMPF7010 Extended Work-based learning project

Project title: An interdisciplinary approach to voice care for Extreme Metal singers.

Contents :

Project Proposal form	3
Project report :	8
Introduction	8
Literature review	10
Themes	10-14
Methodology	14-18
Findings presentation Greek team	19-29
Focus Group findings with Extreme Vocal Coaches	30-37
Reflection on the data	37
Reflective model	37
Advantages, Disadvantages and Limitations	38
Conclusion	38
References	40
Appendix 1: Project information sheet for participants	50
Appendix 2: Participant consent form	51

Appendix 3: Questions for the participants	53
Appendix 4: Transcription of semi-structured interviews	54
Appendix 5: Transcription of focus group discussion	78
Appendix 6: Focus group table	99
Appendix 7: Ethics form	101
Appendix 8: Permission letter	118

Project Proposal form

1. Project Title

An interdisciplinary approach to voice care for Extreme Metal singers.

2. The context

For close to fifteen years, I have been employed in the field of voice instruction and coaching vocal performance. When I first began teaching, I focused mostly on teaching vocals for extreme metal, but I also taught pop, rock, folk and soul. In addition to being a performer of extreme metal vocals, I have been experimenting with my voice for a considerable amount of time prior to enrolling in the conservatory curriculum for my academic studies at the Conservatory of Rotterdam. According to Laal (2012), the main advantages of lifelong learning can be categorised as follows: adapting to a rapidly changing world, increased earnings through career options, and enhancing and satisfying life experiences. This is what drove me to conduct this Masters degree study. I have devoted all of my time and my studies to extreme metal vocals in an effort to understand more about this interesting topic in order to assist both myself as a performer and my pupils.

The majority of the metal singers I work with are both inexperienced and experienced, and they are all working towards the goal of enhancing or developing their technique in order to be able to make it through practices and performances. According to Van Omermeiren et al (2019) it is widely acknowledged that those who rely on their voice for professional purposes and those who are highly skilled vocal performers are susceptible to developing voice-related issues during the course of their careers. For me, as a teacher and a singer of extreme metal vocals, the significance of this project rests in the idea that extreme metal singers belong to this highly skilled group. Therefore it is very likely that at some point in their careers, they will be confronted with urgent vocal issues and will require assistance in order to find solutions to these issues.

3. The justification

Within the scope of my third module (BMPF7008), I demonstrated that the need for vocal coaches and singers who specialise in extreme metal has been growing over the course of the past decade, particularly in the realm of voice acting and video games (Tsaltampasi, 2022).

However, there is currently no specific singing guidance available for vocalists in the extreme metal genres such as death metal, deathcore, grindcore, post metal, and others. I would like to contribute with my own study.

The reason I am undertaking this project lies within the aforementioned lack of literature on extreme metal vocals. There are commendable research papers available on extreme vocal effects and harsh voicing that I have utilised in my past modules, (Sadolin, 2021, DiLorenzo et al, 2016, Melissa Cross, 2005, Aaen et al, 2021, Tsai et al, 2010, Sakakibara et al, 2004). The significance of these papers stems from the fact that they were authored by phoniatricians and eminent pedagogues who conducted scientific discussions on extreme uses of the voice. However, there is currently no established methodology for providing emergency assistance specifically tailored to extreme metal vocalists at least in Greece.

My aim is to find out if there is common ground in ideas and perspectives and maybe methodologies for the creation of an emergency aid/prevention protocol between the disciplines of voice rehabilitation, logo therapy, laryngeal massage, classical singing training and otolaryngology. This will be beneficial for me not only as an extreme metal vocalist but also as a teacher due to the fact that I will be able to give advice to my students that is suggested by medical professionals. The professionals that will take part in this research, are all members of an already established scientific team and that was one of the main reason I have selected them.

4. The intended impact

What I would like to achieve as a practitioner and performer with this emergency aid protocol for extreme metal singers is to offer a useful tool for rehearsals and live concerts to my students, clients and also myself in case something goes wrong. There exists a potentiality that my vocal health may not be at its peak due to the substantial duration of my daily work schedule. I acknowledge that a considerable number of my students and colleagues experience similar situation. I would appreciate additional assistance in improving the condition of my voice. While I have myself never encountered vocal issues prior to a performance, some of my students, as well as my friends and fellow metal colleagues, have experienced such problems. I aspire to provide expert assistance to these individuals. Furthermore, I strongly advocate for the implementation of a protocol specifically crafted by medical professionals, among other experts, for the metal community, as it would yield significant advantages. In my opinion, the primary benefits would be that vocalists in the metal community would be less apprehensive about feeling raspy and unsure of what to do when they deal with fatigue and hoarseness. Furthermore, they would establish themselves as legitimate vocalists rather than individuals who scream in a random way.

5. The outlined intention

I aim to interview a minimum of three and a maximum of ten professionals in the field of voice located here in Athens / Greece. This group will consist of Ear, Nose and Throat doctors, voice rehabilitation specialists, laryngeal massage therapists, classical singing teachers and logo therapists. They are all members of a scientific team. My intention is to develop in the future an emergency aid protocol for extreme metal vocalists based on qualitative data. I will also a lit review as part of gathering data. This research will be held solely online. The online platforms that will be used will be Zoom and Google email and will ensure anonymity. They will be provided a sheet with all necessary information concerning the procedure of the research and will sign a consent for. I expect this to happen around mid of February 2024. A questionnaire with open questions will be sent to them online around the end of February 2024 so they will have time to think through their replies.

An online focus group with the professional participants will be shaped by the answers of the participants around the end of March 2024. The number of my participants is manageable to allow for varied and unrestricted discussion of the topic at hand without drowning out any individual views (Denscombe, 2003). The focus group will enable the participants to discuss ideas and challenge one another's perspectives, and this will help me to gather a more varied set of data than I would with individual interviews (Morgan, 1996).

I will also use semi-structured interviews. These interviews will be recorded and transcribed. I expect this to happen mid of April 2024. These will be open ended to elicit rich data. There will be some structure to facilitate consistency but the questions will be designed for further probing. I will limit the time to 30 minutes in order to contain the data as I am conscious of it becoming too vast. By the middle/end of July 2024, a written report and presentation using thematic analysis will be accessible to participants.

Detailed timeline for the project :

Task	Jan 2024	Feb 2024	March 2024	April 2024	May 2024	June 2024	July 2024	Aug 2024	Sept 2024
Agree on research topic with tutor									
Determine aims & objectives									
Project proposal									
Invite participants									
Literature review									
Determine themes									
Code initial data									
Questionnaires									
Interviews									
Results and report									
Draft report								16th	
Final submission									2nd
Presentation									9th-12th

6. The ethics and insider research

Since I will be recording the focus group and I will be transcribing the data, there is the risk for the participant of some personal data being disclosed. All data will be encrypted and kept in password protected personal MAC computer which will not be shared. Any USB sticks used to store or transfer data will be password protected. All data transfers will be encrypted and password protected. All participants will be given a unique identifier to ensure confidentiality and this list will be kept securely in the password protected folder. There may be some conflict of interest with the expert participants as they are also professionals that work with singers and provide emergency aid to extreme metal singers as well when it is needed. However, I lack medical expertise and cannot offer advice comparable to that of a doctor. I will make it evident to my participants to mitigate any conflict that might arise. As an insider-researcher, I must consistently engage in self-reflection, carefully considering my own contribution to the research's success (Saidin & Yaacob, 2016).

7. Personal learning outcomes

- Find common ground for extreme metal vocals between the more “traditional” group of medical professionals and the extreme vocal coaches.
- Deepen my knowledge on what this already established group of professionals can offer at metal vocalists in trouble.
- Use the research as a foundation to establish that this interdisciplinary group consisting of specialists from a variety of fields, will get together on a regular basis to discuss new information concerning extreme metal vocalists.
- Use this research as the foundation of developing in the future a model for an emergency aid training that is geared towards extreme metal vocalists.
- Engage in activities that will lead to the presentation and publication of my course at various events and conferences.
- Use the research as a foundation to establish an interdisciplinary group consisting of specialists from a variety of fields, which will get together on a regular basis to talk about the course and offer new information.

The Project Report

Introduction

I have been singing and teaching extreme vocal techniques and metal vocals for almost fifteen years. One of the reasons that I have devoted my whole Masters research journey to extreme effects and extreme metal vocals is that I wanted to use evidence based research to develop my teaching strategies. This journey brought me to this last module where I have decided to include other disciplines that deal with voice and see if we can all collaborate in order to help metal vocalists when in trouble. Building on previous research that I have conducted, my intention is to collect insights from a variety of professionals in the field of vocal rehabilitation who have already established an interdisciplinary team to research and treat voice issues. A classical vocal teacher, a logotherapist/rehabilitation coach, an otorhinolaryngologist, and a person with a laryngeal massage certification will comprise this team of professionals. It is crucial to obtain the perspectives of these professionals in order to demonstrate that extreme metal vocalists encounter comparable challenges to the vocalists of other genres and to demonstrate how a medical professional would advise these singers. Due to the abundance of misinformation surrounding this issue, it is crucial to emphasise these points. The information would assist other professionals in validating the treatment of similar cases.

Professional voice users, who are similar to vocal athletes in that they depend on their instrument's general condition and fitness to instruct and perform, must prioritise vocal health (Castelblanco et al., 2014). Extreme metal vocalists often deal with vocal health difficulties as a result of the demanding and intense nature of their vocal skills (Unterhofer et al., 2023). Significant damage to the vocal folds, which are essential for the production of extreme metal vocal techniques such as screaming and growling, may occur from overuse injuries and might contribute to the loss of voice. However, this phenomenon is not exclusive to or primarily experienced by extreme metal vocalists, but rather affects vocalists across all genres. Finding solutions to vocal health problems experienced by extreme metal singers with the help of professionals in other vocal fields is the primary goal of this research.

I specialise in teaching extreme metal vocals and as a metal vocalist myself, I can only give very basic advice on how to handle a fatigue situation based on my experience as I am not a medical professional. I always suggest to my clients to visit an ear, throat and nose doctor just for a check-up and a voice rehabilitation specialist when there is a hoarse voice for a period of time. For module three, I had the opportunity to collaborate with experienced metal singers and instructors. This experience helped me recognise that a significant number of my pupils has encountered vocal health problems at some point. Nevertheless, in the event of a vocal issue, there is a lack of particular guidance tailored to extreme metal vocalists, with only generic recommendations for vocal well-being such as doing humming and straw exercises among others. Expanding upon my previous modules, I intend to investigate what individuals from a professional

group of voice practitioners can offer at an extreme metal vocalist who is experiencing voice issues hoping to broaden my knowledge and understanding on this matter. The focus of this dialogue is to explore the topic of extreme metal vocalists and identify whether they require different care when experiencing vocal issues in comparison to artists in other musical genres.

The driving force behind this decision was the fact that although extreme vocals have become very popular the last decade, there is still this urban myth that they can be damaging for the voice and that people should not do them. According to Aaen et al., (2022) there is inadequate documentation regarding the vocal health of individuals who sing with rough vocal effects. On the other hand, there are a few papers suggesting that growl like sound are not potentially harmful for the voice. Guzman et al. (2018) stated that It is quite possible that the avoidance of voice problems in singers who employ these vocal resources, which could be classically classified as vocal abuse, is influenced by an appropriate resonance strategy in reinforced falsetto and a reduced glottal adduction in growl voice.

Aims

- To search for new academic research on extreme metal vocals.
- To reflect on my own strategies on simple voice rehabilitation advice at both fields of teaching and performing.
- To capture the perspectives of a group of voice practitioners who occasionally work with hoarse metal singers.

Personal learning outcomes

- To gain more knowledge on the effectivity of some vocal remedies such as SOVTs.
- To improve my own strategies that deal with hoarseness and fatigue.
- To listen, learn and appreciate the perspectives and views of experienced professionals.

Literature Review

Having in mind that this project will include professionals from different disciplines such as classical singing training, laryngeal massage, otolaryngology and voice rehabilitation, I knew that I had to be creative and search even more thorough than past times. I started doing an extensive research as soon as the module started gathering data from Google Scholar, Academia, Science Direct, Journal of Voice, Complete Vocal Technique research site, Vocal Health Education and National Library of Medicine. The exclusion criteria process involved discharging articles and papers that were solely medical in nature and did not involve the singer and the singing teacher. The inclusion criteria process involved articles and studies that related the professional singer to the vocal athlete and discuss the physical importance to the production of sound. I tried to eliminate bias by maintaining detailed records of all the material during the research process and also by making available to my participants to see the presented data so that they could decide if I presented their perspectives in an accurate manner. I created a separate file with all related articles and studies which consisted of thirty scholarly articles and books and based on these books I sorted out the themes which I consider essential for my study. The themes are presented below.

THEMES

About these themes

All of the themes are connected to my primary research question, which is to investigate whether or not a combination of vocal professionals and their methodologies and knowledge can result in a future protocol for emergency aid for extreme metal vocalists. This is the reason why I have decided to include these topics and information that is pertinent to my research. There is no specific data for all these themes and their relation to extreme metal vocals, so I made the decision to study the literature in order to investigate these themes irrelevant to the music genre. Since, in my view, these topics are relevant to the vast majority of singers, vocal teachers and coaches, as well as extreme vocalists and extreme vocal coaches, these topics are important. The styles of Hardcore, Deathcore, Grindcore, Melodic, and Traditional Death Metal are all included in my field, and my goal is to apply as much information as I can to my field. Aside from that, I am aware of the fact that there is a strong desire for additional research to be conducted on extreme metal vocalisations and the examination of whether or not they are detrimental to the voice. At least according to the research that is currently available, there is no evidence that extreme vocals are more likely to be associated with pain or discomfort than other strong vocal vocations.

Lack of scientific data on extreme metal vocals

To produce a wide range of vocal expressions, singers necessitate a greater amount of their voices for longer periods of time than the average individual (Fujiki & Thibeault, 2024). This puts them at a significantly higher vocal overload and potentially increases their susceptibility to vocal injury. In more intricate vocal techniques, such as singing with heightened supraglottic narrowing to achieve a metallic quality and harsh voice effects, this vulnerability may be particularly evident (Aaen et al., 2022). Regardless of this, the health and lifespan of individuals who sing with voice effects are not well understood (Kochis et al., 2014). In spite of the fact that vocal health for the singing voice has been investigated across a variety of communities, contexts, and styles using a variety of methods, including informal self-reported data and questionnaires, acoustics, stroboscopy, electroglottography, high-speed imaging, and MRI-imaging, only limited investigation has been conducted (Freedman et al., 2007). Additionally, Aaen et al. (2022) do not exclusively focus on the well-being of the singing techniques that employ supraglottic actions as a noisy sound source but focus on the measurement and comparison of vocal health singers and teachers that are trained using the Complete Vocal Technique method.

Rougher voicing has consistently been linked to vocal harm (Guzman et al, 2019). Due to this fact and also because of the aggressiveness of these sounds, extreme vocal effects may be exhausting or damaging to someone that does not comprehend those when contrasted with opera or musical theatre vocalists. The safety of these sounds is often discussed in voice pedagogy, which is unfortunate due to the lack of data on the topic. This is consistent with a vocal pedagogy theory that has been relatively well-established and has a long history. This theory states that rough-sounding sounds are less adequate than other singing styles (Koufman et al., 1996; Guzman et al., 2019). This theory, however, is problematic. This is primarily due to the fact that the extant body of literature does not support this theory. Overall, the sounds are more closely associated with negative emotions and appear to be detrimental to the voice. In addition, it restricts the broad accessibility and development of efficient medical and instructional advice for vocalists in the areas of training and producing these sounds (Guzman et al, 2019).

Perceived vocal risk

Performance of extreme vocal techniques has been a source of concern regarding their potential long-term health consequences. There is a risk of vocal injury as these sounds are intense and frequently harsh. In spite of this, research has demonstrated that vocalists can reduce the likelihood of vocal damage by implementing suitable training and technique. In 2022, Aaen et al. conducted a longitudinal investigation on professional singers who teach and perform rough vocal effects. These vocalists did not demonstrate substantial vocal health issues over a fourteen year period when they employed appropriate techniques, according to the study. Controlled supraglottic narrowing and techniques that enable supraglottic structures to participate in vibration were identified as essential for the preservation of vocal health.

In addition, Caffier et al. (2017) discovered that professional non-classical singers who frequently employ vocal effects, including vocal distortion and growl voice, did not exhibit any substantial differences in voice and laryngeal evaluation when contrasted with other contemporary commercial music (CCM) singers who do not employ these techniques. The implication is that these vocal effects do not necessarily result in long-term vocal damage when executed accurately. In contrast, it appears that the secure execution of these vocal styles is contingent upon the adoption of appropriate technique and training (Aaen et al, 2021). I am optimistic that additional evidence-based studies will be published in the future, which will result in a greater availability of resources and a greater sense of positive outlook for specialised trainers.

Vocal Imitations and Non-Vocal Sounds

The ability to incorporate sounds that are not vocal into vocal performances is another topic of research in the field of voice studies. The research conducted by Le Maitre et al. (2016) analyses the ways in which vocalists might increase their expressive talents by copying noises that are found in their surroundings. According to Morawska et al. (2022), this talent is particularly relevant in musical genres such as experimental music and beatboxing, where vocalists routinely test the constraints of standard singing approaches. Therefore, the ability to integrate non-vocal sounds is not only an intriguing area of investigation, but also a critical skill that can expand the expressive capabilities of a vocalist, particularly in avant-garde musical genres.

It is important to do additional research in order to acquire a comprehensive understanding of the complex physiological and auditory systems that are responsible for these vocal imitations. Vocal training programs can be informed by an understanding of these principles, and vocalists can develop new methods while protecting their vocal health if they have this understanding. The same principle stands for extreme metal vocalists whose sound is often described as non human, non vocal or monstrous voice (Radovanovic, 2019).

The Role of Vocal Health for Voice Professionals

Awareness of the significance of maintaining excellent voice health has been considerably boosted by studies and peer reviewed articles that have been written on the topic of vocal health in the music industry. The majority of these research and publications have focused on a variety of musical genres and the specific vocal demands that come along with them. Rock and metal genres have been specifically mentioned, which is a good starting point for the notion that specific genres require specific vocal demands. However, they have also highlighted the enormous vocal load that

teachers in general carry on a daily basis. When compared to other vocal professionals, teachers have a frequency of voice disorders that is approximately five times greater than that of non-teachers (Mowraska & Niebudek-Bogusz, 2017; Devadas et al., 2016; Seifpanahi et al., 2016; Behlau et al., 2012; Munier & Kinsella, 2008). This can be compared to my area of interest as extreme vocal teachers may not sing that much but they do tend to talk a lot during the lessons which makes vocal load a big issue. This is the case when compared to other vocal professionals. The greatest ways to preserve vocal health have also been emphasised in studies on vocal health. Some of these best ways include activities like warm up and cool down, drinking water, and maintaining a balanced diet, to mention a few. Further investigation is required regarding these considerations for extreme metal vocalists.

Vocal pedagogues, speech language medical professionals, and laryngologists frequently recommend vocal hygiene techniques such as moderation in voice use and voice type, lowering stress levels, avoiding phonotraumatic behaviours such as screaming or talking over crowds, and improving water intake and moisture control (Murry & Rosen, 2000; Timmermans et al., 2005; Behlau & Oliveira, 2009). These techniques are used specifically to improve performance and ensure vocal endurance. These suggestions are reinforced by some evidence, such as studies that demonstrate a connection between increased laryngeal hydration and voice consistency (Sivasankar & Leydon, 2010) and vocal rest and improved vocal condition (Chan & Yiu, 2003).

Interdisciplinary Approaches to Voice Studies

The function of the voice is highly complex and demands extensive therapy strategies. An interdisciplinary approach to voice studies is necessary due to the intricate nature of voice and its diverse roles, which encompass communication and artistic expression. According to a study done by Hejná et al. (2024), interdisciplinary research combines knowledge from other disciplines, including linguistics, medicine, psychology, and musicology, to gain a more holistic understanding of vocal phenomena. This method is especially beneficial for dealing with the complex nature of voice disorders and the diverse requirements of vocal performance.

The same study delves into the difficulties and advantages of interdisciplinary research in the field of voice studies. The study emphasises the diverse contributions that other disciplines may make to the understanding of voice, including the examination of vocal variation as a means of conveying social and emotional cues, as well as the examination of the influence of voice on notions of identity (Podesva & Callier, 2015) and morality (Dixon et al., 2002). By including these viewpoints, researchers can construct more comprehensive models of voice well-being and proficiency.

The study also addresses the pragmatic obstacles of interdisciplinary research, such as the communication barriers that exist between different fields of study and the challenge of identifying appropriate publication platforms for interdisciplinary work. aside from these challenges, the

authors contend that the advantages of interdisciplinary collaboration surpass the problems, since it enables more intricate and comprehensive understandings of voice.

An instance of effective interdisciplinary research is the investigation (Milstein et al, 2023) of respiratory illnesses in athletes, which integrates knowledge from sports medicine, otolaryngology, and vocal science to tackle the distinctive difficulties encountered by athletes with induced laryngeal obstruction (ILO) and breathing pattern disorders (BPD). This study emphasises the significance of using a variety of disciplines to provide accurate diagnostic tools and treatments for voice issues.

Laryngeal Massage and Muscle Tension Dysphonia

Muscle tension dysphonia (MTD) was first identified as a voice disorder by Morrison in 1983. It refers to a condition where there is heightened muscle tension in the muscles around the voice box, including the laryngeal and paralaryngeal muscles. Singers and extreme metal vocalists frequently fall into this category, although it has been brought to my attention that it can be easily diagnosed by ENT doctors due to the absence of other potential causes. Manual therapy is becoming more widely employed in the treatment of muscle tension dysphonia (MTD), and the expanding literature is starting to establish a solid foundation of evidence for the usefulness of these treatments (Roy et al., 1997; Wuyts et al., 2000). Undoubtedly, the approaches of manual therapy employed by practitioners of different professions differ based on their professional backgrounds (Mathieson et al., 2007). In the same paper it is stated that although the sample of the people that took part in the study was small, there was a positive correlation between laryngeal massage and relieving the symptoms of MTD. The same conclusion is stated by Verdolini et al. (2022) in a study on laryngeal massage and MTD. In the country where I live, Greece, there is only one laryngeal massage professional situated in Athens and is one of the professionals that I will be interviewing for my report.

Methodology

Ontology and epistemology

The term ontology refers to the study of "being" and investigates the nature of reality as well as the things that are present. According to Crotty (1998) and Guba and Lincoln (1994), ontological beliefs influence how researchers perceive the world, what they define as present, and what they believe may be investigated. Epistemology is often known as the study of knowledge, "a way of understanding and explaining how I know what I know" (Crotty, 1998, page 3). The social character of knowledge, the function of interpretation, and the well-foundedness of knowledge are all significantly influenced by ontological and epistemological issues. I frequently determine my

ontological perspective between relativism and realism, as constriction is the primary challenge for the majority of metal vocalists who consult with me and also the main reason why I decided to gather all the professionals from different fields. To be able to give more concrete answers.

Realism, defined as the belief in a single objective reality or truth (Easterby-Smith, et al., 2012), is, in my case, the condition where the constriction of the larynx is caused by a dysfunction, as certified by a doctor specialising in speech and language therapy (SLT). My relativist ontological perspective, which acknowledges the existence of multiple truths and the subjective nature of facts (Easterby-Smith, et al., 2012), is influenced by my ability to maintain a healthy voice that only experiences constriction during extreme vocal effects or heavy melodic singing. I identify with the notion that, despite our shared anatomical structure, each individual is unique. Although we frequently encounter similar conditions, such as dysphonia, muscle tension, and breathiness or hoarseness, we each experience and perceive our voices in a unique manner. I am optimistic that the interviews with the various professionals will provide some insight.

Paradigm

I believe that the interpretivism paradigm is the most appropriate for my research, as I plan to concentrate on qualitative methods. Interpretivism—Constructivism regards reality as the product of human experiences and interactions. It recognises that there are numerous realities that are influenced by individual perspectives, as opposed to a single, objective reality (Guba & Lincoln, 1994). Semi-structured interviews, ethnography, case studies, and focus groups are the qualitative methodologies most frequently associated with interpretivism. These techniques enable researchers to investigate the profundity and complexity of human experiences, thereby capturing the diversity of participants' viewpoints (Creswell & Poth, 2018). My objective is to integrate an examination of subjective feelings and meanings with an emphasis on real-life events through the application of interpretivism and realism. The integration of these elements will enable a thorough comprehension that is based on personal interpretation and practical realities.

I will conduct a focus group with my professionals and also conduct semi-structured interviews with them to gather as much information as possible for their extreme metal vocal clientele. In the social sciences, a comprehension of human behaviour, culture, and social phenomena necessitates an appreciation of context and meaning, which is why interpretivism is particularly well-suited for research. For instance, interpretivism enables researchers to explore the complex nature of participants' experiences and the significance they attribute to them in research such as mine, which involves semi-structured interviews and focus groups (Bryman, 2016; Morgan, 1997). I believe that this is highly advantageous for my research, as there is already a significant amount of prejudice surrounding this issue, and it is crucial for individuals to communicate their experiences and interpretations.

Methods

This research is a qualitative study that intends to examine a specific set of specialists that are engaged in voice-related professions, including otolaryngology, voice rehabilitation, laryngeal massage, and classical vocal instruction. All of them are part of a scientific team based in Athens, Greece, dedicated to advancing vocal health and conducting vocal research. It is crucial to emphasise this, as there are no other organisations in my country that focus on this area. This team consists of professionals from several professions, including the aforementioned fields and also pilates for voice, modern singing, gymnastics, and logo therapy. In order to gain valuable insights on whether extreme metal vocalists experience more vocal problems than singers in other genres, or some emergency aid vocal advice, it is essential to ask individuals to share their experiences as doctors, teachers and singers. By comparing and contrasting the present with the past, and evaluating the extent of similarities and differences, we can extract useful information.

I selected qualitative methodologies for this assignment because they are the most suitable for my research, which is dedicated to investigating the intricacy and profundity of human experiences and interactions with others. Qualitative methodologies, including interviews, focus groups, and case studies, facilitate a comprehensive, in-depth comprehension of participants' viewpoints, thereby allowing me to capture the subtle interpretations and meanings that are frequently overlooked in quantitative methodologies (Creswell & Poth, 2018). Furthermore, qualitative research is particularly well-suited for delving into phenomena that are not readily quantifiable, including cultural practices, emotional responses, and interpersonal dynamics (Denzin & Lincoln, 2018). By employing qualitative methodologies, I can interact with participants in a manner that is both adaptable and responsive, thereby enabling the research process to evolve in response to new insights (Bryman, 2016). This adaptability is essential for my research, as it facilitates a more comprehensive and authentic examination of the research topic, which is consistent with the objectives of my research.

The team disbanded between the conclusion of the proposal and the commencement of the assignment. According to Heaton (2004), researchers should maintain a reflexive approach, which entails the continuous evaluation and modification of their research methodology. Therefore, my objective was to recruit additional members for the focus group, who were extreme metal vocal coaches. I determined that it would be beneficial to engage in a conversation with the extreme instructors regarding the data from the professionals group and to gain their perspective.

Four semi-structured interviews, a focus group, and a questionnaire with open-ended enquiries were the methods I employed to extract the desired data. I opted for the open-ended questions option because I found it to be challenging for my research and used the same questions for both

groups as I was aiming to see if there would be an agreement in these groups. Additionally, they offer participants the flexibility to respond to the extent of their choice and are particularly beneficial for the investigation of intricate situations that discourage straightforward solutions. Dibley (2011) emphasises the importance of capturing the essence of the narratives provided by the narrators in his qualitative research analysis. This was one of my primary considerations. I aspired to be able to deduce straightforward conclusions and interpret the data. Despite the creativity and imagination that qualitative data analysis is renowned for, it still necessitates a systematic approach and high standards (Coombes, Allen & Humphrey, 2009). All data was obtained through online sources. A participant agreement form was signed by a sample of nine volunteer participants after they were provided with an information participant document (see appendix 1) regarding the research project's objective, intended techniques, and methodology. After they were informed, they had to sign a consent form (see appendix 2). To prevent participants from being identified, all questionnaire responses were anonymised, and confidentiality regulations were adhered to during the transcription of the focus group discussion (Bell, 2005).

Smith and Dean (2009) emphasise that practice-led research is founded on two interrelated concepts. In my case, emergency aid for specialists in a variety of voice-related disciplines and extreme metal vocals for vocalists and teachers. Initially, "that creative work in itself is a form of research and generates detectable research outputs" (Smith & Dean, 2009, p5). The outcome of creative endeavours contributes to the development of a research project and the formulation of a response to a research question. Secondly, "creative practice -- the training and specialised knowledge that creative practitioners possess, as well as the processes they engage in when they are creating art -- can result in specialised research insights that can be subsequently generalised and documented as research" (Smith & Dean, 2009, p. 5). Consequently, I was assigned to two teams for this assignment. A small unit consisting of Greek professionals and a larger team consisting of Extreme metal coaches. I was acquainted with all of the individuals, and they were all acquainted with one another. At the outset, I kept in mind that this could potentially be a concern. The dynamics of the group may be significantly disrupted by acquaintances, which could potentially obstruct the provision of responses (Smith, 1972). However, I believe that I was able to obtain non-biased responses to a high degree, primarily as a result of the desire of individuals to derive value from the entire process.

I employed semi-structured interviews as an additional instrument to acquire additional data for my research, specifically for my Greek team. Denscombe (2003) posits that interviews are carried out when the researcher determines that their project necessitates a more comprehensive understanding of the field from a specialist. And that resonated with the core of my project, as I have been endeavouring to conduct a comprehensive investigation into extreme vocal effects since the beginning of my Masters journey. I intend to examine the existing techniques, the diverse sounds, the existing literature, and collaborate with other similarly enthusiastic individuals. I requested that my Greek team members provide a comprehensive account of the cases involving extreme metal vocalists, the frequency with which they are treated, and whether these clients

experience a greater number of vocal health issues and vocal problems in general when compared to other genres of music, such as opera, light pop, and traditional Greek music. In addition, they were asked to suggest exercises that they would instruct clients to perform for warm-ups and cool-downs, as well as to prevent vocal health ailments. The objective of these enquiries was to ascertain whether they would offer general advice or whether they would be biased as a result of the widely held belief that extreme metal vocals can damage the voice.

While a semi-structured interview does involve a predetermined series of questions aimed at gathering certain information, these questions are open-ended, enabling the interviewee to freely discuss the issue at hand (Denscombe, 2003). During the semi-structured interview, my research involved four participants. The individuals were selected based on their expertise in the areas of otolaryngology, classical vocal training, voice rehabilitation, and laryngeal massage. Interviews are undertaken when the researcher determines that their project necessitates obtaining detailed information from an expert in the specific topic they are studying (Denscombe, 2003). In my case, it was crucial to interview experienced professionals in the medical industry. The participants were required to respond to and assess enquiries such as identifying the predominant issue encountered while working with extreme metal vocalists, as well as suggesting effective measures for preventing vocal health issues (see appendix 4).

The online focus group consisted of five members, however three persons withdrew at the last minute due to illness. They were admitted sequentially based on their arrival order. This group of people are my colleagues who teach extreme metal vocals, and we had a fruitful discussion about the material I received from the Greek professional team. Focus groups, such as this one, provide the benefit of delivering information that is qualitatively distinct from what can be gathered from individual interviews (Fern, 1982). Additionally, they encourage valuable discussion and agreement among members (Morgan, 1996). I facilitated the group discussion by employing the technique of "strategic use of silence" (Gill et al., 2008) to provide each participant sufficient time for observation and reflection on their respective contributions. I made an effort to assimilate discretely into the surroundings, allowing the talk to proceed organically, and only interjecting to ensure that everyone had an opportunity to contribute. The questionnaire (appendix 3) was tested and made accessible online using Google Docs. The transcription of the conversation (appendix 5) has maintained anonymity by concealing the identities of the individuals involved.

Coding

I began my analysis by utilising in vivo and process coding, with an emphasis on the precise words used by participants. This method facilitated the rapid and organic emergence of themes by utilising the participants' own language, which provided a direct understanding of their experiences and perspectives (Charmaz, 2006). I was enthusiastic about exploring the extensive data I had

gathered, as the conversations had brought to light a variety of intriguing subjects. In order to facilitate the identification of recurring themes and enable a clear comparison, I collected tables that captured the specific terms and statements used by each participant to systematically organise the data (Saldana, 2016). This systematic method established the foundation for the thematic analysis that ensued, enabling me to interpret the data in a manner that was both organised and meaningful (Miles, Huberman, & Saldana, 2014). I also used colour coding in the very first reading of the transcript. It can be found at the appendix 4.

Findings Presentation

Starting with my findings presentation, I will divide this part of the assignment which is the biggest one into two basic categories. The first one will be the Greek professionals team and the second one will be the Extreme vocal coaches.

Greek professionals individual interviews

The study aimed to recruit professionals from the fields of Voice Rehabilitation, Otolaryngology, Laryngeal Massage and Classical Singing Technique. A total of four semi-structured interviews were completed.

1. AT - Voice Rehabilitation Specialist / Logotherapist / Speech language therapist.
2. KL - Otolaryngologist / Phoniatician
3. SG - Laryngeal Massage specialist / Specialised Voice Physiotherapist
4. IT - Classical Singing Technique Teacher / Mezzo Soprano

Professionals	Field of expertise	Years of experience
AT	Voice Rehabilitation Specialist	20
KL	Otolaryngologist / Phoniatician	40
SG	Laryngeal Massage Specialist	10
IT	Classical Singing Technique Teacher	20

I asked all of them the same questions aiming to see if they would have similar or different opinions and approaches on extreme metal vocals, having always in mind my research question. The questions can be found at appendix 3.

In the forthcoming pages I will name the themes that derived from the participants and I will use their quotes to make sense of the data. Here is an overview of the themes and sub themes that will be presented :

1. Practitioners Lack of Experience with Metal Vocalists
2. Extreme metal vocalists are not different
3. Vocal Tension and Constriction
4. Warm-ups and cool-downs
5. Prevention and maintenance tips
6. Vocal Exercises
7. Having fun
8. Holistic approach
9. Emotion as a teaching tool
10. Singing classical and metal

Practitioners Lack of Experience with Metal Vocalists

KL *"They don't come to me. I mean, obviously there are artists who do extreme things with their voices, but I haven't seen them. I mean I've seen five people over the years nicely and even in the last few years."*

AT *"Not that much from metal singers, because I hadn't had that many clients."*

SG *"The truth is that people doing extreme vocals are not the most common cases of singers I see. If we consider that I see for example 10 singers, 9 of them are classic singers, contemporary, pop etc and one or 2 at most would be extreme metal."*

ET *"Metal singers don't come to me often."*

It was quite intriguing to me to hear from each of them that they do not frequently encounter extreme metal vocalists, as I had the exact opposite thought. I am certain that their number has increased substantially in recent years. I have provided information regarding this matter during my third module (Tsaltampasi, unpublished). Furthermore, I frequently receive new clients who are interested in learning advanced vocal techniques. Therefore, how is it possible that these individuals neglect to examine their vocal folds to ensure that they are in good health?

I am aware that they are extremely dedicated to their instrument, as I have had the opportunity to work with numerous students over the years. I personally recommend that they undergo a vocal fold examination once a year or whenever they experience any problems. However, they are unlikely to comply. I am of the opinion that their greatest concern is the possibility of receiving negative feedback from their physician, such as being told that they are performing all the incorrect actions and that they have a vocal issue, and that the physician will advise them to cease exhibiting these "harmful" effects. I believe that this is a component of biased information that we must overcome, as it discourages individuals from pursuing their true passions. I am of the opinion that additional investigation will be highly beneficial in this area.

Extreme metal vocalists are not different

KL *"Like all voice professionals. They experience voice problems when they do something wrong. If they do it right, they don't have a problem. That is, you can do the most extreme things with your voice, but if you do them right and supported, you won't have a problem. So you can do the simplest vocal things and if you do them wrong you'll have an immediate problem."*

SG *"I have not seen them show any difference in the problems you can find in a voice. These are the muscle problems, i.e. muscle tension issues problems. I see they are exactly the same as the other cases, for example firstly incorrect posture, turned shoulders, closed sternum, stiff sternum with ribs both forward and backward in the back."*

ET *"In the specific few instances I had, I didn't see anything more than I see in a contemporary or even folk singer."*

"In the advanced classical singing classes I might use a little more complicated exercises, but the same stuff I use not only for my classical students but also in all other genres."

This topic is of major importance to my research, as I have attempted to make this precise point throughout my entire MA program. Additionally, receiving this information from these professionals significantly enhances the value of my work. We are accustomed to hearing numerous negative statements regarding extreme metal vocals, such as the possibility of the voice disappearing and the development of nodules. However, it is important to note that numerous bands and solo artists perform these advanced vocal techniques on extended tours without encountering any issues. Throughout the conversations I had with the Greek professionals, they consistently supported the notion that extreme metal vocalists are no different from any other voice user who employs the voice in a more advanced manner.

Vocal Tension & Constriction

KL *"No, it's the same. It's not about what you sing or what you do. It's how you sing it and how you do it. I mean, it's the question I often face when they ask me "Can I sing a few hours a day? A little bit?" And I say, 24/7. If you do it well, you'll never have a problem."*

AT *"And we know that constriction is a very misunderstood term. So I often say to my clients that every human being has its own unique style of constricting the vocal mechanism in very harsh ways or in very subtle ways."*

SG *"So then in the continuation of what I see they're quite tight, in the neck area of the throat area that is the larynx area. I usually see tight hyoid muscle (the tongue muscle that connects the tongue with the hyoid bone), I see narrow pharyngeal walls, usually too much pressed sphincters (the constrictors), I see closed cricothyroid membrane that does not let the cartilages do the tilt easily."*

ET *"What was there was tension, there was tightness which prevented them from going to the high area. That was the most obvious as a vocal problem for them."*

It is undeniably one of the most frequently discussed topics among both instructors and singers: the prevention of tension and whether it is necessary or not in order to maintain a healthy voice. It was also mentioned that the term "constriction" is misunderstood, and my participants commented on the tension and constrictions they observed in all of their clients, regardless of the genre of music.

A significant number of pupils are unable to sing in a relaxed manner and produce high-quality sound due to vocal tension. While it is not uncommon for beginner voice students to experience some form of misplaced tension, even experienced vocalists may encounter difficulties with this issue. It is evident that tension in the neck, shoulders, and face prevents the natural flow of sound, while tension in any part of the body can influence the tone. The vocal autonomy of the singer can be influenced by the slightest tension, even in the foot. Contraction of the muscles in the foot can result in tension that extends up the leg to the hip or abdominal region. The abdominal muscles may become tightened and posture may be altered as a result of the tension in those areas. Both of these outcomes may have a detrimental impact on the vocal sound's independence (Sundberg, 1987; Sataloff, 2021). My laryngeal massage specialist participant got very much in detail about the parts that are being constricted. But what does the literature say about constriction?

In Cornelius Reid's A Dictionary of Vocal Terminology, tension is defined as the state or condition of being stretched, which is caused by the contraction of an elastic body, such as a muscle.

According to his vocabulary, muscular tension is necessary for vocal tone. When the vocal function is optimal, a varied combination of mutually opposing muscles synchronise their motion, resulting in a state of balance in tension (or absence of "tenseness") across the entire vocal tract. Meribeth Bunch also argues that the singer must maintain a delicate equilibrium between tension and muscular activity in the precise areas of the body that impact the quality of their voice. In her book called "Dynamics of the Singing Voice" she discusses the elements that influence vocal quality and deal with tension and those are :

1. Hyperactive facial muscles
2. The positioning and downward motion of the jaw
3. Tongue stiffness
4. Neck tension
5. Chest tightness
6. Emotional stress

And again, these are all things that my participants have pointed out as problems that have been working with their clients. Especially the laryngeal massage specialist was very detailed on the tension caused in the body due to too much effort.

SG *"I don't see bodies that are free, that are flexible, that have control of the core stability, that can, let's say, sit in an upright position without exaggeration, but an upright spine without getting tired in about half a minute. That's something that can affect the voice."*

I also try to engage the idea of a free body in my teachings, doing stretching exercises and working on the posture. This is for me one of the biggest challenges as due to the way of living and working (most of the times online sitting all day in a wrong position) most of the people are having a hard time with their daily routines.

"Because tongue is one of the most common problems in singers, not only in extreme vocalists, but in all the singers that I see."

The tongue pressure is another subject that has recently garnered attention, and I do not intend to suggest that it is not significant. However, I have observed that tongue stretches and other tongue exercises have only recently become a more prominent part of the teachings. My classical singing teacher participant also argues about the importance of the tongue :

ET *"And the second is the tongue. So if we get the tongue sorted out, I think we're on the right track."*

AT *““You really shouldn't do constricted voice”. And that's not. It cannot happen in an actor's life. That's when they come to me. Because I cannot instruct an actor not to constrict. It's impossible.”*

I have highlighted this quote due to the fact that the same thing is happening with heavy metal vocalists. People have the expectation that the singer will be completely calm and gentle, and that they will be able to perform all of these harsh sounds with absolutely no effort at all. They believe that this is the only way that the method will be done correctly. That is not something that can take place. Not only is tension and "good" constriction necessary for the production of metal vocals, but they are also necessary for the music to be played in an authentic way.

Another aspect of constriction is that it is present in all genres, not just those characterised by loudness and harshness. I have observed individuals who constrict excessively when they are extremely breathy and "soft," as well as those who shout for two hours without interruption.

Warm-ups and cool-downs

KL *“As I tell everyone there is no special thing for metal or for opera, that is everyone has to warm up their voice because it's a muscular process.”*

AT *“I constantly use lax vox techniques with different diameters, according to each person. So to ensure that the flow is there and at the basic level, I have some soft and functional voicing. I would much ensure that I do glides. I would definitely try to engage the whole body to what the person is doing. And by that, I mean I have many times used more constantly with my actors, the alba emoting technique that uses all of the body.”*

SG *“As for warm-up and cool-down, I would give a physical warm up, but I wouldn't give that just in case I heard or saw something. I would suggest it applies to the whole singing career and not just on the day of the live gig or rehearsal day, but more as a way of life.”*

ET *“You definitely want to do easy scales up and down and then go for fifths, octaves etc.”*

I anticipated that all of them would address the same topics, such as humming exercises, SOVTs, straws, and other popular concepts. However, I was delighted to observe that they also addressed other issues. Like the alba emoting technique or the physical warm-up, for instance. From my time as a student, I have never observed teachers engaging in more dynamic activities during their lessons, despite the fact that they have been discussing the extent to which singing is a muscular process for numerous years. Singers are required to perform a variety of somatic activities, rather than merely standing and singing, while the classical vocal training has also undergone significant changes. In the case of extreme metal vocalists, it is crucial that the body is able to jump and

headbang for an extended period of time as these are very common “duties” for extreme metal singers.

Prevention / Maintenance / Tips

KL *“They need to learn to check the height of the larynx in the throat. This is achieved by the technique of yawning equals you controlling the length and tension of the strings. And the second is relaxing the jaw too much so they can have a good resonance at the top.”*

AT *“I would utilise techniques that stabilise a higher larynx.”*

Here, we have a situation in which two opposing elements are present. The speech language therapist recommends techniques for a higher larynx, while the ENT specialist with a more classical background suggests yawning and relaxing the jaw, which is commonly recommended as a starting point for individuals to find a low larynx. Again, it is evident that it is necessary to experiment with a variety of elements in our daily routine and to be able to adapt as necessary. Some repertoire or parts of a song like for example a sustained fry scream with or without a note may necessitate a higher larynx, while others like a low growl may require a lower one. An accomplished singer should be capable of performing both tasks.

SG *“Stretching is also very important.”*

ET *“I personally and from personal experience find that sleep is the greatest protection you can offer your voice.”*

“Because whatever genre you do, once you're a professional singer, you ought to have a coach who coaches you.”

Due to the physical demands of their profession, singers are frequently referred to as vocal athletes, a term that is reminiscent of the rigorous training and performance requirements that sports athletes endure. In contrast to athletes in conventional sports, many vocalists are unwilling to recognise the necessity of a vocal coach, despite the fact that it is essential for the preservation of vocal health and the enhancement of performance. On the other hand, athletes who seek a career in any sport would hardly advance without the assistance of a coach, as they acknowledge that regular training and expert counsel are essential for achieving their best performance (Gupta, 2023; Willan Academy of Music, 2023).

“It doesn't matter what genre it is, the singer must do the same. So one thing is good preparation Second, it's good sleep. And the third is a little gymnastic work.”

How much air?

AT *“So when you have extreme vocals, high intensity or shrills or, you know, cries, please do not use a big amount of air.”*

It is true that in order to achieve some specific types of scream like for example a proper fry scream, less air is needed. There is no available research yet for these types of screams but I found some interesting points in the literature for breathing related to tension that support less exaggeration during inhaling. Doscher asserts that in amateur singers, inhalation is all too frequently accompanied by exaggerated diaphragmatic/abdominal antagonism, which results in a tone that is monotonous and mechanic. According to Smith, the complete action of inhalation occurs exclusively below the diaphragm when the body is in the appropriate alignment. As a result of the body's alignment, the thorax will have already expanded to the appropriate extent. The body is compelled to compress the inspiratory air by singers who resort to loud breathing, which constricts the larynx and produces an asthmatic sound during inhalation, as Lamperti writes in his book, *Vocal Wisdom*. This is both unpleasant for the observer and exhausting for the singer. In addition, it requires the throat to perform a dual function, monitoring the inflow and outflow of oxygen.

ET *“How much air is being used, if that's sorted out we've overcome a major issue.”*

Sub themes

- **Vocal Exercises**

ET *“It doesn't need to be too much of a complicated exercise as much as it needs to be mindful towards the process of using the voice at that moment.”*

“It's not, so much the exercise as the process.”

It is also my philosophy to prioritise exercises that are straightforward, as I have observed that my students are more focused and effective when they are assigned straightforward tasks, as opposed to when they are overwhelmed with information and lose sight of their primary objective. Sadolin, the founder of Complete Vocal Technique argues that in order for the singer to achieve the correct singing technique, the exercises should be as simple as they can (Sadolin, 2021).

- **Having fun**

KL *“One cannot take out of one's life the part of fun, pleasure and moral satisfaction. But between finishing the show and going out for beers, there can be a ten-minute period of vocal recovery.”*

As it accurately depicts the reality that numerous performers encounter, this observation is particularly insightful. It is, however, difficult to comply with such recommendations, even to a limited extent. For instance, individuals are frequently advised to refrain from engaging in conversation or consuming alcohol following a performance in order to safeguard their vocal health (Sataloff, 2017; Rubin, 2014). Even with these suggestions, it can be hard to stay away from engaging with colleagues who attend performances to provide support. Frequently, this results in a feeling of sadness for failing to adhere to these precautions during the most critical periods, as the social context and the desire to demonstrate gratitude for the assistance can be at odds with the most effective vocal care practices (Miller, 2004).

- **Holistic approach**

AT *“I would definitely try to engage the whole body to what the person is doing.”*

“So you can evoke emotions by entering the gestures of the emotion. So engaging the facial expression, the mask, as I often described to my actors, the body posture, being aware of the breathing pattern and have a very strong body.”

The holistic approach to the voice indicates that the act of singing involves the entire individual, and I absolutely agree with this definition. It is essential to approach the singing voice in a comprehensive manner, as it is not a separate mechanism, but rather a complex system that is interconnected to the entire body and psychological state. Miller (2004) and Smith (2007) have demonstrated that vocal resonance and control of respiration, which are indispensable components for successful singing, are directly influenced by the alignment and harmony of the body. It is crucial to integrate body awareness and strategies for relaxation into vocal instruction, as tension or misalignment can result in vocal distress and a decrease in the quality of a singer's voice (Stemple, 2005). This point is crucial to the extreme metal vocalist since tension and sometimes misalignment can have the desired result. Although it should not happen for extended periods of time but more used as a trick when the singer wants to find rather fast the starting screaming point. Again, this is a matter of discussion.

Furthermore, singing's psychological and affective components are considered in the holistic approach. Performance is strongly influenced by conveying emotions and mental well-being, and vocal production can be substantially influenced by nervousness or anxiety. Singers manage performance anxiety and establish a more profound connection with their emotional expression through the use of practices such as mindfulness and visualisation, which results in more authentic and impactful performances (Smith, 2007). Furthermore, by encouraging holistic vocal wellness, rather than merely treating vocal issues as they occur, vocalists can guarantee the long-term health of their voices by tackling the three primary aspects of voice production: breathing,

phonation, and resonance (Stemple, 2005). Singers can realise all of their strengths in both technical and emotional capacities through this comprehensive approach.

- ***Emotion as a teaching tool***

AT *“That means that the control is not there because you're in the emotion. You can't control things while you're in the emotion.”*

“And I know that every one of us can lose, can easily lose control when, amidst emotion. So I wouldn't advise them to get into the emotion.”

Another thing that we discussed was emotion as a teaching tool not only for extreme metal vocals but for all other genres as well. Although expressiveness and performance can be improved through the teaching of singing through emotion, it is not always the most efficient or advantageous method. One substantial issue is that excessive emphasis on emotions can result in muscular tension, which significantly impairs vocal technique. For instance, singers may accidentally contract their throat, shoulders, or jaw when they attempt to express intense emotions like anger or sorrow, resulting in vocal strain or damage (Miller, 2004).

It is still quite common for educators who do not have experience as metal vocalists to rely on the emotion that underpins the sound when teaching extreme metal vocals. Additionally, these sounds are emotionally dependent on the presence of negative emotions in order to be effective. Such as anger and disgust, which can result in numerous tensions if the technical knowledge is inadequate to support the performance. Breath support and vocal projection, which are foundational elements of healthy and effective singing, may be impaired by this tension. Nafisi (2010) posits that in order to preserve the vocal health of singers and prevent permanent damage to their voices, it is imperative that educators strike a balance between emotional expression and correct technique.

In addition, vocal instruction that places an excessive emphasis on emotions may result in performance inconsistencies. Vocalists may encounter challenges in reproducing shows with a similar level of technical precision when they engage in emotion-driven singing, as emotions are intrinsically subjective and variable (Thurman & Welch, 2000). For instance, a singer who exclusively depends on emotional connection may be unable to sustain control over their vocal during performances in which they are not experiencing the same level of emotion. The consequence of this can be a failure of confidence in public shows, intonation issues, and inconsistent vocal quality. And although intonation is not of great importance for some genres of extreme metal music, vocal technique is. Therefore, in order to guarantee consistency and longevity in a singer's career, emotions must be harmoniously incorporated with controlled vocal techniques (Miller, 2004; Thurman & Welch, 2000).

- ***Singing classical and metal***

ET *“Whether you want to or not. You can't sing both without consequence.”*

“So it's either weights or gymnastics or ballet. You can't do both. It's just muscle use, meaning no matter how good your technique is muscle use. There will come a moment from the many years of use that the muscles above the larynx will tighten no matter how much good you are doing things.”

Although I understand the rationale behind this claim, I am unable to completely concur with it. I am of the opinion that it is both difficult and challenging to sing diverse genres simultaneously. However, I am confident that it is feasible. Other genres, in addition to classical and heavy metal, are also included. The development of a singer's voice can be facilitated by the ability to perform both classical and heavy metal styles, provided that the singer employs appropriate technique and care. The robust foundation that classical singing establishes is capable of supporting more demanding genres, such as heavy metal, due to its emphasis on breath control, resonance, and healthy vocal production. The voice can be safeguarded when transitioning to intensive vocal styles, which frequently necessitate more force and aggression, by utilising the skills acquired in classical training, such as diaphragmatic breathing and the effective use of vocal registers (Chapman, 2012). Sadolin (2021) reports that heavy metal vocalists who employ appropriate techniques, including distortion and growling, can sing these styles without causing damage to their vocal cords, particularly when they integrate classical principles of vocal care.

Heavy metal techniques, when executed correctly, enable vocalists to experiment with various vocal effects and timbres, while classical techniques instruct them on how to maintain their vocal health over the long term. Combining both styles can result in a more comprehensive vocal experience, provided that vocalists adhere to proper technique and refrain from overexertion. For instance, heavy metal vocalists who have studied classical singing methods frequently discover that they can sustain the performance of demanding metal vocals for extended periods without dealing with exhaustion, indicating that classical training offers a solid foundation for addressing more extreme vocal styles (Sadolin, 2021).

Focus Group findings with Extreme Vocal Coaches

This group consisted of five fellow extreme vocal coaches, three people called in sick at the very last minute. For this instance, I used a table with the themes and their response as I found it to be more helpful for me to understand the data that I received. It can be found at the appendix 6.

Themes

Themes
Problems in speaking / clean voice
Metal singers are not different when it comes to vocal problems
SOVTs
Warm-ups / Cool-downs / Individuality
Advice for prevention
Vocal Routines
Bias

Problems in speaking / clean voice

I was expecting that we would engage in a more in-depth conversation regarding extreme metal singing with my colleagues. However, our conversation turned more towards the clean voice and its potential impact on the screaming technique in the case of a clean voice issue.

"It's mostly comes the speaking voice, not from the extreme voice. "

"Sometimes it then translates into to the effects that they want to do. So super breathiness or something like that, then it translates into the effects that they want to add as well."

There was an agreement that quite often when there is a problem in the screaming voice of a client, frequently the solution lies in controlling the clean voice. For example if a client cannot find a high falsetto based fry scream, it can be because he cannot find the falsetto in the clean voice. Switching from growling and screaming to melodic singing is very demanding and it can cause problems if there is not good co ordination. Many vocalists that perform extreme metal vocals have a tough time maintaining a clean singing voice in addition to their brutal vocal styles.

This is because extreme metal vocal styles are inherently aggressive. The two types of vocals need distinct sets of vocal abilities and muscle control (Sadolin, 2021;Chapman, 2012). Even with the right technique, it is possible for the voice to experience cumulative damage over time, which can make clean singing more difficult (Sataloff, 2017; Rubin et al., 2014). This can be a reason why clean singing can be difficult to achieve. The vocal folds might sustain injury if pressure is applied to them for an extended period of time and this is something that happens not only for all Fry related screams but also to guttural sounds that the ear perceives as "voiceless" (=no vocal fold activation). Vocal fold activation is present for the majority of distorted vocals.

"I've had a few students who came to me and they could not scream in their falsetto, for example. And what happens is that then we just test what they can do with their clean voice and they cannot reach it either there."

There is a possibility that extreme metal vocalists will have trouble switching between their harsh vocal technique and clean singing when they are performing, which is yet another issue that may come up. The muscular tension and breathing support that are necessary for growling or screaming are different from those that are required for clean singing, which may lead to a gap between the two. For example, growling requires more muscle strain than Fry screaming does. This issue can cause inconsistencies in all areas of the vocal performance, including pitch, tone, and control of the voice, while the performer is transitioning from one vocal style to another while they are performing. According to Sadolin (2021) and Chapman (2012), it is essential to obtain the right training and conditioning in order to achieve the goal of managing these transitions and guaranteeing that both vocal styles may be sustained without affecting the quality of the clean voice.

Metal singers are not different when it comes to vocal problems

In this section, we have all reached a consensus that the genre of the performer is irrelevant, whether it be pop, heavy metal, or country. They all encounter vocal issues, with tension and unnecessary constrictions being the most prevalent.

"So no, I wouldn't say that the extreme singers stand out when it comes to vocal health problems."

"But I don't think in general that metal vocalists have more voice problems."

"I haven't seen differences in extreme vocalists in terms of problem."

"I would say on average, I find that the screaming humans have less problems than the clean Singers."

This subject is entirely in accordance with the Greek professionals. All members of both groups confirmed that extreme metal vocalists do not appear to have any distinct pathology or structural irregularities that could potentially worsen their issues when compared to other vocal styles. The extreme coaches also stated that they perceive voice actors and rock vocalists as the professional categories with the most vocal problems.

"The person with the most problem for me is the voice actor, not metal vocalist, enthusiast."

"Voice actor, yes. Not people who are trying to train or a little bit training to extreme vocals."

"I would say the voice actors stands out in terms of having problem compared to people who are actual practitioner even beginners, basically because voice actors are not focusing on the things they need to focus the same way that we do."

SOVTs

"Never in 30 something years, or let's say 15 years that I've been doing vocal coaching, have I recommended anything related to semi-included vocal track exercises."

This category is a topic that is consistently discussed. Additionally, while they are highly practical, enjoyable, and effortless exercises, they should not be considered a panacea for all vocal disorders. The individuals of this group contended that they will not implement these exercises with all students or in all circumstances. They all engaged in a conversation regarding the fact that not all of them are effective for the same purposes. According to the literature, SOVT exercises are advantageous, however, they are not without constraints. This research suggests that the effects of SOVT exercises may be context-dependent and temporary. Singers may observe immediate enhancements in their vocal quality subsequent to SOVT exercises; however, these advantages may not endure without regular and systematic vocal training regimens (Ragan, 2016). In addition, SOVT exercises may not resolve all underlying vocal issues, including persistent tension, poor posture, or respiration control problems, necessitating a more thorough approach (Behrman, 2005).

In addition, SOVT exercises may be ineffective for individuals with specific vocal pathologies, such as hyperfunctional voice disorders, who necessitate more precise therapeutic interventions. According to certain studies, SOVT exercises may temporarily alleviate symptoms; however, they do not always result in permanent enhancements in vocal function without the implementation of long-term vocal care strategies and additional therapy (Titze, 2006; Sovijärvi & Laukkanen, 2007). As such, SOVT exercises should be considered a component of a comprehensive approach to vocal health, rather than an independent solution.

I believe it is crucial to mention this here, as the majority of voice teachers and individuals who instruct extreme metal vocal techniques rely on SOVTs without understanding the research behind them or the appropriate exercises for each purpose.

"I have a bunch of tools of stuff that I use, different sizes of straw, different things, and I've been trying them for the last two years. In terms of having any effect on my practises, my own, I didn't see any real improvement. Mostly for me, it's individual."

Warm-ups / Cool-downs/ Individuality

“For me, warm-up depends on the main voice technique of the person first.”

“Generally, you are judging from your student, your client. You are making something for the specific person.”

“If I were to give any general advice on warmup, it would be like the body awareness.”

The significance of tailor-made instruction for each individual was extensively discussed in this topic. This, to me, is the essence of teaching all forms of voice. Due to the fact that each individual is unique, they require distinct approaches. I am of the opinion that the more research is conducted in this discipline, the more information we will acquire regarding the various aspects and requirements of the voice. If I were to compare the two groups, I would assert that the Greek group did not prioritise the individuality of each individual in terms of warm-ups and cool-downs, despite emphasising the significance of warming up the entire body.

“It is extremely specific to the individual, to the task that they are about to do. So are we warming up for a voice lesson? Are we warming up for a performance, for a recording? What are we warming up for?”

“So I don't really do warm-ups or cool-downs. And so far as that, I go right into the technique. But I don't do a warm-up before, because if he has that problem, the warm up doesn't solve it.”

I would like to add to this point, the importance that I personally find in the cool-downs. I believe that it is still being overlooked by the majority of students, as well as by some instructors. According to the literature, there is an additional critical component of vocal routines that vocalists frequently neglect: the cool-down phase. Just as athletes must cool down their muscles after an exercise, singers must cool down their voice after performing intensely. Vocal cool-down exercises are beneficial for the purposes of promoting restoration after a performance, reducing swelling in the vocal folds, and releasing tension (Ragan, 2016). The significance of this phase lies in its ability to prevent vocal fatigue and guarantee that the voice is prepared for the next show or practice session. It is also possible to protect the voice over the long term by incorporating vocal cool-downs into a daily regimen, which can help reduce the accumulated effects of overuse (Sataloff, 2017). That can too be tailor-made I believe for the individual but can also include just some simple exercises that can be done after the performance.

Advice for prevention

"General advice is know your body, know your voice, know your brain, assess where they are every day, and adjust accordingly. No amount of technique is going to prevent an injury."

"An anti-advice would be, do not check in with your extreme voice all day. But instead, trust your experience."

This is a useful advice for extreme vocalists due to the fact that they tend to scream for a long time during the day when preparing for a live show, doing either warm-ups or rehearsing their songs.

"I would also say there aren't any general exercises that I would say to everyone, do this, but I try to encourage my students, at least the online ones, to sit down five minutes before the lesson starts and either do a little bit of stretches or meditate or just whatever breathing exercises you like. It's more about being present and having some body awareness."

Once again, both groups approached the topic of vocal problem prevention from a broader point of view. The two terms that were once more the most frequently used in this group were individuality and holistic approach. Also people discussed about having a good sleep, reduced stress if possible and healthy habits. The literature agrees with this as I have analysed in the "Holistic approach" section of the Greek group.

Vocal routines

"I do the same exercises that I've done since I was 16 or whatever. I do them not because I think they are the best vocal exercises, but I do them because when I do them, I do them in the same order, the same way. Every day, my mind calms down and I get focused."

I can identify with this statement, as it is a practice that I also engage in as an extreme metal vocalist. Although there is a wealth of information regarding the beneficial effects of vocal routines in ordinary life, I am of the opinion that the most significant outcome is the individual's increased confidence and control over their voice, rather than a specific exercise that accomplishes the task. Daily vocal exercises are also beneficial for the development and preservation of vocal flexibility and strength. Similarly to any other muscle in the body, the vocal muscles require consistent exercise to operate at their best rate. The classical singing instructor from the Greek group argued that the exercise and its complexity are not as important as the awareness of the material being worked on.

"I more and more just focus on screaming as being a muscle memory type of a thing."

I would like to expand a bit on this subject as it is one of my favourites. I will have this discussion with every student of mine about the importance of screaming and growling becoming muscle memory because I am of the opinion that this will enable the body to be liberated, which will subsequently free the voice.

Muscle memory is a critical element of vocal performance for vocalists, as it facilitates precise alignment of the muscles involved in articulation, respiration, and phonation. Singers are capable of executing complicated vocal actions without consciously trying as a result of the development of muscle memory through repeated practice. In singing, an automatic combination of respiration support, vocal fold vibration, and resonance is crucial for efficient performance and it applies for extreme vocalists as well as all professional singers. According to research, vocalists are more likely to be able to reproduce precise pitches, dynamics, and tone quality during a performance when they engage in consistent vocal exercises, which help to establish proper vocal techniques in muscle memory (Sundberg, 1987). By utilising muscle memory, vocalists can concentrate on the creative and emotional aspects of their performance, rather than focussing on the technical execution of each sound.

The establishment of muscle memory in vocalists is of crucial importance due to the fact that the voice is an instrument that is located within the body. Unlike external instruments, such as a piano or violin, vocalists are unable to touch or observe their vocal folds and resonance cavities. As an alternative, they depend on kinaesthetic consciousness and proprioception to direct their vocal production (Miller, 2004). Muscle memory enables vocalists to internalise the sensations that are linked to effective vocal technique, such as the feeling of the most effective vowel location or controlled breath support. As time passes, these sensations become deeply ingrained, allowing vocalists to perform complex tasks with ease and coherence, even in high-pressure situations like live performances (Callaghan, 2000).

By engaging in consistent practice, the vocal muscles' cooperation and strength are enhanced, thereby decreasing the probability of strain or injury during a performance (Sataloff, 2017). According to Stemple (2005), vocalists are less inclined to engage in compensatory behaviours, such as high tension in the neck or jaw, when their muscular memory is well-developed. I would argue that for extreme metal vocalists it is not that simple as many times this tension is needed in order to achieve the sound. But nevertheless it needs to stay balanced. This is why it is essential to establish good muscle memory through regular, deliberate practice as a preventative measure for the preservation of vocal health. It may be challenging for singers to overcome established bad habits later on if they fail to develop proper muscle memory early in their training. This can result in ongoing vocal problems and limit their vocal potential.

In addition to technical consistency, muscle memory also contributes to the expressive abilities of a singer. When the technical aspects of singing are automated, muscle memory opens up cognitive resources that can be moved towards expressive emotion and interpretation. Singers need to preserve technical accuracy while conveying the affective content of a song in performance contexts, which is particularly critical (Miller, 2004). The capacity to depend on muscle memory for technical execution enables vocalists to concentrate on delivering a compelling performance and connection with the audience. In this manner, muscle memory is not only a technical instrument but also an element of increasing artistic expression, rendering it an essential component of vocal training (Sundberg, 1987; Callaghan, 2000).

Bias

“And the best thing that we can do is just adjust accordingly and also not hold these ideas. That, oh, if I just sang with good technique, nothing would happen to me because then we get into the whole victim blaming and a lot of paranoia and shame. So it's crap.”

This is something that I have heard many times in the past and continue to to this day. The notion that a singer who has superb technique is invulnerable to vocal difficulties is a position that is both biassed and simplistic. Although having strong technique is vital for lowering the risk of vocal damage and boosting performance, it fails to offer total protection against all of the possible vocal problems that could arise while performing. Outside of technique, there are a number of other elements that might have an effect on voice function. These include health in general, tension, and the surrounding environment. As an illustration, even a singer who possesses outstanding technique may experience vocal tiredness or strain when they are ill, when they are dehydrated, or after they have used their voice for an extended period of time in stressful circumstances (Sataloff, 2017). Therefore, in order to maintain vocal health, it is necessary to take an approach that takes into account not only the skill of the singer but also their physical and mental well-being.

Additionally, the belief that proper technique is sufficient to prevent all vocal disorders ignores the fact that the voice is a living instrument that is susceptible to injury and strain. irrespective of how technically proficient they are, professional singers exert significant pressure on their vocal cords. This is particularly relevant during times when they have demanding performing schedules or when they are practicing at rehearsals. Vocal pathologies such as nodules, polyps, or haemorrhages can be caused by repetitive use, particularly when stressful conditions are present (Mathieson et al., 2014). This is true even when the correct technique is utilised.

Not only does technique play a large role in vocal health, but it also plays a huge role in the mental and emotional components of singing, which cannot be entirely addressed by technique alone. It is possible for stress, worry, and emotional strain to appear physically, which frequently results in tension in the throat, neck, and shoulders, which can have a bad impact on the voice (Zemlin,

1998). Although they may have superb technique, singers who fail to tackle these mental factors may still face difficulty with their vocal performance. For this reason, it is essential to acknowledge that excellent technique is an essential component of vocal health; nevertheless, it must be supplemented by appropriate vocal therapy, handling emotions, and healthy lifestyle practices in order to guarantee the long-term viability of the vocal cords (Smith, 2007). However, extreme metal vocalists are frequently considered not having adequate technique or having more often vocal pathologies even though there is no official data to back up this idea. That has also been a core idea for this study.

Reflection on the data

In regard to the fact that I have now documented all of the information that I required for this project, it is clearly apparent to me that I discovered a greater degree of common ground between the two groups than I had anticipated. People may originate from different nations and backgrounds but does not change the fact that they have very similar thoughts about the vocal instrument. The Greek group may also relate to the perspective of extreme metal vocalists, despite the fact that they are unfamiliar with the music and the techniques. My primary objective from the beginning of this module was to be able to identify common ground throughout the various fields of study and the metal community and I believe that I was successful in doing so this time around. In the end there were no significant differences between the two groups.

Reflective Model

I employed Gibb's reflective model (1988) to comprehend the data I was reviewing and the experiences I had personally encountered. To maintain a sense of order in both my thoughts and the literature, I attempted to stick to the six phases of the reflective cycle. This has enhanced my capacity to differentiate between what I knew and what I did not. I tried to organise my thoughts and the data based on the following categories :

1. My initial research question and the purpose that it would serve.
2. Collecting the data from the Greek professionals.
3. Collecting the data from the fellow Extreme Vocal coaches.
4. How all these new insight could possibly shape my research question.

Advantages, Disadvantages and Limitations

I knew from the beginning that answering my question would not be an easy task. Based on the results I believe that it was answered but I do acknowledge that it will take more research for more detailed work to be done. It was a great advantage that my participants are top professionals in the medical field in Greece and well updated and the extreme metal coaches have many years of experience in teaching and performing extreme metal vocals. On the other hand, it was very unexpected for me that the professionals have only seen very few cases of extreme metal vocalists, I expected that there would be more cases to be discussed. I acknowledge as a weakness of my study that in order to have more valid results I should have more participants. However, it was already overwhelming for me even with this amount of people. I have also faced limitations from the beginning like the scarcity of literature. I was in constant search of more and more papers to back up my questions and at some point I lost my focus. Additionally, Due to the underground status of this type of music, is it very possible that research will continue to be limited. Most likely only hardcore metal fans seem to be conducting research for these extreme vocal techniques. This study could be used to bring more people together to discuss extreme metal vocals with an interdisciplinary approach.

Conclusion

From the beginning, I was fully aware of the fact that the task I was undertaking in this research would be tough. Collecting the content proved to be a problematic matter at times. I encountered moments of uncertainty and anxiety, characterised by self-doubt and panic, as I questioned the sufficiency of my connections between the literature, facts, and concepts that I intended to investigate and ultimately deliver. This uncertainty persists, as I am still unsure about the correctness of these connections. However, my excitement for this topic motivated me forward, and I am quite grateful that I continued. During the study, my participants sent me emails enquiring if they could offer further assistance or if there was anything else I required. I perceived their messages as a form of encouragement. I have been fortunate in that my discussions with all of those who participated provided me with plenty and valuable material. However, this has posed a challenge in determining the appropriate boundaries for my study. The guidance I received has instilled in me the resolve and bravery to persist with the initial purpose of my studies and it has also provided me with numerous ideas for future research and potential themes.

I made an effort to maintain my research question in my mind at all times in order to prevent myself from becoming distracted by my thoughts. However, my primary concern remains whether I have effectively connected the dots, as I intended to analyse core themes while also remaining focused on my question.

In terms of my personal learning outcomes for this project, I managed to succeed in half of them. Initially among others I wanted to be able to structure an emergency aid protocol for extreme metal

vocalists taking into account all the different perspectives of the participants. However, time wise that proved to be impossible. So the aims that I succeeded were the following :

- I have gained insights on extreme metal vocals from respected people of the medical field here in Greece and also within the metal community.
- I investigated the most recent academic research concerning extreme metal vocals.
- I have set the ground and the connections for future studies.
- I reflected on my own strategies on simple voice rehabilitation advice at both fields of teaching and performing.
- I found common ground in perspectives and techniques between the two groups that gives me the certainty that I could in the future structure an emergency aid protocol for extreme metal vocalists.
- I have deepened my knowledge in the specialised fields of laryngeal massage therapy, voice rehabilitation, otolaryngology, logo therapy and classical training.
- I will use the research as a foundation to establish an interdisciplinary group consisting of specialists from a variety of fields, which will get together on a regular basis to talk about the course and offer new information. These people will be the participants of both groups blending together.

REFERENCES

Aaen, M., McGlashan, J., Christoph, N., & Sadolin, C. (2021) 'Extreme vocal effects distortion, growl, grunt, rattle, and creaking as measured by electroglottography and acoustics in 32 healthy professional singers'.

Aaen, M., Sadolin, C., White, A., Nouraei, R., & McGlashan, J. 'Extreme vocals—A retrospective longitudinal study of vocal health in 20 professional singers performing and teaching rough vocal effects'. Available at: <https://doi.org/10.1016/j.jvoice.2022.05.002>

Aaen, M., McGlashan, J., Sadolin, C., & White, A. (2023) 'A mixed-method feasibility study of the use of the Complete Vocal Technique (CVT), a pedagogic method to improve the voice and vocal function in singers and actors, in the treatment of patients with muscle tension dysphonia: A study protocol'.

Behlau, M., Azevedo, R., Pontes, P., Vieira, V., & Madazio, G. (2012) 'Epidemiology of voice disorders in teachers and nonteachers in Brazil: Prevalence and adverse effects', *Journal of Voice*, 26(6), pp. 665.e9-665.e18. Available at: <https://doi.org/10.1016/j.jvoice.2011.09.010>

Behlau, M. and Oliveira, G. (2009) 'Vocal hygiene for the voice professional', *Current Opinion in Otolaryngology & Head and Neck Surgery*, 17(2), pp. 149-154.

Behrman, A. (2005) *Speech and Voice Science*. Plural Publishing.

Bell, J. (2005) *Doing your research project*. 4th ed. Maidenhead: Oxford University Press.

Borg, W.R. and Gall, M.D. (1989) *Educational Research: An Introduction*. 5th edn. New York: Longman.

Bryman, A. (2016) *Social Research Methods*. 5th ed. Oxford University Press.

Bunch, M. (1997) *Dynamics of the Singing Voice*. 4th ed. Wien: Springer-Verlag, p. 103.

Caffier, P., Sandner, D., Kniesburges, S., & Richter, B. (2018) 'Common vocal effects and partial glottal vibration in professional nonclassical singers', *Journal of Voice*, 32(3), pp. 340-346. Available at: <https://doi.org/10.1016/j.jvoice.2017.06.009>

Callaghan, J. (2000) *Singing and Voice Science*. San Diego, CA: Singular Publishing Group.

Castelblanco, L., Habib, M., Stein, D. J., & Sataloff, R. T. (2014) 'Singing voice handicap and videostrobolaryngoscopy in healthy professional singers', *Journal of Voice*, 28(5), pp. 608-613. Available at: <https://doi.org/10.1016/j.jvoice.2014.03.003>

Chapman, J. L. (2012) *Singing and Teaching Singing: A Holistic Approach to Classical Voice*. San Diego, CA: Plural Publishing.

Chan, R. and Yiu, E. (2003) 'Effect of hydration and vocal rest on the vocal fatigue in amateur Karaoke singers', *Journal of Voice*, 17(2), pp. 216-217.

Charmaz, K. (2006) *Constructing Grounded Theory: A Practical Guide through Qualitative Analysis*. SAGE Publications.

Coombes, L., Allen, D., Humphrey, D., & Neale, J. (2009) 'In-depth interviews'. In: Neale, J. (ed.) *Research Methods for Health and Social Care*. Basingstoke: Palgrave, pp. 195–210.

Reid, C. (1983) *A Dictionary of Vocal Terminology*. New York: Joseph Patelson Music House, Ltd., p. 371.

Creswell, J. W., & Poth, C. N. (2018) *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. 4th ed. SAGE Publications.

Crotty, M. (1998) *The Foundations of Social Research: Meaning and Perspective in the Research Process*. SAGE Publications.

Devadas, U., Bellur, R., & Maruthy, S. (2016) 'Prevalence and risk factors of voice problems among primary school teachers in India', *Journal of Voice*, 31(1), pp. 117.e1-117.e10. Available at: <https://doi.org/10.1016/j.jvoice.2016.03.006>

Denscombe, M. (2003) *The Good Research Guide for small-scale social research projects*. 2nd edn. Philadelphia: Open University Press.

Denzin, N. K., & Lincoln, Y. S. (Eds.). (1994) *Handbook of Qualitative Research*. SAGE Publications.

D'haeseleer, E., Meerschman, I., Van Lierde, K., & Van Overmeiren, T. (2019) 'The vocal symptoms and habits of professional voice users'. Available at: <http://hdl.handle.net/2263/75132>

Dibley, I. (2011) 'Analysing narrative data using McCormack's Lenses', *Nurse Researcher*, 18(3), pp. 13-19.

Dixon, J. A., Mahoney, B., & Cocks, R. (2002) 'Accents of guilt? Effects of regional accent, race, and crime type on attributions of guilt', *Journal of Language and Social Psychology*, 21(2), pp. 162–168. Available at: <https://doi.org/10.1177/02627X02021002004>

Doscher, B. M. (1994) *The Functional Unity of the Singing Voice*. 2nd ed. Lanham, MD: The Scarecrow Press, Inc.

Easterby-Smith, M., Thorpe, R. & Jackson, P. (2012) *Management Research*. 4th ed. London: Sage Publications.

Fern, E. F. (1982, in press) 'Why Do Focus Groups Work: A Review and Integration of Small Group Process Theories'. In: Mitchell, A. (ed.) *Advances in Consumer Research*. Ann Arbor: University of Michigan.

Freedman, S. E., Maas, E., Caligiuri, M. P., Wulf, G., & Robin, D. A. (2007) 'Internal versus external: Oral-motor performance as a function of attentional focus', *Journal of Speech, Language, and Hearing Research*, 50(1), pp. 131–136. Available at: [https://doi.org/10.1044/1092-4388\(2007/011\)](https://doi.org/10.1044/1092-4388(2007/011))

Fujiki, R. B., & Thibeault, S. L. (2024) 'Voice disorder prevalence and vocal health characteristics in adolescents', *JAMA Otolaryngology–Head & Neck Surgery*, 150(7), pp. 789-795. Available at: <https://doi.org/10.1001/jamaoto.2024.2081>

Gibbs, G. (1988) *Learning by doing: A guide to teaching and learning methods*. London: Further Education Unit at Oxford Polytechnic.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008) 'Methods of data collection in qualitative research: Interviews and focus groups', *British Dental Journal*, 204(6), pp. 291-295.

Guba, E. G., & Lincoln, Y. S. (1994) 'Competing paradigms in qualitative research'. In: Denzin, N. K., & Lincoln, Y. S. (eds.) *Handbook of qualitative research*. Thousand Oaks, CA: SAGE Publications, pp. 105-117.

Guzman, M., Acevedo, K., Leiva, F., Ortiz, V., Hormazabal, N., Quezada, C. (2019) 'Aerodynamic characteristics of growl voice and reinforced falsetto in metal singing', *Journal of Voice*, 33(6), pp. 803.e7-803.e13. Available at: <https://doi.org/10.1016/j.jvoice.2018.04.022>

Guzman, M., Laukkanen, A. M., Krupa, P., & Geneid, A. (2019) 'Vocal Tract and Glottal Functioning During and After Different Types of Vocal Exercises', *Journal of Voice*, 33(4), pp. 489.e1-489.e12. Available at: <https://doi.org/10.1016/j.jvoice.2018.01.006>

Heaton, J. (2004) *Reworking Qualitative Data*. SAGE Publications.

Hejrná, M., Kjeldgaard-Christiansen, J., & Eaton, M. (2024) 'Why interdisciplinary approaches to voice studies?', Aarhus University, Denmark.

Hoepfl, M.C. (1997) 'Choosing qualitative research: A primer for technology education researchers', *Journal of Technology Education*, 9(1), pp. 47-63.

Izdebski, K., Di Lorenzo, E., Yan, Y., & Blanco, M. (2016) 'What we have learned about extreme metal production from HSDP'.

Kochis-Jennings, K., Eadie, T., & Finnegan, E. (2014) 'Examining Vocal Function in Extreme Metal Singers: A Retrospective Analysis of Vocal Health', *Journal of Voice*, 28(5), pp. 638.e13-638.e20. Available at: <https://doi.org/10.1016/j.jvoice.2013.12.008>

Koufman, J., Sataloff, R. T., & Toohill, R. (1996) 'Laryngopharyngeal reflux: Consensus conference report', *Journal of Voice*, 10(3), pp. 215–216.

Laal, M. (2012) 'Benefits of Lifelong Learning', *Procedia - Social and Behavioral Sciences*, 46, pp. 4268–4272.

Lamperti, G.B. (1931) *Vocal Wisdom*. Transcribed by William Earl Brown. New York: Taplinger Publishing Company.

Lemaitre, G., Houix, O., Voisin, F., Misdariis, N., & Susini, P. (2016) 'Vocal Imitations of Non-Vocal Sounds'. Available at: <https://doi.org/10.1371/journal.pone.0168167>

Mathieson, L., Hirani, S., Epstein, R., Baken, R., Wood, G., & Rubin, J. (2007) 'Laryngeal Manual Therapy: A Preliminary Study to Examine its Treatment Effects in the Management of Muscle Tension Dysphonia'.

Miles, M. B., Huberman, A. M., & Saldana, J. (2014) *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. SAGE Publications.

Milstein, C., Patel, R., Laurash, E., & Kampert, M. (2023) 'Identification of Breathing Pattern Disorder in Athletes With Exercise-Induced Laryngeal Obstruction: A Novel Assessment Tool'. Available at: <https://doi.org/10.1016/j.jvoice.2023.01.006>

Miller, R. (2004) *Solutions for Singers: Tools for Performers and Teachers*. New York: Oxford University Press.

Morgan, D. L. (1996) 'Focus Groups', *Annual Review of Sociology*, 22, pp. 129-152.

Morgan, D. L. (1997) *Focus Groups as Qualitative Research*. 2nd ed. SAGE Publications.

Morrison, M. D., Rammage, L. A., Belisle, G. M., Pullan, C. B., & Nichol, H. (1983) 'Muscular tension dysphonia', *The Journal of Otolaryngology*, 12(5), pp. 302–306.

Mowraska, J. and Niebudek-Bogusz, E. (2017) 'Risk factors and prevalence of voice disorders in different occupational groups—a review of literature', *Otorinolaryngologia*, 16, pp. 94-102.

Morawska, J., Niebudek-Bogusz, E., & Pietruszewska, W. (2022) 'Considerations and demands in the voice care of contemporary commercial singers in occupational health and safety aspects'. Available at: <https://doi.org/10.13075/mp.5893.01201>

Munier, C. and Kinsella, R. (2008) 'The prevalence and impact of voice problems in primary school teachers', *Occupational Medicine*, 58(1), pp. 74-76. Available at: <https://doi.org/10.1093/occmed/kqm104>

Murry, T. and Rosen, C. (2000) 'Vocal education for the professional voice user and singer', *Otolaryngologic Clinics of North America*, 33(5), pp. 967-981.

Nafisi, J. (2010) 'Gesture as a tool of communication in the teaching of singing', *Australian Journal of Music Education*, 2, pp. 103-116.

Nieto, O. (2013) 'Unsupervised Clustering of extreme vocal effects'. In: *Proceedings of the 10th International Conference on Advances in Quantitative Laryngology, Voice and Speech Research*, June 3-4, 2013, Cincinnati, Ohio, USA.

Podesva, R., & Callier, P. (2015) 'Voice quality and identity', *Annual Review of Applied Linguistics*, 35, pp. 173–194. Available at: <https://doi.org/10.1017/S0267190514000270>

Radovanovic, B. (2019) 'Monstrous Voice? Extended Vocal Techniques in Extreme Metal Music'. *ISMMS 4th Biennial International Conference*. Book of Abstracts, 2019.

Ragan, K. 'The Impact of Vocal Cool-down Exercises: A Subjective Study of Singers' and Listeners' Perceptions'. Available at: <https://doi.org/10.1016/j.jvoice.2015.10.009>

Roy, N., Bless, D. M., Heisey, D., & Ford, C. N. (1997) 'Manual circumlaryngeal therapy for functional dysphonia: An evaluation of short- and long-term treatment outcomes', *Journal of Voice*, 11(3), pp. 321-331. Available at: [https://doi.org/10.1016/S0892-1997\(97\)80003-1](https://doi.org/10.1016/S0892-1997(97)80003-1)

Rubin, J. S., Mathieson, L., & Blake, E. (2014) *The Laryngeal Manual*. 2nd ed. San Diego, CA: Plural Publishing.

Sadolin, C. (2021) *Complete Vocal Technique*.

Saidin, K. & Yaacob, A. (2016) 'Insider Researchers: Challenges and Opportunities'. In: Utara, Universiti Utara Malaysia, pp. 849-854.

Sakakibara, K., Kimura, M., Imagawa, H., Niimi, S., Fuks, L., & Tayama, N. (2004) 'Growl Voice in Ethnic and Pop Styles'.

Saldana, J. (2016) *The Coding Manual for Qualitative Researchers*. 3rd ed. SAGE Publications.

Sataloff, R. T. (2017) *Professional Voice: The Science and Art of Clinical Care*. 4th ed. San Diego, CA: Plural Publishing.

Sataloff, R. T. (2021) 'Anatomy and Physiology of the Voice'. In: *Dentofacial Anomalies*. Springer, Cham.

Seifpanahi, S., et al. (2016) 'Prevalence of voice disorders and associated risk factors in teachers and nonteachers in Iran', *Journal of Voice*, 30(5), pp. 506.e19-506.e23. Available at: <https://doi.org/10.1016/j.jvoice.2015.05.019>

Sivasankar, M. & Leydon, C. (2010) 'The role of hydration in vocal fold physiology', *Current Opinion in Otolaryngology & Head and Neck Surgery*, 18(3), pp. 171-175.

Smith, H. & Dean, R. T. (2009) *Practise-led Research, Research-led Practise in the Creative Arts*. Edinburgh: Edinburgh University Press.

Smith, W.S. & Macfarlane, J. (1972) 'Group Discussions'. In: *Interviewing in Market and Social Research*. London and Boston: Routledge and Kegan Paul.

Smith, W.S. & Chipman, M. (2007) *The Naked Voice: A Wholistic Approach to Singing*. Oxford: Oxford University Press.

Stemple, J. C. (2005) 'A holistic approach to voice therapy', *Seminars in Speech and Language*, 26(2), pp. 131-137. Available at: <https://doi.org/10.1055/s-2005-871209>

Sovijärvi, J., & Laukkanen, A.M. (2007) 'Semi-Occluded Vocal Tract Exercises in Voice Therapy', *Logopedics Phoniatrics Vocology*, 32(3), pp. 128-138.

Sundberg, J. (1987) *The Science of the Singing Voice*. DeKalb, IL: Northern Illinois University Press.

Timmermans, B. et al. (2005) 'Analysis and evaluation of a voice-training program in future professional voice users', *Journal of Voice*, 19(2), pp. 202-210.

Titze, I. R. (2006) *The Myoelastic-Aerodynamic Theory of Phonation*. National Center for Voice and Speech.

Tsai, C., Wang, L., Wang, S., Shau, Y., & Hsiao, T. (2010) 'Aggressiveness of the Growl-Like Timbre: Acoustic Characteristics, Musical Implications, and Biomechanical Mechanisms'.

Tsaltampasi, C. (2022) *Unpublished*.

Thurman, L., & Welch, G. (2000) *Bodymind and Voice: Foundations of Voice Education*. Collegeville, MN: The VoiceCare Network.

Unterhofer, C., Seidner, W., Lichtenberger, R., & Lehnert, B. (2023) 'Prevalence of Dysphonia in Metal Singers and the Impact of Vocal Education: A Subjective Analysis', *Journal of Voice*, 37(1), pp. 52.e15-52.e24. Available at: <https://doi.org/10.1016/j.jvoice.2021.12.023>.

Verdolini, K. A., Ahmadi, N., Fatemeh, R., Torabinezhad, F., Takamjani, I., & Gharamaleki, B. (2022) 'Effects of Laryngeal Manual Therapy on Primary Muscle Tension Dysphonia (MTD-1): Implications for MTD-1 Type'. Available at: <https://doi.org/10.1016/j.jvoice.2022.04.002>.

Wuyts, F. L., Bodt, S. D., Molenberghs, G., Remacle, M., Heylen, L., & Millet, B. et al. (2000) 'The dysphonia severity index: An objective measure of vocal quality based on a multiparameter approach', *Journal of Speech, Language, and Hearing Research*, 43(4), pp. 796-809. Available at: <https://doi.org/10.1044/jslhr.4304.796>.

WEBSITE REFERENCES

Melissa Cross Zen of Screaming <https://www.youtube.com/watch?v=spZWQwxNKHg>

<https://healthcare.utah.edu/newsroom/news/2024/05/research-reveals-how-heavy-metal-singers-scream-and-squeal>

[https://www.physio-pedia.com/Postural Principles Useful to Consider in Voice Production](https://www.physio-pedia.com/Postural_Principles_Useful_to_Consider_in_Voice_Production)

<https://www.centerforvocalhealth.com/voice-technology-and-diagnosis/vocal-athlete>

<https://www.willanacademy.com/do-you-know-that-singers-are-like-athletes/>

Appendix 1

Project information sheet for participants

Chrysa Tsaltampasi Work-based learning project May 2024

Information for prospective participants

This document provides information about a research project I am currently working on. The project is part of an MA in Vocal Pedagogy I am undertaking with the University of Wales Trinity Saint David and Voiceworkshop. I am keen to examine the creation of an emergency aid model for extreme metal vocalists based on information taken out of different disciplines such as vocal rehabilitation, otolaryngology, classical training and laryngeal massage.

I hope that some members of the Voice Mentoring team will volunteer to participate in this study. This will involve :

- Providing consent to participate by completing a consent form.
- Possible participation in an online focus group (maximum of 6 participants) to further examine emerging themes from the questionnaire responses and debriefing will be provided prior to submitting the report.
- The final report/presentation will be made available to you.

If you have any questions about participating in this project, please get in touch by email on chrysavox@gmail.com or by mainline telephone on 00306934728688. If you are happy to participate, please complete the attached consent form with a digital signature (your name typed in the box) and email to me as soon as possible. Many thanks in advance for your time and responses! Chrysa Tsaltampasi, Singer/Songwriter - Vocal Coach.

Appendix 2

Participant consent form

Project title : An interdisciplinary approach to voice care for Extreme Metal singers.

- I..... voluntarily agree to participate in this research study.
- I understand that even if I agree to participate now, I can withdraw at any time or refuse to answer any question without any consequences of any kind.
- I understand that I can withdraw permission to use data from my interview and/or focus group discussion within two weeks after completion of these, in which case the material will be deleted.
- I have had the purpose and nature of the study explained to me in writing and I have had the opportunity to ask questions about the study.
- I understand that participation involves doing an interview and possible participation in an online focus group discussion.
- I understand that I will not benefit directly from participating in this research.
- I agree to my online focus group discussion being video-recorded.
- I understand that all information I provide for this study will be treated confidentially.
- I understand that in any report on the results of this research my identity will remain anonymous. This will be done by changing my name and disguising any details of my responses which may reveal my identity or the identity of people I speak about.

- I understand that disguised extracts from my responses may be quoted in the written report and presentation and possibly in future published papers or at conferences.
- I understand that if I inform the researcher that myself or someone else is at risk of harm they may have to report this to the relevant authorities - they will discuss this with me first but may be required to report with or without my permission.
- I understand that signed consent forms and original video/audio recordings will be retained in a password protected laptop until June 2025.

Appendix 3

Questions for the participants

ΕΡΩΤΗΣΕΙΣ // QUESTIONS

1. “Έρχεστε σε επαφή με extreme vocal techniques μέσω των πελατών σας? // Do you often experience extreme vocal techniques through your clients?
2. Πόσο συχνά έχουν vocal health issues? // How often do they have vocal health issues?
3. Συγκριτικά με άλλα είδη μουσικής, έχουν περισσότερα (ή και διαφορετικά) vocal health issues? // Compared to other genres of music, do these extreme metal vocalists face more (or different) vocal health issues?
4. Τι θα προτεινάτε για warm-up & cool-down σε extreme metal vocalists σε περιπτώσεις που βλέπετε/ακούτε ότι υπάρχει θέμα? // What would you recommend to an extreme metal vocalist as warm-ups and cool-down in case you understand that there is a voice issue?
5. Πότε συστήνεται η επίσκεψη στον ωριλά?// When would you suggest your client to visit an ENT/SLP doctor?
6. Τι συμβουλές θα δίνετε για πρόληψη και αντιμετώπιση για vocal health issues σε extreme metal vocalists? // What would you suggest as prevention for vocal health issues at extreme metal vocalists?
7. Προτείνετε 2 ασκήσεις που κατά τη γνώμη σας θα μπορούσαν να είναι πολύ αποτελεσματικές για extreme metal vocalists που αντιμετωπίζουν προσωρινά κάποιο φωνητικό πρόβλημα. // Could you suggest two exercises that in your opinion could be very effective for extreme metal vocalists who deal with a voice problem?

Appendix 4

Transcription of semi-structured interviews

AT

[00:00:00.200] - Speaker 1

Record. So, hello, Athena.

[00:00:08.270] - Speaker 2

Hello.

[00:00:10.430] - Speaker 1

Thank you very much for participating in this assignment.

[00:00:16.510] - Speaker 2

Thank you for inviting me.

[00:00:20.870] - Speaker 1

Okay, so we're gonna discuss some simple questions, at least. Yeah. I think they are simple questions that deal with, of course, voice and the use of it in more extreme ways. And I'd like to hear your opinion based on your professional experience with all these things that we are going to discuss. So let me find the questions. But anyway, for start, I would like you to introduce yourself.

[00:01:09.850] - Speaker 2

Okay. So I was trained as a speech and language therapist at the same time. When I was studying, I started studying, studying singing. I was very interested in eastern culture and eastern, middle eastern singing. But then I had to find a teacher, and where I was studying, it was very difficult to find a teacher for that kind of music. So I went to study classical singing, and that was the time that I started developing vocal nodules.

[00:01:49.090] - Speaker 1

Okay.

[00:01:50.050] - Speaker 2

Because apparently I was singing in a very different way and more free way as I was experiencing it when I was singing traditional eastern music. And the classical training had a lot of what I know now had a lot of falsetto in that, in its use for me being untrained. And I found it very hard. I worked a lot on my singing, and I developed nodules. So that was the time when, being a student of speech and language therapy, I started becoming aware of voice problems because of my own, and I started looking out for voice therapy.

[00:02:41.980] - Speaker 1

Okay.

[00:02:43.130] - Speaker 2

Okay. So the nodules went away, like, one or two years ago, one, two years after I quit my classical training and my thesis on my degree was voice therapy and vocal rehabilitation. Later on, I started on Central School of Speech and Drama on the MA of voice studies. So I was trained to coach actors mainly, or people in generic voice and voice for acting, voice for staying, and that in some cases, meant doing extreme vocals for harsh scenes. So vocal violence. And of course, I had many students that were hurting their voices during that scenes, so I had to find a way to help them. So I became very interested on that. Later on, I started having a contact with Estill voice training and through voice therapy that I also do as a speech and language therapist, I trained in voice. I combined all these strategies, and I do voice therapy for, you know, the dysphonias in artists or in other population, and voice pedagogy on actors. This is the two strands that I'm working on.

[00:04:30.590] - Speaker 1

Okay. What an interesting journey you've had so far.

[00:04:39.390] - Speaker 2

Yeah, literally, I tell my clients, you know, don't worry. Wherever you've been, probably I have been.

[00:05:02.550] - Speaker 3

Yes, yes.

[00:05:03.660] - Speaker 1

I also tell them, yes.

[00:05:12.830] - Speaker 2

Anyway, so I was very interested on voice because of my interests that I also sing, and I have a degree in jazz singing now.

[00:05:25.880] - Speaker 1

Wow.

[00:05:27.250] - Speaker 2

Yeah. And I was very, very, very interested in the voice on stage, be it acting or singing and the problems that come with it.

[00:05:52.050] - Speaker 1

Okay. So many things we are covering already, but I will just keep the structure just for typical reasons.

[00:06:02.410] - Speaker 2

Yeah, yeah, yeah.

[00:06:03.100] - Speaker 1

So my first question is, do you often come in contact with extreme vocal techniques through your clients? And this. In this question, I'm not meaning only for metal vocals, but Extreme vocals for actors.

[00:06:25.690] - Speaker 2

Mainly with actors. And I have. I had a client, like, eight years ago who was a metal singer, so, yes.

[00:06:38.580] - Speaker 1

Okay, so you would say that it's not so often that you have to deal with.

[00:06:47.800] - Speaker 2

My teaching point of view is very often because of the actors. Because directors ask actors to do, you know, many things with their voices and.

[00:06:58.170] - Speaker 1

Yes.

[00:06:58.720] - Speaker 2

Many harsh things with their voices.

[00:07:01.500] - Speaker 1

Quite a lot, yes. Okay.

[00:07:04.960] - Speaker 2

But not from. Not that much from metal singers, because I hadn't had that many clients.

[00:07:10.820] - Speaker 1

Okay. So with the clients that you already had, with the extreme vocal techniques, mainly the actors, do they have really often vocal health issues? Yes, really often, yes. Okay, so you would say that. And I'm going already to question number three, that if you compare these techniques or this genre of music, this has, do you think it has more or different vocal problems than other genres of music, like pop, classical, stuff? Like, if we would compare this, would you say that they all have the same vocal health issues and with the same time frame?

[00:08:12.200] - Speaker 2

Probably, yes.

[00:08:14.240] - Speaker 1

Okay.

[00:08:15.130] - Speaker 2

Probably, yes. Because I think that. So now I'm talking about constriction.

[00:08:22.350] - Speaker 3

Yes.

[00:08:22.920] - Speaker 2

And we know that **constriction is a very misunderstood term.**

[00:08:28.560] - Speaker 3

Yes.

[00:08:29.440] - Speaker 1

Thank you.

[00:08:30.570] - Speaker 2

So a vocal constriction that, in my point of view, as I was trained, concerns the false vocal folds, and they're overlapping above the true vocal folds. So this is a feature that we see in all of the people that have not all, I'm lying, in a very big amount of the population that has dysphonias. So I often say to my clients that **every human being has its own unique style of constricting** the vocal mechanism in very harsh ways or in very subtle ways.

[00:09:20.820] - Speaker 2

And sometimes it means the same as in pathology. **So you can see a vocal polyp in a person that does not constrict that much or talk very loud, and you can see a vocal polyp in an actor that has just finished a show where he had a very brutal scene.**

[00:09:46.060] - Speaker 2

And you can see the same polyp.

[00:09:49.220] - Speaker 2

So I think that **the aftermath is that the problems are often the same, but the mechanism is behaving in quite many different ways.**

[00:10:03.750] - Speaker 2

But it has a lot to do with constriction, the way I see it.

[00:10:08.670] - Speaker 1

And I totally agree with you. And I also believe that now, I mean, now that we are living in this era where **we have more information constantly about extreme vocal techniques and we have endoscopies and we can see what is happening now.** You know, we can see that it's not like black or white. Or you mustn't do this because you will have vocal problems. So what I'm trying to say is that there is a big percentage of biased opinions, of course, like in every other subject. And it's

good now that we are discussing this and also with the other people, because we are saying common things and this is really good.

[00:11:01.650] - Speaker 2

Yeah. I think that many clients of mine, many actors that come to me for therapy have tried voice therapy elsewhere. Because of the setting of a voice therapy where. Where the voice therapy, the first therapist, the voice therapist might have told them, you know, **you really shouldn't do constricted voice**. And that's not. It cannot happen in an actor's life. That's when they come to me. Because I cannot instruct an actor not to constrict. It's impossible.

[00:12:12.640] - Speaker 1

Oh.

[00:12:53.010] - Speaker 1

So my next question is, like, assuming that you have an extreme metal vocalist visiting you, or a person that uses extreme vocal techniques. And you can hear, and you can see also that there is an issue there. What kind of warm warm ups and cool downs would you suggest these people to do either before a performance or like, when they are preparing because in a couple of days they will have a performance.

[00:13:30.140] - Speaker 2

Okay, so, first of all, if I'm going to rehabilitate or train a person for doing something hard on their voices on stage, I acknowledge the thing that this has to come with some kind of economy around the issue. So I wouldn't give a training that aims towards harsh singing all the time or harsh vocalising all the time. So I would very much insist on airflow and dynamics. No, I constantly use lax vox techniques with different diameters, according to each person. So to ensure that the flow is there and at the basic level, I have some soft and functional voicing. I **would much ensure that I do glides**. So I have the elasticity of the vocal mechanism there. And after ensuring these two main pillars of the technique, I would definitely try to engage the whole body to what the person is doing. And by that, I mean I have many times used more constantly with my actors, the alba emoting technique that uses all of the body.

[00:15:31.650] - Speaker 1

The what?

[00:15:32.300] - Speaker 2

The mask. **Alba emoting technique. It's technique intensive**. The Alba emoting.

[00:15:52.680] - Speaker 1

I will search.

[00:15:55.520] - Speaker 2

So Alba emoting technique is developed by, I don't remember her name now by a neuro linguist, not a neuroscientist. And she studied the emotions. And how can evoke emotions, and does it have

to concern the psychology of the emotion? Apparently not every time or never. So you can evoke emotions by entering the gestures of the emotion. So engaging the facial expression, the mask, as I often described to my actors, the body posture, being aware of the breathing pattern and have a very strong body. Of course, we know that this involves head and neck, torso anchoring. So within the vocal mechanism, there is a flow that can support. Not big flow, but a flow, not very, not a stop, not constriction in ways that cannot deal with it.

[00:17:19.860] - Speaker 1

Always say it's a bad, bad constriction and good constriction. Yeah.

[00:17:24.620] - Speaker 2

So, yeah, not much air beneath the folds, but some air and some flow that enables the actor or the person doing harsh voice to deal with it in a very postural way.

[00:17:43.010] - Speaker 2

So, yes, it has to be the flow and the elasticity, things that I would do with anybody. And then anchoring the body. Anchoring, yes, the expression.

[00:18:05.000] - Speaker 1

I believe that the more holistic is the approach, the better, because we know that in order to be able to produce sounds, either it's melodic or extreme, you need to have an engaged body because multiple things are happening. So it's not only one. So I totally agree with your approach. Okay. When would you suggest these clients to visit an otolaryngologist? Like, always?

[00:18:45.130] - Speaker 2

Always. Either it's a structural thing, like they have developed a polyps, either it's a functional thing, a functional dysphonia. I would always suggest that they come to me for our first session with an endoscopy.

[00:19:03.060] - Speaker 2

So I can see the way that they treat the vocal mechanism.

[00:19:08.080] - Speaker 1

Okay, great.

[00:19:10.320] - Speaker 2

I'm not, I'm not a big fan of that. Okay, let's work on it and we'll see how it goes. And then. Okay, now I have a problem. Maybe you should go to an ENT. So go to an ENT so I can see how your vocal mechanism works.

[00:19:23.890] - Speaker 2

And then we can focus on what.

[00:19:27.700] - Speaker 1

Well, I always say the same, but then, you know, most of the people don't go because they are afraid.

[00:19:36.230] - Speaker 2

The metal singers are not very big fans of this.

[00:19:41.050] - Speaker 1

Yeah, but also the doctor, maybe also other people are not a big fan of going to an ENT doctor. But anyway, so what would be an advice that you would give to extreme mental vocalists or to your actors or other people that use these techniques for prevention and vocal health issues.

[00:20:13.560] - Speaker 2

So when you have extreme vocals, high intensity or shrills or, you know, cries, please do not use a big amount of air.

[00:20:30.360] - Speaker 2

A small amount of air will do it.

[00:20:33.170] - Speaker 3

Yes.

[00:20:35.040] - Speaker 2

Please act it with your body as you do with your voice. Don't let the voice do all the work. So you have to express the emotion on the mask so you cannot, you know, go, ah, and your face is like, flat. Ah. It's not going to work that well. So engage body, engage, engage facial expression, what else?

[00:21:03.180] - Speaker 1

Yeah, but without necessarily having the real emotion, because this is also another topic for discussion. Discussion like, okay, have the emotion in your mind and then it's gonna happen because most of the times, these vocals, they are connected to bad emotions. So there is a great discussion there. Like, okay, should we advise people relying on the emotions? Personally, I don't do that.

[00:21:30.860] - Speaker 2

No, I never do that. I never do that. And that's the way I chose Alba emoting for my guidance in this work, because, I mean, from personal experience as well, or from experience experiencing my students or my clients being connected with the emotion, that means that the control is not there because you're in the emotion. You can't control things while you're in the emotion. And often I heard directors say that if you feel it, if it's true, it's not gonna hurt your voice. No, man. When I'm,

you know, when I'm pissed with somebody and I yell at them, I might injure my voice because I'm not in control of what I do.

[00:22:25.580] - Speaker 2

And I'm being very real at that time.

[00:22:29.550] - Speaker 2

And so I suppose that. And I know that every one of us can lose, can easily lose control when, amidst emotion. So I wouldn't advise them to get into the emotion. Maybe leave a door open for, you know, expressing something that comes through this gate. It's not bad if a real cry arises, of course, you can express it, but nothing. Not go for, you know, now I'm going to be sad. Now I'm going to be angry and I will connect with them, my being angry and I will, you know, spit my larynx out.

[00:23:13.290] - Speaker 2

Express the emotion, do the body, do the mask, because that's what the audience wants to see. The audience wants to see somebody experiencing body connexion with that, what with what they're doing, what they're saying. They don't care if you feel angry or you feel sad at that time.

[00:23:37.890] - Speaker 1

Totally agree. And last question. Could you suggest two exercises that, in your opinion, could have very good results on extreme metal vocalists that they deal with a vocal health problem temporarily?

[00:24:03.670] - Speaker 2

Temporarily. So, yes, a shortcut when I have a client facing a problem, but we don't have much time, is getting to be able to get them in touch with their twang. Nothing else to weigh, maybe not so much thin folds, as thick to thin folds. And, yes, being able to do a very easy. Yes, very easy twang with the thicker folds.

[00:24:52.040] - Speaker 1

Then you would have to explain the twang to your student.

[00:25:00.820] - Speaker 2

Not always.

[00:25:02.040] - Speaker 1

Okay.

[00:25:02.810] - Speaker 2

Twang and AES is much easily perceived acoustically. It's very common, at least here in Greece. And yes, I would say that I don't have to explain that much. The one thing I need to explain is, okay, now it sounds annoying to you, but once the scene is developing and there's much noise around you, it will sound like a voice expressing itself. It will not sound as much annoying as we're doing here. This amidst silence.

[00:25:58.410] - Speaker 1

Okay, well, that's great.

[00:26:01.810] - Speaker 2

And another one.

[00:26:17.900] - Speaker 2

I would utilise techniques that stabilise a higher larynx. Because in my opinion, or in my experience, people shouting, at least in the theatre, they many times they use lower larynx. And this is not very functional. That's why people go to the stadium supporting their local team, and they end up with cracked voices. I had a fan a greek football team two months ago that developed a polyp after he went to a game, and he was literally shouting with lower larynx. It doesn't sit that well.

[00:27:17.730] - Speaker 1

No. And also because people want many times to do a lower sound, they try to do a very, very low larynx. Because they think that this is the way to sound lower. I also see that a lot, so that is a great point. With the high larynx, try to shortcut.

[00:27:45.170] - Speaker 2

And always ensuring that I don't have much air beneath the fold. I have flow. I have some flow, but not much air.

[00:27:53.960] - Speaker 1

Okay, so this is it. Well, Athena, it's been a pleasure. Let me stop the recording. Okay.

IT

[00:00:03.09] - Speaker 1

Very, very nice. Hello Mrs. Irene! How do you do?

[00:00:08.12] - Speaker 2

Hello Mrs Chrysa, We are very well and happy to be involved.

[00:00:13.09] - Speaker 1

And I'm very happy that you're participating here. Let me just say for the record that what we're doing is part of my final project for my master's degree in voice pedagogy. And my thing is about how different disciplines that deal with voice, either the singing voice, or the actor's voice, or voice in general, how can they give us common ground in terms of extreme metal vocals. Because all the professionals, quite a few of the professionals in these disciplines many times come across with metal singers who may go with a request, with a problem and ask for help. So for me, what I'm really interested in is to see how a professional in a different field than mine would deal with such a task. So the questions I'm going to ask you are related to that. Before we get started, could you give a short bio of you?

[00:01:48.14] - Speaker 2

Of course. My name is Irene Tsirakidou. I'm a lyric singer, mezzo soprano, 53 years old, which I don't think I'll be 53 this year, but it doesn't matter.

[00:02:07.03] - Speaker 1

In the heart 13.

[00:02:09.06] - Speaker 2

Yes, but that has its importance. I teach, I've had an international career in classical, opera, classical singing. I've been teaching for the last 18 years exclusively classical singing and my studies have always been on classical singing. In the last four years we have built a company that deals with the issues of the human voice and beyond, but that's how it started. I am a member of the interdisciplinary voice based team called Voice Mentoring. For the last six to eight years, I'm more involved in voice issues from the scientific side. Wanting to discover what voice means too and expand my own perceptual horizons. That's it.

[00:03:19.07] - Speaker 1

Very, very nice. Perfect introduction. So let me start. My first question is this. Do you often come in contact with extreme metal vocal techniques through your clients//students.?So actually what I'm asking is : Do metal singers come to you often?

[00:03:50.20] - Speaker 2

Not very often.

[00:03:53.03] - Speaker 1

But do you have any experience?

[00:03:55.20] - Speaker 2

Yes, I have, but they've come to me, they've usually come to me not to teach them to sing this kind of music that I don't know! They come with a request to correct a vocal problem that they've had for example.

[00:04:14.18] - Speaker 1

Okay, can you give us some examples of these vocal problems?

[00:04:22.20] - Speaker 2

Yes. The usual is for women who wanted to sing this. What's the name of this metal that has opera in it?

[00:04:40.23] - Speaker 1

A Symphonic Yes.

[00:04:42.22] - Speaker 2

Yes. They were trying to sing this. So there if you like in a way it sort of matched my kind of thing with her kind of thing in terms of voice training, but in the case of another student who was singing thrash, I think. His request was for example how to do the high notes. And because he happened to be in the baritone voice, it was a little bit easier for me to direct him towards the counter tenor voice for the falsetto, with greater safety. That was before I learned about the voice hahaha!

[00:05:37.07] - Speaker 1

So, at this point it would be good for me to clarify that when we say extreme metal singers, we will also mean those you say, who want to reach in a way their clean voice, that is to say their pure voice to reach the extremes, but also those who scream and you can't distinguish a note there.

[00:06:06.04] - Speaker 2

Such cases with not distinguishing the voice have not come to me.

[00:06:08.24] - Speaker 1

From those who have come to you, then, have they had some vocal issues? I mean. Apart from what the goal was. Did they have a hoarse voice or you suspect that there might be something there?

[00:06:39.04] - Speaker 2

There was no pathology. What was there was tension, there was tightness which prevented them from going to the high area. That was the most obvious as a vocal problem for them.

[00:06:58.22] - Speaker 1

Good, good. Would you say that compared to other genres of music, they have more vocal issues around this tension that we are talking about?

[00:07:16.20] - Speaker 2

I would say almost all of the pop songs, potentially have this tendency to risk, although I can assume without being, able to tell you this 1000%, but I guess that due to the intensity and specific way of using the instrument, that they will probably have a bigger problem. But I am not sure.

[00:07:52.18] - Speaker 1

You from your experience, that is, from these incidents that you've had so far.

[00:07:56.21] - Speaker 2

In the specific few instances I had, I didn't see anything more than I see in a contemporary or even folk singer.

[00:08:13.19] - Speaker 1

Good. In a situation where you'd get a metal singer. Either with a vocal tension like we just said. Or he could have a gig in two weeks and his voice wouldn't be ready, in those situations. What would you suggest as warm up and cool downs? Would that change anything in what you would normally say?

[00:08:54.07] - Speaker 2

I'll tell you because it's difficult for me personally to fully understand what exactly is going on inside the throat of the person who sings metal, the only way I've been able to instruct and I've done it is through the humming, that is, with my mouth closed doing stretching of the vocal folds. If that's something that can be addressed in that way. Or I would tell him as a protection to strengthen the body support in very specific ways so that the load is taken off the neck and transferred to the body to other parts of the body. If there was a pathology, for example, I don't know if that in itself would resolve it.

[00:09:52.20] - Speaker 1

Do you also have other exercises for warm ups and cool downs except for the humming?

[00:10:21.22] - Speaker 2

Absolutely! You definitely want to do easy scales up and down and then go for fifths, octaves etc.

[00:10:38.19] - Speaker 1

Good. That's fine.

[00:10:44.12] - Speaker 2

And also mobility of the larynx, that is, too high position, too deep position to catch the movement and range of the larynx. up and down, which will help him to understand the movement of the larynx.

[00:11:09.21] - Speaker 1

Good. That's fine. When do you recommend a visit to the ENT doctor? In a case of an extreme metal vocalist.

[00:11:28.23] - Speaker 2

Okay, I guess.

[00:11:33.01] - Speaker 1

You're free to say whatever you want. There's no restriction!

[00:11:41.20] - Speaker 2

Okay, I understand that in this genre there is a hoarseness that is often the issue. Fry for example, which results in that hoarseness. If it's done with a very good technique, the vocal folds can get together afterwards right? If that doesn't happen and also in his clean voice without using his own techniques the folds don't close again, I'm going to ask for an opinion. *If there's too much air coming through and it's hard for the voice to go higher, for example, that's an indication. When the other person tells you that "here, while I could say it, now I feel there's a gap, a step", that could also be a clue. Mostly then. So it has to do with if I hear that there's not good closure of the folds. And the second one. If I see that in the transition to moving up in the vocal range that there is difficulty to do that.*

[00:13:13.16] - Speaker 1

But I also consider the most important factor to be hoarseness, especially when it happens for a long time, because the other person may come once and the day before he has been out, he has been drinking, he has been smoking, he has done various things.

[00:13:33.22] - Speaker 2

Especially when there is such a hoarseness, when trained for a while, even though the strings can be stiff and heavy, the voice can be a little bit heavy, but it's a different sound than having nodules for example. The voice that is difficult for me personally to distinguish is the voice that has a varicose vein on top. I have an experience but I haven't categorized it, so there it might be a bit tricky, so I send then to the doctor from the beginning to see what's wrong and get it over with.

[00:15:18.03] - Speaker 1

Can you hear me? Good, you're back!

[00:15:24.20] - Speaker 2

All right, then. All right.

[00:15:31.07] - Speaker 1

Now okay, we say a lot of things in the conversation. However, I'll ask her the questions so I can keep writing here. Could you yourself suggest some more classic exercises for metal singers who would have some kind of vocal health issue? And if so, if you can give me two examples, of classical exercises that you would suggest.

[00:16:06.07] - Speaker 2

Good. One of the things that I think is really important is how you manage the internal air pressures in the chest. *It's not, so much the exercise as the process.* Also, another important one to get him to be able to get away from the pressures that he's creating inside his throat is to get him to do tongue control. Although again, that's not the exercise, because the exercise can be a simple EEE

triad and nothing more. It doesn't need to be too much of a complicated exercise as much as it needs to be mindful towards the process of using the voice at that moment. So, to address some of these issues, one would look at the air pressure. That is, how much air he's putting out or not putting out. Or what we call support. I call it pressure, air pressure adjustment. And the second one is what it does with its tongue.

[00:17:34.17] - Speaker 2

I think usually the biggest percentage of problems come from those.

[00:17:43.04] - Speaker 2

One is the speed of exhalation. How much air is being used so if that's sorted out we've overcome a major issue. And the second is the tongue. So if we get the tongue sorted out, I think we're on the right track. So I would look at those issues.

[00:18:08.21] - Speaker 1

Okay, so you would suggest exercises that serve that purpose and not necessarily be from the classical world.

[00:18:18.23] - Speaker 2

Yes exactly. In the advanced classical singing classes I might use a little more complicated exercises, but the same stuff I use not only for my classical students but also in all other genres. Me personally.

[00:18:40.14] - Speaker 1

So the last question. That being said before what advice would you give for prevention and treatment for vocal problems for extreme metal vocalists.

[00:19:07.07] - Speaker 2

One of the main ones, because whether we want it or not, this job is mostly done in the evening, in the late night, in the alcohol, for most people, and in a smoking environment. Is that they should be a little bit careful. I personally and from personal experience find that sleep is the greatest protection you can offer your voice. Really that is, if you know if you have a one on one relationship with what voice means, if you do your training. Because whatever genre you do, once you're a professional singer, you ought to have a coach who coaches you. It's just like runners. It's not that somebody who is winning as they say, (it's that Jamaican guy who is breaking all the and records), that he doesn't know how to run, he knows how to run. But clearly he has a coach because he needs a coach! Because he needs to follow him, he needs to point out different mistakes that are being made.

[00:20:32.24] - Speaker 2

So the singer has to do the same thing.

[00:20:36.13] - Speaker 2

It doesn't matter what genre it is, the singer must do the same. So one thing is good preparation. Second, it's good sleep. And the third is a little gymnastic work. These are general observations and not specific ones. Because I will tell you this. **I have seen that the biggest problems, are made by a tired body, a tired body, which cannot be supported by a tired mind which cannot observe.** Clearly he will also miss things and at the time of the live, for example, he will have to over push himself. But these things are being recorded in the subconscious mind at that moment absolutely. So we need a mind that is a mind that is alert and a body that can respond to whatever the mind decides. **So putting too many complicated things as tips will not be functional because nobody does them and the one who does them means he is obsessed.**

[00:21:57.07] - Speaker 2

And the one who is obsessed means he has fear and so when the time comes he will deliver a shitty performance!

[00:22:09.12] - Speaker 1

Haha!

[00:22:11.23] - Speaker 2

I understand that there are protocols. But as I get older and observe, I see that there is a very wide range in the protocols. I mean we say yes, this is what you should do because this is what I remember and I was told from a young age "this is what you should do". And I did it, but it didn't exactly get better for me because it was something else that I had to observe. But nobody was telling me "notice that". And so. **The more complicated the method gets the less the brain works. Because then what do you do? You wait for the protocol to give you the answer.** Is that what you're saying? Is that the behavior? If I do these 1, 2, 3, 3, 5, 10 steps, I've got it afterwards? Um, it's not, because it takes an awakening to something else that's difficult.

[00:23:05.06] - Speaker 1

I also totally agree and in my opinion it all always starts with that. We don't pay enough attention or maybe most of us don't pay enough attention to the fact that the voice is installed in the body. We can't catch it, we can't regulate it. It doesn't work like everything else, which can work very nicely with a protocol, but with the voice it's not like that. It can do everything, all the magic that this protocol says and nothing works. Because you can be in depression which let's face it, singers most of the time in depression we're much less happy. So then you say but why doesn't this magic work? Forgetting that you have a body that's being affected. Is there a psychological factor? Is there a distraction? There's a whole bunch of other things.

[00:24:01.14] - Speaker 2

That's exactly where it is. I think this factor is much more important. **And I see that there are people who have very big vocal issues and they overcome them because they have a huge desire to sing and the time they want to sing they magically overcome them.** Or better, they don't overcome them. They coordinate their whole muscular system to get their brain to hear what they want to hear, whereas in the other cases of those who actually follow protocols faithfully, they think that "if I get out of protocol Jesus, the sky will fall on my head". So they don't dare. They tell you

I'm faithful, I'll do the protocols just fine, I'll do everything and then I'll be OK. And then they wonder, "But why doesn't it sound the way I want it after I've done it? "Yeah, but that's the thing. The protocol is there to show you an outline of the path. Not the path and especially not your personal path. Because even in classical singing there ought to be a sound differentiation.

[00:25:13.22] - Speaker 2

Because otherwise it will all look the same. Boring.

[00:25:18.13] - Speaker 1

Yeah, you bet.

[00:25:21.22] - Speaker 2

Yes. So if you don't understand that this color is his, that's him. You just can't do it with this protocol, so to speak. Is it valid?

[00:25:36.21] - Speaker 1

But that's why I'm telling you that if many more classical singing teachers could treat the voice and the singer in this way, things would be very different. Because I remember it from when I was doing classical, because that's how I started out too, and my teacher was this black and white. You only push, you only do that. In bands you shouldn't be in bands. Don't do this, don't do that. And I mean, I was 16 years old and I was like, but I can't do that because it's not me. Isn't that how it's supposed to happen? I mean one good thing that has happened with this whole explosion of information is that now the voice is being treated holistically.

[00:26:22.22] - Speaker 2

At least.

[00:26:24.05] - Speaker 1

And people are no longer afraid to say that yes, I got nodules and I did this and I overcame them or I had a cyst or even a cyst. And yet I did this and this and this and now I'm fine.

[00:26:38.10] - Speaker 2

The problem, you know, is not whether you're going to get hurt. It's a prejudice. You will. And why? Because nobody can know from birth. We don't know how we're going to operate and many times we make the wrong thing a thousand times until we know what the right thing is. If we learn in this process, yes, there are times when we can hit, create an edema. Nothing serious, but yes, there is a possibility of that happening. I remember in my school days I had one too. And not just in my student days, but then later on, at one point I struggled on stage and I had a cervical vein from the pressure, psychological pressure So I mean there is no professional who doesn't have to deal with these issues. **And those who say now that even in classical, if you have the artistry, you can sing all the time without getting hurt, well that's bullshit!**

[00:27:50.06] - Speaker 2

That's a little bit of small talk.

[00:27:52.23] - Speaker 1

It can't be done.

[00:28:00.14] - Speaker 1

These are some myths that we grew up with as children and at some point we saw that they are not true. Like if you sing classical, you automatically can sing all other genres.

[00:28:12.11] - Speaker 2

The tragedy is that because of this belief, people come along who are doing contemporary singing and they say hey, I want to do classical singing. Why? Because classic is the top, it's this, it's that. And I say, "What are you guys looking for?" That's the point. Because if you're going to do classical we're talking about getting the volume of the voice and all the parameters of the classical voice. It means that you will alter the voice that sings the other things. And ultimately what do you want to sing? The others or classical? Because I can't go sing either. Whether you want to or not. You can't sing both without consequence. There's one who does, who sings metal I think and classical. Patoulidou, Aphrodite.

[00:29:29.20] - Speaker 1

I like her very much.

[00:29:36.04] - Speaker 2

Yes, multi-talented creature, multi-talented really, but I think she just, because she did it, at the same time, she got used to doing it. Still, I have to tell you that I'm not sure she'll be able to keep doing that. Such are her demands that at some point she's going to get in trouble. She can't. You can't pull one on one and one on one. **So it's either weights or gymnastics or ballet. You can't do both. It's just muscle use, meaning no matter how good your technique is muscle use. There will come a moment from the many years of use that the muscles above the larynx will tighten no matter how much good you are doing things.**

[00:30:50.22] - Speaker 1

So I think after all that we said it's kind of safe to say that you would also treat a metal singer more holistically, I mean you would see what they need to get. You wouldn't just think about it in a classical way. You would combine things that you think are better for him/her overall.

[00:31:37.11] - Speaker 2

Depending on the voice usage that everyone does, I would check the muscle systems and the brain systems that might have misinterpreted a physical muscle process and I would try to solve that first.

[00:32:10.18] - Speaker 1

Very, very nice! Thank you very much Irene.

SG

1. Do you often

experience extreme vocal techniques through your clients?

2. How often do they have vocal health issues?

3. Compared to other genres of music, do these extreme metal vocalists face more (or different) vocal health issues?

[00:00:00.500] - Speaker 1

The truth is that people doing extreme vocals are not the most common cases of singers I see. If we consider that I see for example 10 singers, 9 of them are classic singers, contemporary, pop etc and one or 2 at most would be extreme metal. **However, despite this, I have not seen them show any difference in the problems you can find in a voice. These are the muscle problems, i.e. muscle tension issues problems. I see they are exactly the same as the other cases, for example firstly incorrect posture, turned shoulders, closed sternum, stiff sternum with ribs both forward and backward in the back.** A forward projection of the head forward, which creates problems both in the neck in terms of the joints and the neck musculature (posterior but also anterior) which creates problems in the larynx, because the moment the part of the neck, that is, the muscles with the additional muscles of the larynx and the neck (because the neck has an anterior aspect) work together in such a connective way that if one surface shows muscular tension, then it seems that the front surface will also be burdened by this tension.

[00:01:48.350] - Speaker 1

Imagine the neck as an onion that you have cut across. Think of the circles that exist around this onion. We have a front semicircle and a back semicircle. These are the anterior and posterior muscles. If you look at the picture that's on the cut onion with the concentric circles, like this, are the muscles connected in the throat. The muscular muscles connect in the neck, so the front and back have unbreakable cooperation. So the muscles have unbreakable cooperation with each other. **So then in the continuation of what I see they're quite tight, in the neck area of the throat area that is the larynx area. I usually see tight hyoid muscle (the tongue muscle that connects the tongue with the hyoid bone), I see narrow pharyngeal walls, usually too much pressed sphincters (the constrictors), I see closed cricothyroid membrane that does not let the cartilages do the tilt easily.** I also sometimes see a stiffness in the ribs, a stiffness of the fascias in the stomach and liver, which directly affects the diaphragm, therefore the respiratory function and also affects the

sub glottal pressure and also the glottal pressure. The most common thing I would like to mention, and it's not only for this category of singers but for singers in general, is that I don't see the bodies being muscularly organized and properly toned, that is, having the right muscle tone. I don't see bodies that are free, that are flexible, that have control of the core stability, that can, let's say, sit in an upright position without exaggeration, but an upright spine without getting tired in about half a minute. That's something that can affect the voice.

4. What would you recommend to an extreme metal vocalist as warm-ups and cool-down in case you understand that there is a voice issue?

[00:00:01.460] - Speaker 1

As for warm-up and cool-down, I would give a physical warm up, but I wouldn't give that just in case I heard or saw something. I would suggest it applies to the whole singing career and not just on the day of the live gig or rehearsal day, but more as a way of life. We know that voice is a muscular process. We know that muscles are connected to each other like chains, in English it's called myofascial chain. So I would suggest specific exercises. I have now created exercises of this kind. I don't know if you want to refer to it, it will be in my book. This is a training which keeps all these guidelines on the chains in elasticity and activation. I would also give exercises of stretches for the neck area for the throat area and I would also give some self-therapy exercises done with the hands by the singer on himself, some very simple laryngeal mobilizations, some tongue stretches, a tongue massage, some massages on the cheekbones, on the face, that is on the muscles of the jaw inside and outside the mouth.

[00:01:47.000] - Speaker 1

I would also suggest following an aerobic exercise, running for example, which keeps the muscle tone at a very satisfactory level. Aerobic exercise, i.e. running, cycling not so much. So the goal is for the body to learn through an aerobic exercise an elasticity program of the body so that when a live gig comes to be ready, to have some things automated and elastic activated.

5. When would you suggest your client to visit an ENT/SLP doctor?

[00:01:47.000] - Speaker 1

Now as far as the visit to the ENT doctor, In my opinion once a year is the usual and necessary. But if someone feels that because he got into a fight and increased the volume of his voice, something is going on in his larynx or because he got tired because he had repeated gigs or because something happened during the live, for example on a high note and that left him with something afterwards, which is let's say hoarseness or a difficulty in his high notes or a difficulty in

his passages. If that lasts and doesn't go away with the vocal lessons, then it might make sense I think to have a checkup.

6. What would you suggest as prevention for vocal health issues at extreme metal vocalists?

7. Could you suggest two exercises that in our opinion could be very effective for extreme metal vocalists who deal with a voice problem?

[00:00:00.170] - Speaker 1

Prevention for me is the alpha and omega in any body issue, let alone the voice. What would I give for prevention and treatment? I would definitely give very clear instructions on the type of exercise that is good for everyone to follow, *because not everyone likes the same type of exercise*. I would definitely say to avoid or even ban weights for artists, especially artists who are not familiar with the technicalities of how to lift weights. There are others who have trained either from a young age or older who know technique and even then it takes very, very great care because usually when lifting weights, inhalation and exhalation don't happen in a good way. Instead we have an exhalation hold and when this hold is done, usually the tongue presses the palate and as a result it absorbs tension as well. So weights are one of the things I would avoid. *I would suggest for strengthening to be followed by stretch bands or pilates exercises with instruction specific and in pilates until one learns to activate what we call the transverse abdominis*.

I would suggest that the pilates instructions would be to not having torso lifts, as we have for example in the abs. Abdominals is an exercise that for me to performers who are not physically trained is not an exercise that I would suggest they follow, especially in the beginning until they learn how to do it properly, *because there is technique even in the simplest exercise within the introductory level*. I usually give some self-treatment exercises to all artists which I suggest they continue even after the vocal problem has been dealt with, because they are exercises which keep the cervical area flexible, that is, it does not hold tension, and once you know this exercise you can evaluate it yourself with your hands. That is, if something goes, to at some point goes to create tension or not, so you have your own hands as evolutionary tools for this. I also give some simple laryngeal mobilizations which is very important. Also very important is to know how to soften and make the tongue more elastic.

[00:03:00.380] - Speaker 1

The tongue is a big muscle, a strong muscle, which has a lot of pain. When you know how to work, that is, when we work the body of the tongue, the muscle mass of the tongue, the pain is very great. So it's good to know how to manipulate this not alone, because it's a huge tool, as we know in singing. Also, if the tongue has tension, then it seems very much that the jaw has tension, that is, the masseter muscles also get tension and it happens vice versa. So if you see someone who has

a closed jaw, talks and sings with a closed jaw, we usually see an issue in the mobility, the elasticity of the tongue. So for the tongue and the jaw I will always give exercises. **Because tongue is one of the most common problems in singers, not only in extreme vocalists, but in all the singers that I see,** this aspect of the tongue, that is stretching and softening, toning the tongue are two of the exercises that I would definitely suggest that one should do, whether it's before rehearsal, after rehearsal, before live, after live, but also during the week. **Stretching is also very important.** I would suggest stretches for the neck area, specifically for the scalene and sternocleidomastoid muscles, and also for the iliopsoas muscle which is a muscle that is connected to the diaphragm and has direct importance to the function of the diaphragm, so it is good to be an elastic muscle. **Precisely because one muscle is inside the other, if the iliopsoas muscle is not elastic, it can have an impact on the movement of the diaphragm, and therefore on the ease of breathing.**

KL

[00:00:04.970] - Speaker 2

So hello Mr. Lambropoulos. Thank you very much for your participation in my assignment. I would like you to give us a little introduction about your status and tell us who you are.

[00:00:24.830] - Speaker 1

My name is Lambropoulos Konstantinos, I am an otolaryngologist surgeon and phoniatician and I have been seeing people with voice problems for 40 years.

[00:00:32.520] - Speaker 2

Well, that's perfect! Good! I now have some very simple questions. My first question is this. Do you often have contact with extreme metal vocal techniques through your clients?

[00:01:00.460] - Speaker 1

I have no frequent customers so far.

[00:01:05.380] - Speaker 2

But have you had in the past?

[00:01:10.300] - Speaker 1

Yes, but very little. I mean, the number of people that I have seen isn't a reliable sample for me to be able to say much but yes I have seen.

[00:01:16.990] - Speaker 2

Okay, yes, well you know, it's also a very interesting what you say.

[00:01:26.860] - Speaker 1

They don't come to me. I mean, obviously there are artists who do extreme things with their voices, but I haven't seen them. I mean I've seen five people over the years nicely and even in the last few years.

[00:01:38.500] - Speaker 2

Good, good and these five are good. How often would you say they deal with vocal health issues?

[00:01:48.650] - Speaker 1

Like all voice professionals. They experience voice problems when they do something wrong. If they do it right, they don't have a problem. That is, you can do the most extreme things with your voice, but if you do them right and supported, you won't have a problem. So you can do the simplest vocal things and if you do them wrong you'll have an immediate problem. Yeah.

[00:02:07.790] - Speaker 2

I totally agree. Good, that's very good. Compared to other genres of music, would you say that the extreme metal ones have more or different vocal problems? Is that true or is it the same?

[00:02:25.070] - Speaker 1

No, it's the same. It's not about what you sing or what you do. It's how you sing it and how you do it. I mean, it's the question I often face when they ask me "Can I sing a few hours a day? A little bit?" And I say, 24/7. If you do it well, you'll never have a problem. The same goes for this. It's just that because it strays a bit from the usual singing training process, it takes a lot of special training so that you can achieve your vocal effect without damaging your voice. Yeah.

[00:02:54.090] - Speaker 2

Yes, I agree. And to tell you the truth from these answers comes material for another paper. That is, you start out for other things and end up somewhere else. I mean the fact that most of you agree that it has nothing to do with whether it's metal or traditional or something else.

[00:03:14.320] - Speaker 1

It's about how. I mean, if you accept that we used to say that singing is like a singer athlete sport and that the champions are the ones who do the opera. Now metal has been added to that, which is people who start doing things outside the boundaries. An opera singer is a special thing ie a soprano who has to sing a counter F to 1497 Herz and a rock metal singer who can make other sounds with his voice. They use the vocal mechanism to produce a sound that is not usual, so it's something extraordinary. They have to do it in a special way.

[00:03:57.370] - Speaker 2

I agree. Good, very, very good. What would you suggest for warm up and cool down for extreme metal vocalists in cases where you see and hear there's a vocal health issue?

[00:04:12.170] - Speaker 1

I will answer. As I tell everyone there is no special thing for metal or for opera, that is everyone has to warm up their voice because it's a muscular process. It doesn't matter in the end what you sing. What matters is how you properly prepare your vocal mechanism to meet your vocal demands. So you have to do the very ordinary simple things. You warm up your voice, you don't warm up your voice by singing opera and you don't warm up your voice by singing metal. You do a basic way of training and warming up the voice and then you sing whatever you want. And that goes for therapy

and preparation and recovery, which you never take seriously as an artist. I'm not talking about you.

[00:04:57.340] - Speaker 1

So recovery means that the performance is over, my vocal work is over. *Then I have to do five things to re-train my vocal muscles and the neck and cervical muscles that were involved in the extreme vocal process to get them back in place.* That is, a man who sings opera or who sings metal, then the next day he will still say good morning. Will not say good morning with a deep voice or metallic voice or piercing voice. So he has to restore his vocal mechanism to its former state.

[00:05:25.290] - Speaker 2

And we all know that's what happens afterwards with the beers and talking to our friends. Right?

[00:05:30.840] - Speaker 1

One cannot take out of one's life the part of fun, pleasure and moral satisfaction. But between finishing the show and going out for beers, there can be a ten-minute period of vocal recovery.

[00:05:47.280] - Speaker 2

I agree. Well when is it recommended to visit an ENT doctor? It has more to do with when you as an ENT doctor would recommend.

[00:06:00.640] - Speaker 1

In theory, a professional voice artist should be seen once a year. It's not too easy to do that. That is, too many do not observe it. *My own suggestion is if you can do it, financially, one must see him once a year in any case and possibly whenever during the year there are special requirements and if he feels the slightest annoyance, before they develop into a voice problem.*

[00:06:31.700] - Speaker 2

Prevention we are always.

[00:06:34.370] - Speaker 2

And that's the epilogue.

[00:06:36.050] - Speaker 1

And something else for the people who will train the singers, regardless of the genre that they teach. Send your students first before you take them on, to know what they are starting from. Learn about the kind of throat, the kind of voice, the capabilities, if they have problems so that you don't take them without knowing. And it's good when there is also another recommendation. *Every singer should have a little flash drive, a stick in which they record every test they do at every laryngologist or phoniatician.* He should create his own personal record of videos and photos to be auditable and comparable in the future.

[00:07:12.060] - Speaker 2

But can I ask you something here now? I say this to every student, every student of mine. But they don't go. What do you suggest? Not to take them on? I'm telling you I've told everybody.

[00:07:31.830] - Speaker 1

I understand. Theoretically, if a football club does not sign a player, it will send him to have an ergometric examination. He has to do things, he has to know what condition he's receiving him in. So imagine now you get someone who has a deep dark gritty voice. He wants to learn extreme metal vocals and he's already got a polyp. Are you going to put him on your back next?

[00:07:51.270] - Speaker 2

That's right.

[00:07:53.800] - Speaker 1

So it has to be a requirement for everyone. It will happen eventually.

[00:07:58.720] - Speaker 2

Moment will be well. At my school that's what we had to do. Otherwise we couldn't start our study.

[00:08:06.310] - Speaker 1

In Berlin, at the university, all the children who were doing opera came to us in the phoniatic clinic of the university and were tested at the beginning to know how to do a recording.

[00:08:16.000] - Speaker 3

Yes.

[00:08:16.660] - Speaker 1

And we didn't have the facilities back then with sticks and videos and we watched them, photographed them, gave them away. But this has to be done.

[00:08:24.290] - Speaker 2

I have my last question. Suggest two exercises that in your opinion could be very effective for an extreme metal vocalist temporarily experiencing a voice problem. Let the temporary be in quotation marks.

[00:08:44.640] - Speaker 1

Whatever we say as rules and hygiene voice guidelines, obviously. I hope you teachers all say this to your children. The next two are two things. They need to learn to check the height of the larynx in the throat. This is achieved by the technique of yawning equals you controlling the length and tension of the strings. And the second is relaxing the jaw too much so they can have a good resonance at the top.

[00:09:14.000] - Speaker 2

I agree you have me covered. Thank you very much for your time.

[00:09:22.400] - Speaker 1

Thank you for the invitation.

Appendix 5

Transcription of the focus group

[00:00:02.940] - Speaker 3

Okay. Hello, everybody. Thank you so much for being here and helping me out in this difficult time. Before we start, I would like you to just give a very short intro about your name and what you do. We know each other, but other people don't know you. You can start introducing yourselves. Well, let's start with David, the way I see you on the chat.

[00:00:45.060] - Speaker 5

All right. Hello. My name is David Akesson, and I'm a Swedish vocal coach. I studied at the Academy of Music in Malmo for five years. For 15 years, I've been teaching vocals at a music school here in Sweden. I've been teaching online since early 2019, so that's like five years now. Around that time, I also started to teach extreme vocals. My education is mainly in classical music, but I've always been... I sometimes describe myself as a classically trained musical theatre nerd that ended up in metal.

[00:01:32.780] - Speaker 3

Okay.

[00:01:34.230] - Speaker 5

So that's me.

[00:01:36.230] - Speaker 3

Cool. So you have experience from multiple genres? Okay. Thank you. Okay. Soren.

[00:01:47.080] - Speaker 4

Yes. My name is Soren. I am originally from Denmark, now living in Bulgaria. I started as a singer, and I got headhunted to become a voice teacher at the the Danish Metal Academy. Then later on, joined Rocky Music Studios. Now, I have created a neuroscience method for all styles of singing called the MasterKey vocal system that is built on neuroscience. Other than that, I have done research with Nathalie Heinrich in France. I have been teaching, I guess, since 2004-ish, somewhere around there. It's hard to remember now, but yeah, been teaching for a few years, and yeah, that's me.

[00:02:39.450] - Speaker 3

Great. Thank you so much. Sebastián, Hello.

[00:02:49.720] - Speaker 2

My name is Sebastian Croteau. I'm happy to say it's 5:00 AM in Canada here. I've been a metal vocalist since 1990, so 34 years practising as a death metal vocalist. I've been doing throat singing since 1997, so Tuvan, Tibetan, and Inuit throat singing. I've been teaching, probably for now, for 14 years as a vocal coach for throat singing and for extreme voices, and now I've been also doing voices in video game for 18 years, and I've been teaching creature voice acting for probably up to five years now. Yeah, that's it.

[00:03:38.940] - Speaker 3

Great. Thank you so much. And Alik.

[00:03:45.680] - Speaker 1

Hi. I am Alik. I'm not good at my bio. Let's see. I've been in and out of bands since I was 14. I started my singing lessons in classical singing when I was 16, did quite a bit of musical theatre, and didn't have any particular interest in extreme vocals. I'm very, very, very interested in clean vocals, and I got into extreme vocals by mistake as a singer and by mistake as a teacher. And I've been doing that for many, many, many years now. There you go.

[00:04:37.240] - Speaker 3

Okay, great. So it's very nice that you all have these backgrounds with multiple stuff that you have done, because we can say opinions, not based only in one thing, but having experience on other stuff, too. So we are starting very, very normal and easy. So my first question is, do you often come... Because again, I'm reminding you, I will ask you the same questions I asked those people because we are all professionals, so they say their opinion and background, and we say ours. So do you often come in contact with extreme vocal techniques through your clients/students? And yeah, I just want to hear all of you, so you just open your mic and say.

[00:05:52.460] - Speaker 4

Yes.

[00:05:55.800] - Speaker 3

Okay. So it's a very Very often that this happens with all of you, right? Correct. Yes. Okay. Correct. That is correct. And how often would you say that they deal with vocal health issues?

[00:06:17.880] - Speaker 4

I would probably say 1-3 percent-ish. It's low, but it happens. I've had people with very severe issues come and then we I can totally fix it up, but it really comes down to the person. I've had a person with one and a half lung. After that, I am open for whatever. But it can really... You never know what you get as a voice teacher. So they can have that technique from someone else beforehand. It can be multiple things, like physical things that's wrong.

[00:06:54.550] - Speaker 3

Okay. Yes, Sebastian.

[00:06:57.500] - Speaker 2

Just to clarify, do you mean they come to us because they have a problem or they come to us to learn and we found out that they have a problem?

[00:07:08.680] - Speaker 3

Well, basically, I mean both. But it's like what comes first in your mind because this is very general what I ask. So the first thing that pops up in your mind, maybe they come to you because they have something or maybe they feel very great. But you as a professional, you say, okay, something is happening here. Yes.

[00:07:40.920] - Speaker 2

They come to me because they want to learn the different voice techniques. Sometimes they're like, Well, while I'm trying this, it's a little tinklish. I cough when I do this and that. But for me, it's not related to any help matter, but just because it goes with the practise. Yes.

[00:08:00.320] - Speaker 3

Okay. Yes. Because also you're doing something very, very specific. You're well known for this. So it's obviously they will come for this.

[00:08:12.540] - Speaker 2

Okay. But some time along the way, probably again, Probably like Soren, 2-3% of them all, I find that there might be something. And even I'm not a vocal health specialist. Okay. It's mostly comes the speaking voice, not from the extreme voice. Yes. Extreme voice, even if our voice is shut down, we can still scream. Even for me, that's the same. So sometimes it's more in their speaking voice that you see there's a little breathiness, there's a little like... But it's like 2-3% of the most that I think they might have an issue with it.

[00:08:53.780] - Speaker 3

Okay.

[00:08:56.110] - Speaker 4

Yes. Because exactly what you say. Sometimes it then translates into to the effects that they want to do. So super breathiness or something like that, then it translates into the effects that they want to add as well.

[00:09:10.660] - Speaker 3

Yes. Alike?

[00:09:12.540] - Speaker 1

I would agree. I would say it's a very small percentage. It's somewhere around the 1-2 %. I get a mixture. It is more common that people come in with an existing problem, especially if they are not metal heads and not screamers. So the group that I find have the biggest problems are mostly people with musical training background, they have the biggest problems. And then second would be voice actors tend to suffer the most in my experience.

[00:09:55.480] - Speaker 3

Yes. Okay. So Sorry, you're saying something, Sebastián, I didn't hear you.

[00:10:03.550] - Speaker 2

I was going to say what Alike said. The person with the problem, or for me, voice actor, not metal vocalist, enthusiast.

[00:10:16.240] - Speaker 3

Yes. Never.

[00:10:17.740] - Speaker 2

Voice actor, yes. Not people who are trying to train or a little bit training to extreme vocals.

[00:10:24.320] - Speaker 3

Also here with the people I discussed, they are also sing with actors and some voice actors. David?

[00:10:35.990] - Speaker 5

I would agree that there's very few singers that come with actual voice problems. But the students that I have seems to be either total beginners that would like to learn to use extremes or very experienced screamers who want to broaden or or adjust or check in, so to say, on their technique. I very rarely get the mid-student. It's either the very beginners or the very very experienced ones. Yes. Because the beginners, most often, they haven't had a time to develop that problem. And that's a good thing because then you can guide them in the beginning of their journey. And the very experienced ones, perhaps they have like, Oh, my, my screams are starting to sound less cool than they used to, or I get tired more quickly. So they don't really have a problem, but they come with very specific. I want to fix this. It's not like, I want to learn something. It's often very specific.

[00:11:58.020] - Speaker 3

Okay. Yes. Thank you. So I think we all agree then that it's not so often that we get to see vocal health issues. That's what I understand from what we say. And we just need to dig deeper sometimes to see if there is an existing thing or they have a habit that might turn into, I don't know, more harmful. Yeah, okay. If you would compare extreme metal vocalists with other genres of music, do you believe they have more or different vocal health issues? Okay, David? I can't hear you.

[00:12:58.440] - Speaker 5

Sorry, I was muted. So The question was if extreme singers have more or less vocal problems.

[00:13:08.060] - Speaker 3

Yes. Comparing it to other genres of music, so like pop, opera, whatever.

[00:13:17.400] - Speaker 5

No. In my experience, I can't really see. I can't see that the extreme singers are standing out or the symphonic metals are standing out or not in the students I have. So no, I wouldn't say that the extreme singers stand out when it comes to vocal health problems.

[00:13:41.200] - Speaker 3

Same as David, I would say the voice actors stands out in terms of having problem compared to people who are actual practitioner even beginners, basically because voice actors are not focusing on the things they need to focus the same way that we do.

[00:14:10.200] - Speaker 2

If I look at when I started to do it, I was practising three times a week, only doing screaming and extreme vocals, only doing that. The problem with voice actor is their voice, they have to do a commercial up there like this, and then they have to do that big radio voice. They have to do so

many things with their voice, and the time they take, even if you tell them you need discipline, whatever, the time they take to actually practise is very little. So in the end, it takes longer for them to be comfortable with it, and they come up with more issue. But for me, I haven't seen differences in extreme vocalists in terms of problem. We use a lot of supraglottic structure, not actually necessarily linked to stuff. Of course, we're using vocal folds, but the problems are usually around the vocal folds, right? We don't have nodules on false vocal folds. I've heard of it, but I've never actually know what it is. But I don't see that issue. I think it's mostly focusing around vocal folds, but for me, it's the same as anyone else, I think.

[00:15:31.530] - Speaker 3

Yes. Okay. Alik?

[00:15:38.280] - Speaker 1

I always consider screaming vocalists as being a little bit more likely to struggle with edema, worst case scenario, haemorrhage. So far, I don't frequently encounter haemorrhages from other genres and groups of people. It's like the metal heads have a monopoly almost on the haemorrhage, but it's very, very rare. I would say on average, I find that the screaming humans have less problems than the Clean Singers. And the group, to me, that really stands out in terms of problems and fixing problems are rock singers, massively. And the reason that they stand out is not because they necessarily have bigger problems, but there's so much substance abuse, alcoholism, and all that stuff that it's really, really difficult to implement behavioural shifts, because very often with voice act, there's musical theatre singers, classical singers, pop singers. You tell them what it is that they need to do, and they can take those steps. Whereas with rock singers, it's this constant scenario of, I did it for two days, and then I got drunk, and then it's happened again, and it's just the whole process is much slower with rock singers.

[00:17:12.050] - Speaker 3

Okay, nice. Thank you. Soren?

[00:17:17.660] - Speaker 4

Yeah, rock singers. Like Alik said, I think that's where the biggest group is.

[00:17:23.940] - Speaker 3

We have a win-win here.

[00:17:26.260] - Speaker 4

Yeah. But again, it's really hard to say. I've had students that came to me because they actually ended up with different things happened to their vocal folds. And then they stopped doing it because they had to go to an ENT, see a speech language pathologist, get it fixed. And then 10 years later, they're like, I still want to do this, and then come to a voice teacher and learn how to do it. Anyone with bad technique could end up with something negative happening, right? So it's hard to say. I really don't want to stand on one side or the other in this one, to be very fair. I don't feel like it's a person, right? It's like saying one martial artist is better than another. I cannot say that because it comes down to the person. You cannot just... I had a colleague say that mainly she saw that classical singers from a specific place had issues with their voice. But I don't know. That's, again, mouth to mouth things. And so you don't know these things. It can be hard to say.

[00:18:50.420] - Speaker 3

Yeah, but it's good that we... Again, we all agree, I think, that if you don't know how to do something, if you don't have a good whatever genre you are going to sing, possibly you're going to have some problem. If you are very lucky, maybe no. But okay. Excuse me.

[00:19:12.330] - Speaker 2

One thing I've seen also real quick. One thing I do remember, I've seen is voices that have hoarseness.

[00:19:22.140] - Speaker 3

Hey, sorry. Hi, Tony. Welcome. We don't hear you. We all made it. Okay, so we are full now. It is a full house, everybody. Okay. So just, Tony, can you hear us? Okay. Just to say a couple of things. I am just asking a bunch of questions, and these nice people are answering. So you are going to do the same as an extreme vocal coach, but also not only with metal, because I think you are teaching various styles, too, like all other people. So, yeah, we are having an exchange of ideas. My research question that this focus group is based on, I have put it in our chat so you can see with the blending of disciplines, blah, blah, blah, blah.

[00:20:38.790] - Speaker 6

Can you put it in the chat again? It's not in mine right now.

[00:20:43.500] - Speaker 3

Okay.

[00:20:43.950] - Speaker 5

I can do it.

[00:20:45.870] - Speaker 3

Yeah. Yes. Thank you, David. I have put it two, three times.

[00:20:53.760] - Speaker 6

Yeah. Thanks. By the way, in case you didn't hear the first thing I said because the wrong mic was I'm very sorry for the delay. I woke up five minutes ago because I didn't think I'd need a clock for 11:00 AM, but I...

[00:21:10.360] - Speaker 3

And you can talk without coffee? Come on. Okay. Well, thank you. Okay. So I will ask you some things later on.

[00:21:26.900] - Speaker 2

We need a question of that we did. It's going to give me five minutes to make some coffee.

[00:21:32.020] - Speaker 3

Yes. Okay. So, Tony, I will ask you a couple of questions until Sebastián makes his coffee. So I'm asking you the same questions I asked the professionals from the fields of classical singing, voice rehabilitation, laryngeal massage, and Otolaryngology. And so we are a focus group with extreme

metal vocalists, and we are going to say our perspective of things and our background of it. So first, you say your name and you say very briefly what you do, like what you I teach what you sing.

[00:22:17.080] - Speaker 6

My name is Tony. I teach all styles of singing, but my main focus is metal vocals or rough vocal effects in general, not just the metal screaming, but also the rock distortion, the blues, growl and so on. And I focus mostly on these techniques, a bit less on repertoire or interpretation.

[00:22:41.810] - Speaker 3

Great. Very nice. So do you often come into contact with extreme vocal techniques through your client/students? Is it very often that you do that?

[00:22:59.180] - Speaker 6

About 70% of the lessons.

[00:23:02.160] - Speaker 3

Great. Okay. How often would you say that your students, clients have vocal health issues?

[00:23:15.100] - Speaker 6

It depends on where we start. If this is already a vocal health issue, then we'll get it at the time.

[00:23:24.910] - Speaker 3

No problem.

[00:23:27.020] - Speaker 6

Usually, I I think about a third of the people come because they've tried stuff and it didn't feel good. So then we try to find a way to make it feel better. But if we're talking vocal issues in the clinical or pathological sense, I'm going to try to give you a percentage of maybe 5% of people.

[00:23:55.200] - Speaker 3

It's not super high. Yes. We all agreed that It's like a little percentage of students. But again, this is very general. What I am asking is very general. So I just want the first thing that comes in your mind. Because you can have somebody that already has something, or with your experience, you can discover that he has something, even though he or she don't know that they are dealing with a vocal problem. Okay. And if you would compare with other genres of music, do you think that extreme metal vocalists have more or different vocal health issues?

[00:24:47.720] - Speaker 6

I think they have different vocal health issues. Not generally different, but I think the typical situation where it scratches or tickles during practise because you're pushing too much air or whatever. I think that's maybe a bit less likely for someone who sings purely clean. But I don't think in general that metal vocalists have more voice problems. Yes. That's the short answer.

[00:25:29.180] - Speaker 3

Yes. I understand it, but probably you don't need it. Yeah. Okay. I'm just asking from your experience, how you see things and also with the people I talked here, this was also a good thing that they all agreed that it doesn't matter if we are talking about extreme metal vocalists or pop

singers or traditional singers, whatever. If somebody doesn't have a good technique on something, it's very possible that they are going to deal with this problems. So my next question, probably Sebastián favourite, what would you recommend for a warm up and a cool down in extreme metal vocalists in cases that you can hear that there is a vocal issue somewhere? What would you recommend? Let's start with Sebastián. I don't... We cannot hear you. Oh, just a sec. Hello. Hello.

[00:26:48.280] - Speaker 2

I'm just going to put some gain. Now, is it better?

[00:26:52.000] - Speaker 3

Yes, much better.

[00:26:53.180] - Speaker 2

I put some gain in the microphone, not in my voice, because I'm having exactly the same level as five minutes ago.

[00:26:59.310] - Speaker 3

Or you put sexiness. Is there more sexiness?

[00:27:03.520] - Speaker 2

No, it's not sexiness. It's 60 hours of recording in two weeks.

[00:27:07.740] - Speaker 3

Jesus.

[00:27:09.150] - Speaker 2

That's what's happening with my voice right now. For me, It depends on the individual because every voice has its level of proficiency, has its weaknesses, has its strong point, and therefore, it's never standardised or generalised for me. I used to do that at the early beginning of when I was teaching. But up to five, six years ago, I started to see that most of the exercises I was given, for some individual, were not working at all. Like generalise, a very specific way to warm up. Like do this, do this, do this, do this, and then do this, do this, do this, do this, do this. It also depends on the voice technique. Is it a vestibular-based voice technique? Is it mostly like very compressed, dry? For me, it depends on the main voice technique of the person first. Never in 30 something years, or let's say 15 years that I've been doing vocal coaching, have I recommended anything related to semi-included vocal track exercises.

[00:28:31.920] - Speaker 3

Okay.

[00:28:33.880] - Speaker 2

I'm sorry to say that, but not sorry at the same time. I've tried, and that's the thing. It's not because I haven't tried them on myself. I have a bunch of tools of stuff that I use, different sizes of straw, different things, and I've been trying them for the last two years. In terms of having any effect on my practises, my own, I didn't see any real improvement. I don't feel any real improvement from that. Mostly for me, it's individual. It's a case-by-case that I will, depending on what the person is

at, meaning its level of proficiency, where the person is in his practise. Also, the cool down phase, for me, this coming from SovT, because cool down for me means I'm just going to shut up afterwards. It would be vocal rest, I assume, what we call vocal rest afterwards. But up to a few years ago, I was never really conscious about that because I didn't use my voice the same way I'm using it now. Now I need my vocal rest. For me, speaking in a loud environment is more damaging to my voice than screaming for four hours. Even doing inhales, I can do inhales for three hours.

[00:30:05.860] - Speaker 2

I did yesterday for three hours. Of course, my voice was a little tired, but not to the extent of when I go to a video game conference and I have to speak over loud music or loud nosy in the background. For me, warm up needs to be tailor-made. Usually, of course, they consist of breathing exercises because this is something I've seen in voice acting, most people with a singing background have less difficulty engaging and sustaining vocal distortion than people without a singing background in terms of a voice actor because usually they're a little better at breath management, and they can actually engage vocal distortion better and sustain it more. But for me, it usually consists of, let's say, if I standardise it, which I no longer do, but it would consist of breathing exercises and then exercises for the larynx, specifically, a few, just so... Because some people struggle with where to place the larynx, so I try some exercises just for that, specifically. Some stuff on the vocal fold, but it's mostly and a few other exercises. I would say the periodical vibration. Now, I don't know if I can do it this early.

[00:31:43.170] - Speaker 3

No, it's okay. Yeah, stabilising. Generally, you are judging from your student, your client. You are making something for the specific person. Yeah.

[00:32:01.050] - Speaker 2

Then depending on some tongue exercises, sometimes they need to be able to activate other structure, uvula vibration. We experienced that in Rome for a few of you. Other vocal effect. It's mostly sometimes, especially in activating, trying to find the right position for them to use so they can more easily activate what they need to activate. But that would be it. The usual drink water, sleep well.

[00:32:33.740] - Speaker 3

Yes. Drink water and have a very positive mental state.

[00:32:38.050] - Speaker 2

Love someone. Yes.

[00:32:41.490] - Speaker 3

Okay, cool. David?

[00:32:48.200] - Speaker 5

I would also say there aren't any general exercises that I would say to everyone, do this, but I try to encourage my students, at least the online ones, to sit down five minutes before the lesson starts and either do a little bit of stretches or meditate or just whatever breathing exercises you like. It's more about being present and having some body awareness and shutting out the world a little bit

and being able to focus. That is probably a general advice that I give. Otherwise, it's like, Sébastien, I like my students to have different... Depending on what we're working on. And for myself, when I'm on tour, it's the same. I do the same exercises that I've done since I was 16 or whatever. I do them not because I think they are the best vocal exercises, but I do them because when I do them, I do them in the same order, the same way. Every day, my mind calms down and I get focused. And then when it's time to sing, I already know that as long as I'm not sick, I already know that things work, but I need that time. I could just as easily, you know.

[00:34:30.640] - Speaker 5

I don't do that. But for me, it's about the focus. That is a general thing. And that is something that I think whatever school you're in or genre you're in, that is a good thing to focus. So that would be it. If I were to give any general advice on warmup, it would be like the body awareness.

[00:34:52.250] - Speaker 3

Yes, I agree. And I'm also a big fan of everyday rituals. So I'll do the same forever. Okay. Soren?

[00:35:04.880] - Speaker 4

Yes. So I'm a little on both sides here because I've had a few students who came to me and they could not scream in their falsetto, for example. And what happens is that then we just test what they can do with their clean voice and they cannot reach it either there. So again, I am not saying that a specific warmup is better than another, but some people think they can do things with their screaming voice that they cannot do with their clean voice. In my opinion, that's where it breaks a little bit sometimes. I have seen it. I'm not saying sometimes you see someone who have been doing only screaming, and they are very, very effective with what they want to do. And so on. But I have seen a quite big group where they like, I cannot do highs or whatever, but they cannot sing highs either. I like to just do minor warmups on the true vocal folds. Just let's say we're doing something with high streams. Okay, we just do a little warm up up there with our true folds. No worries. It's just a little make sure everything is nice and loose at that point.

[00:36:27.340] - Speaker 4

But I Yeah. I more and more just focus on screaming as being a muscle memory type of a thing. And I think that the more that we focus there and teach them what's inside the body. Because when we're babies, that's why we can scream. We are in a different brain. The brain waves are different at that point. They don't focus much about what's outside their body at that point. They are only focusing on what's inside. And that's why they just scream. They're not focused on, Oh, I had a memory of this and that either, because that memory doesn't happen before three. So we can keep on pushing in that direction and say, Well, it's because we focus more on what's outside. And the more we go into figuring out what's happening inside, again, the more we learn about our voice and the more we can do these different tasks easily. So I think we should focus more on it being like, this is what you want to activate for this and that, and then teach them slowly to build up muscle memory in those regions that we want to activate. So again, can you hit up that region that they want to use?

[00:37:48.540] - Speaker 4

Let's say the ventricular folds. Yeah, you can do. I think Mongolian throat singing, etc, as an SOVT exercise. In my personal opinion, I'm not saying that it is, but in my personal opinion, it is. Simply because if you try to voice from that point where you are either doing an SOVT exercise, just a clean voice, it will just be a vague, something not really a voiced, voiced sound. It sounds like an ending of a line of a phrase. It doesn't really sound like a full-on voice. The same happens with the Mongolian throat singing. I'm more and more into looking at it like that, that, yeah, there are tools that you can use to... Again, is it warming up or is it just a physical thing that you're slowly understanding and being able to do better? When we started writing our names, it was huge letters. And then the muscle memory gets better and better, and suddenly you can follow the lines on a piece of paper with your writing. So muscle memory and how to teach that.

[00:39:08.630] - Speaker 3

Okay. But I think you also see it with your students more individually. I think we probably agree on that. Okay. Aliki?

[00:39:26.980] - Speaker 1

Yeah. I mean, same as everyone else. It is extremely specific to the individual, to the task that they are about to do. So are we warming up for a voice lesson? Are we warming up for a performance, for a recording? What are we warming up for? The dominant thing with warmups in my mind is getting them in the right psychological biological headspace for what they're about to do. And depending on the individual, that might mean doing an exercise that I wouldn't necessarily think would be what I would go to to do that task. But if it works, it works. And for cool downs, I am broadly looking for almost the opposite of the way that they've been muscularly using the voice in order to introduce more variety and not let the brain stay in that one pattern that they've been in. And that can be normal standard cool downs of descending maybe even staying in fry. But it can also be increasing the volume if they've been doing an entire set with only Fry and it's been quiet. So again, it varies a lot.

[00:40:59.370] - Speaker 3

Yes. Okay, great. Toni?

[00:41:05.640] - Speaker 6

So I don't really do warm-ups or cool-downs. And so far as that, I go right into the technique. If a new student comes to me and says, I want to learn fry screaming. We do this. But we start simple. So I don't expect him to scream an Architects song.

[00:41:26.660] - Speaker 3

Yes.

[00:41:27.730] - Speaker 6

So we start right with the fry. However, if I notice that the very simple thing is not possible, we go back to clean voice, or we go to clean voice. We weren't there before. But to me, that's not a warm up. That's fixing an issue. If he is not able to do the fry at a high pitch, but it's always like this, then we practise singing there. And if that doesn't work, we practise singing lower and then extending the range. So if someone has a big head voice problem, we try the scream once, we notice it

doesn't work, and then we work an hour on singing. But I don't do a warm-up before, because if he has that problem, the warm up doesn't solve it.

[00:42:20.090] - Speaker 3

Yes, I agree.

[00:42:22.280] - Speaker 6

I agree with Sebastian. If the student is tired, we don't do cool down. As soon as we notice it, we make a bit of a break. We talk for two minutes, and then I ask, Is it better? And if it's not better, we switch.

[00:42:42.200] - Speaker 3

Yes. Okay. I think that is an interesting point here because, for example, all the people I interviewed, they are suggesting the same things. Okay. A straw humming and drink water and stuff. And we are all discussing here about individuality and tailor-made exercises, which, of course, I agree 100 % because we are dealing with different people, different problems and stuff. So I think that's very important that we are all addressing that and not just, yeah, okay, you do this, you do that, you do that for 10 minutes and you're set to go because in reality, this doesn't happen.

[00:43:36.920] - Speaker 6

The music conservatory professor that I had who said, 45 minutes of warmup every day.

[00:43:45.550] - Speaker 3

Jesus. Yes.

[00:43:46.820] - Speaker 6

And only then you're ready to sing. And the first 10 minutes of that are just... Yeah.

[00:43:57.860] - Speaker 3

Just breathe to live. Otherwise, you die from asphyxia. Okay. Just real quick. Just something real quick.

[00:44:07.740] - Speaker 2

I'm sorry. I'm barely awake. I'm drinking coffee, so my mind is like going everywhere. I ask Arnaud because I'm actually doing a presentation in Dallas, which I should send you the Canvas soon for those that I reach out. In my approach, it's going to be three people talking about the extreme vocals or the way they conceive extreme vocal to be. That's the extent of their perception of extreme vocals, and they're all recommending humming and Sovts. I asked Arnaud to make a research on all the studies of SOVT exercises just to have a better grasp of the scope of those studies in terms of statistical significance. Sometimes it's 10, sometimes it's 20, sometimes it's 5, sometimes it's 60. It depends. But one study in particular was saying that, and that's the conclusion, the study revealed that these strategies are not universally successful, and clinicians should recommend them only after assessing their effectiveness to their client. Clinician needs to be custom tailoring these exercises to their client goals and proclivities. Another consideration is the importance of teaching properly, so it is done correctly without added tension.

[00:45:34.430] - Speaker 2

Even blowing bubbles in a cup of water with phonation can be done poorly, in some cases, yielding counterproductive results.

[00:45:43.990] - Speaker 3

Could you send me this research?

[00:45:48.230] - Speaker 2

I have two like this where it's interesting that even some people are saying, It should be tailor-made.

[00:45:55.800] - Speaker 1

Yes, but just a tiny parenthesis on that and jumping to that. That is arguably the most beneficial data, pro-SOVTs, because it's like medications, right? If it has no side effects, you're taking a sugar pill. It's placebo. It doesn't do anything. The fact that SOVTs can have negative effects on people is probably a good indication that they're doing something sometimes, but it might not be good.

[00:46:27.890] - Speaker 3

Yes. Okay. Okay. So next question, when would you suggest your client to visit ENT doctor? Soren.

[00:46:44.880] - Speaker 4

That's a big one. I don't always hear it in the screaming. I would say it's more about the clean singing there a lot of the time. I'm not focusing on the screaming a lot there. If... Yeah, better knock under the table, as they say. So far, I've been right. Every time I ask them to go to a doctor and check out things, one time it was just a specific special nose spray that this person needed and everything was good afterwards.

[00:47:20.620] - Speaker 3

So you suggested after you hear that there is a problem?

[00:47:25.170] - Speaker 4

So again, as we talked a little bit about, we need to sleep. We need to know, are there any physical issues that my student are not telling me about? Is there a medication that might be negative on the true vocal folds, et cetera, et cetera? Get those out of the way first. Okay, so if there's none of those, to even consider. Then we, and I see the same issue occur again and again. I normally have like a stuff can happen. Let's say you slept poorly for freaking three days and you then try to come and go in a voice lesson. Well, we probably all tried sleeping terribly and then trying to reach up for higher notes and suddenly, What is this? It's not happening. The same goes for a student. It doesn't change because it's a student. If it's reoccurring and it does doesn't seem to be fixed with the exercises we do, then it's time to just be sure. It's not a bad thing to see an ENT.

[00:48:46.940] - Speaker 4

Every time I was about to get healthy, I got hit by a new thing, and I ended up going to an ENT as well, just to be sure, not because I could barely sing or anything, but nonetheless, I just went to be sure. Okay. That's how I explained it.

[00:49:01.820] - Speaker 3

Okay, great. David?

[00:49:07.310] - Speaker 5

Well, I probably say that I agree with what Soren said. If it's reoccurring and if the student sleeps well, just like you put it, if everything else is taken out of consideration. Then I also have a network of ENTs and speech therapists that I know of. I sometimes just throw one out. Hey, the student says this and it sounds like that. What do you guys say? Sometimes it's reassuring. No, that's probably just. Or I get, "Well, you should probably", or they should probably go and see. It's hard to make a general rule But if the student... Sometimes it's just the student is worried about something, and sometimes it's just about reassuring them. This is probably... Because it's always guessing, but you always have to be... You always have to be clear. With my experience, what I am saying is this is probably just a temporal... It's just this is probably going to pass. But if it doesn't pass and if it feels bad in a week or whatever, then go and see an ENT. Okay. Yeah, I agree with Soren. And I also sometimes you have to do the opposite. Like, calm down. Because sometimes the lack of sleep can come from worrying of course.

[00:50:48.660] - Speaker 5

But yeah.

[00:50:49.590] - Speaker 3

Okay. Thank you. Aliki?

[00:50:54.950] - Speaker 1

Yeah. I'm mostly listening out for anything that sounds strange to me or abnormal in their cleans or their speaking voice. And then I will always double check with them. So it's always a back and forth conversation of, how often does it sound like that? Is that abnormal to your ears, et cetera? And if there is anything strange, we'll monitor it. You Usually work it for two weeks. And if it persists, then we need to have an elaborate conversation about whether they can financially go to an ENT and all the complexities along with a long monologue of what an ENT appointment looks like, recommendations, anything to alleviate relative stress around it.

[00:51:57.610] - Speaker 3

Okay, great. Sebastián. Coffee. Okay.

[00:52:11.210] - Speaker 2

I had a discussion, when we were in Rome, about insurance, or the lack of insurance that most vocal coach It made me realise that sometimes it's difficult to see the limit of what we can do, and we try to help, but we're not sure. Sometimes, we could be so wrong about someone's voice and someone's vocal health problem, and even trying to reassure them, maybe as a mental thing, but it will not fix the problem. Especially with working with voice actor, now for me, and sometimes just in order, so they can, for the first time, look at what's happening when they're doing different types of

vocal effect. Just that, not even related to vocal health. Like, Hey, you want to be sure what type of mechanism you are using when you're doing this, this, this, or that? Because we know sometimes it's hybrid, sometimes there's different things happening. For me, go see an ENT just to examine what you are using to produce those vocal effects first, and then you get a better grasp of how you can actually held them because sometimes you can tell by ear, but not all the time.

[00:53:49.180] - Speaker 2

Sometimes it's like, I would love to see down there to see what's happening, and then we can... For me, now it became, especially for voice actor, a It's easier in Canada. We're a Communist country, so we have free health care. It takes a few months of waiting, and then you have access to an ENT doctor here. But it's something that I recommend for people who want to go into creature voice acting to know exactly what they're doing in terms of vocal effect. Go do that. More than that, anytime I am unsure if the person has a problem, my recommendation would be just to tell them to go. Because for me, if I have a doubt and I say, Well, I'm sure it's fine. To my experience, it's fine. I'm not sure if I'm helping them. It's a fine line between vocal health therapist and us, and we're not vocal rehabilitation experts. I'm saying mostly vocal health therapist. There's a line. And after that, I recommend to go at least once a a year, just as a general checkup. Go once a year to see if there's any problem. Sometimes, again, it's mostly in the speaking voice. When you hear something that is-Yeah, it starts from that point, yes.

[00:55:20.940] - Speaker 2

The voice is shut down. One of my voice talent now, I told them yesterday to go to see an ENT doctor, Misha, for people who know about him. He's been doing a lot of voice direction and voice. He doesn't take care of his voice. I can hear he's struggling, he's coughing more to produce some vocal effect than more than I ever heard him cough or doing troll clearing, probably 10 times a minute. For me, that was the little things are like, Dude, you should... Yes, You should go there. Because technically, I'm in charge of his voice because I'm the one hiring him to do those things. So I'm like, Man, go check it out. So that would be, go once a year as a general rule for creature vocal effect, go just to know which type of mechanism you are using to produce that. And then if there's a very specific problem, but again, mostly in the speaking voice, something that feels wrong, again. But when I have a doubt, I don't hesitate to recommend to go. Because again, I'm not trained as a vocal health therapist. There could be a problem and we don't hear it necessarily, but it could develop into something way worse.

[00:56:47.330] - Speaker 2

So I don't want to take any chance. So this all derived from the discussion with Aliki about insurance.

[00:56:55.330] - Speaker 3

Yes. But I think also it can help us very much when they go beforehand, before they start, because many times they have something, and it's very easy for us to be accused of having... That we taught them in a wrong way. Whereas if you do that from the beginning and everything is safe or is okay, then you start with your student. Otherwise, maybe a vocal problem is revealed from the beginning and you don't get accused of something. Toni.

[00:57:37.440] - Speaker 6

I usually do it the same way that you've talked about. If I hear an anomaly in the speaking voice, I ask whether it's like that all the time. Because if you have the same situation as me right now, and it's early in the morning, and you have a nightly reflux, and then it's gone after 2 hours, then it's no problem for us. We just ignore the phlegm, right? But if I have a lesson in the evening with someone and they have problems speaking with a clean tone all the time, then I usually do a couple of exercises because sometimes we can fix a weird functional thing, weird habits, not for forever, but we can find out whether their voice can phonate normally. If it cannot, we have the conversations that Aliko and Sébastien that you all talked about. Other than that, I'm relatively fast to just recommend people to see an ENT. I wasn't aware of the the financial thing that Aliko talked about. It's probably a bit different depending on the country, but I'm trying not to make a big deal out of it. I have my own endoscope. I show people. It's really cool to see what's going on.

[00:59:15.780] - Speaker 6

But you probably should let a professional do that with you because I'm just crazy. So you visit someone who's good at that. And it's basically to rule out anything is weird. The ideal outcome would be you go there, find out your voice is fine, and we're free to experiment with everything here. So even if I worry that they have a voice problem, I try to not make them... I don't know how to word it. You know what? It's too early.

[01:00:02.820] - Speaker 3

It's a miracle that you are doing this without a coffee, I'm telling you again. But I think we are a bit... We agree again. Okay. So for last things, it would be what advice you would give to extreme metal vocalists for prevention of vocal health vocal health issues. Well, we discussed them. This all came up in the discussion, but just to be a couple of things. What advice you would give for prevention of vocal health issues? And if you believe that you could say one or two exercises that you think they are extremely beneficial for extreme metal vocalists that have in a very short term, they have a vocal health issue. Like, okay, they wake up in the morning, they feel awful, but on the evening, they need to perform. Like, what would you suggest that they do It can also be something very mental that they feel better, and so this helps them. I don't know. So advice for prevention and advice for a SOS, S situation. Aliko.

[01:01:36.550] - Speaker 1

Hi.

[01:01:37.350] - Speaker 3

Hi.

[01:01:38.910] - Speaker 1

Yeah. Okay. So I'm thinking. Okay, general advice is know your body, know your voice, know your brain, assess where they are every day, and adjust accordingly. No amount of technique is going to prevent an injury. It doesn't work that way. And we don't live in a parallel universe. And the best thing that we can do is just adjust accordingly and also not hold these ideas. That, oh, if I just sang with good technique, nothing would happen to me because then we get into the whole victim blaming and a lot of paranoia and shame. So it's crap. In terms of vocalist, wakes up in the morning, voice is shredded and they have a performance in the evening. If I had a gun to my head- Yes, think it like this. So if I had a gun to my head and I had to pick two things, the first thing would

be, Shut the fuck up? And once every hour, hum, just to check in, just to see, is it getting better? Is it getting worse? And then the second thing would be, based on however it's sounding, start imagining and envisioning the live show and how you are going to make did that sound look like it was intentional to the audience and how you're going to convey that somehow this is happening because you're so emotional or whatever, bullshit, or crap.

[01:03:41.600] - Speaker 1

It's a basic theatre. How are you going to maximise the illusion for the audience so that you have a plan and you're not worried about the relationship that?

[01:03:52.150] - Speaker 3

Okay, great. David?

[01:03:59.450] - Speaker 5

Well, general advice is to prevent injuries. Of course, when people ask for vocal health advice, I usually say it's the same as the "It's a good advice for a healthy lifestyle overall." Sleep well, eat well, drink well, take care of yourself, both physically and mentally. If When you feel good, you're going to sing better. And that is probably what I would, with a gun to my head, I would say the same as Alik, I would say, Shut the fuck up. First, when you started to say every once in an hour, I was like, I don't like where this is going. But the way you were going with the just humming in. Because the opposite, if you try all day, like, No, fuck. Then you're just building up the nervousness and the paranoia. An anti-advice would be, do not check in with your extreme voice all day. But instead, trust your experience. Shut the fuck up, just hum a little bit, and then do your best in the evening. If it's a show that you have to do.

[01:05:31.960] - Speaker 3

Yes. Okay. Good. Soren?

[01:05:39.220] - Speaker 4

I have done those shows a few times. I've got a few of these experiences. My band had to play with one of my absolute favourite bands from Malta that never played in Denmark at that point. I was on heavy ass medication. We're talking like, I was sick, sick. I could still growl and everything. But up on stage, I was blacking out five times. When I was doing long screams, black, and it was like, and then I came back, whoa, really terrifying.

[01:06:11.840] - Speaker 3

Sounds very stressy, yeah?

[01:06:14.300] - Speaker 4

Oh, yes. So that's where we're going with it. But of course, no one could hear it. That was awesome. But it was like, Oh, you did a great show. And I'm like, You have no idea what I went through there. But I also tried that I didn't have a voice the day before, and then the next day, everything was set up to record and everything. I think that it's like we had ordered a mixer that could record the sound coming in and found 10 cameras to record this show and all that stuff. Not having a voice the day before, not even being able to sing a C4, that was terrifying because everything was set up and we paid money for this and that. Again, Then, as my colleague said

before, Shut the fuck up. That's what I did as well. Keep my voice at nothing until the day at the show. That day, I chose to say, Okay, I woke up. Two, three hours after I woke up, I went down to my piano. I started from almost nothing, almost only breathing, then very quiet singing, then medium volume, then loud volumes. I warmed up just like any clean singer would do, even though I'm not doing clean singing in this case, but just making sure how my overall voice will actually react to this.

[01:07:45.280] - Speaker 4

I don't remember if I did a little bit of screaming as well, but it was at least minimal just to check in. And they said as well, Check in with yourself, where are we at? And as soon as I felt, Okay, I've heated up, I know where I'm at today until the actual time to do the show. And at that point, a little bit of liberal, a little bit of just see, where am I? Where am I at? And then it went pretty good. It wasn't a big problem, actually, which I was super happy about. But most of this comes from nervousness, a lot of it. I think it's way more mental than anything. I think the times when I did blow my voice on stage was because I was carried away with the emotions of people in front of me. With one of my newer bands, we were suddenly playing in Germany and this huge crowd, they were freaking loving it. Okay, going 10 miles harder than you need to. And of course, afterwards, as Sebastian also said, then talking in loud environments after the show as well. Then a bye-bye voice. That's the thing that will happen.

[01:09:04.730] - Speaker 4

But I don't think there is any... I have once taken a medication that numbs everything in the throat. That's great. But that's not a real... That's another way around the problem, right? It's not fixing the problem. So check in with yourself mentally and physically, as Alike also said, it's somewhere in the middle. It really is like, if you know the mental aspect is what is the biggest problem, then I always tell my students to take a step back. Don't overdo anything on the stage. Take a step back, barely move. Focus on yourself today and see how much can you do live for it to still work out and you can do a full show without any problems and so on.

[01:09:52.940] - Speaker 3

Okay.

[01:09:53.590] - Speaker 4

I think that's when it goes to best.

[01:09:55.570] - Speaker 3

Yes. We have already one rule. Shut the fuck up. This will be the rule. Okay. Tony?

[01:10:06.760] - Speaker 6

The same thing everyone has said so far. If you can cancel the show and your voice is in a really bad condition, do cancel the show. If you cannot cancel the show or if you do not want to cancel the show and you're not going to listen to my advice anyway, shut the fuck up until the show. With more pop... Not pop, but like bands where the drummer has a click track on the ear, that amount of pop. Those bands usually have vocal tracks that they can just sample. So you can sing for song, and if it's bad, you give a sign to the sound guy and say, I'm going to lip sync today. That's possible with some music.

[01:11:00.210] - Speaker 3

Okay.

[01:11:01.390] - Speaker 6

Because if your voice is shit, but you have to sing the show, but you cannot sing the show, you can sing. But that's not possible if you're going for old school death metal. No.

[01:11:14.430] - Speaker 4

I was just about to say, That's not metal, man.

[01:11:17.800] - Speaker 6

No, it's not metal. The most metal thing would be to throw up on stage and to throw up blood.

[01:11:25.310] - Speaker 3

To spit blood. That's the most metal. Yeah.

[01:11:28.060] - Speaker 6

So you have to basically Usually, you're in a dilemma situation if you're very metal because you have to decide, do I want to make the most metal show or do I want to have a voice tomorrow to make a 50 % metal show in the future? And it's always the decision of the student, which is why I also say, If you're not going to listen to my advice to cancel the show, here's the second best option. Because you cannot force students or people to listen to your advice. They usually know what they want to do. It's like with addicts. If you know that people are addicted to drugs, usually it's not the best It's not a very smart idea to tell them, Drugs are bad. Maybe stop taking them.

[01:12:20.290] - Speaker 3

Okay.

[01:12:27.140] - Speaker 6

Sorry.

[01:12:28.320] - Speaker 3

Okay. So Yeah, vocal rest, we are saying. Okay, I also agree. And, yeah, Sebastián.

[01:12:38.150] - Speaker 2

Vocal rest. I do remember one time I was touring with Gun in April. I was replacing their singer for a tour, and I had a very bad case of pharyngitis. I had to take huge bill because it's a viral infection. Luckily, the night before, we were playing in Montreal, and they recorded the whole show. So they could play my voice because they were shooting a video. I was too sick to go to the last four show. And unfortunately, the last one was at PlayStation New York Theatre, the big stuff, and I missed it. But actually, because they recorded my voice, for the video, they actually could play my voice if I was there. No, I'm not saying it's an option, but I was lucky with that or unlucky. But the thing is, we are Our own worst judge, meaning death. When we do a show, we know we fuck up like a thousand times during the show. Most of the time, the crowd doesn't notice it. They just come to us and they say, Wow, amazing job. We're like, No, I've fucked up so many times. For me, it's more about maybe people will enjoy it more than you think.

[01:14:00.620] - Speaker 2

Even if you are diminished in the way that you can do stuff. Also for me, I've learned that when I cut my hair because I was no longer just doing the headbanging, I could no longer rely on that as a, Hey, look at my hair. It's so long and beautiful, like an hypnotising people. With the headbanging, I had to rely on visual contact. I had to do other things that I wouldn't do normally because a show is not only your voice, it's a whole package. Maybe your voice will be less good or you will have a huge problem. But maybe there's a way that you can compensate, not vocally, but physically and visually and smiling to people, pointing to people in the crowd. For me, there are way to work and still make it a good show than just... Of course, now this goes beyond if I need to help someone in the last minute. But maybe this would be a conversation that I would have, that a show, it's more than just your voice. Of course, it includes your voice. But if that element is, let's say, less in the equation, there are other things that you can do.

[01:15:25.450] - Speaker 3

Yeah, that is a very interesting point, I think.

[01:15:27.540] - Speaker 2

To make it enjoyable for your sofa myself and for the crowd. Again, I've learned that when I cut my hair because I could no longer rely on my hair to make a distraction. I have to do other things to make the show enjoyable. I think that that's one thing that's good for everybody.

[01:15:47.460] - Speaker 3

Rule number one, shut the fuck up. Rule number two, don't cut your hair, and everyone is happy. Okay.

[01:15:58.870] - Speaker 2

You're saying that to a couple of guy with short hair.

[01:16:03.890] - Speaker 3

Try a wig. Try a wig and everything is going good. Okay, so that was it, people. Thank you so very much for being here with your time schedules and everything. You're really helping me out with that. Thank you very much.

[01:16:29.080] - Speaker 2

You're going to share the result, right? Because it's going to be interesting to see the difference among ourselves and the other people.

[01:16:37.150] - Speaker 3

If I manage to finish that and present that and pass, I can send you to read it. Otherwise, you never hear from me again, and you know that I failed. Okay. So thank you very much. Enjoy this beautiful season. Not. And yes, we're going to talk again.

[01:17:03.560] - Speaker 2

Absolutely..

[01:17:06.260] - Speaker 3

Yes. See you all. Bye-bye. Thank you. Bye..

Appendix 6

Focus group table

Themes	Speaker 1	2	3	4	5
Problems in speaking voice	It is more common that people come in with an existing problem, especially if they are not metal heads and not screamers.	It's mostly comes the speaking voice, not from the extreme voice.		Because exactly what you say. Sometimes it then translates into to the effects that they want to do. So super breathiness or something like that, then it translates into the effects that they want to add as well.	
Categories with the most vocal problems	Actors, musical theatre	Voice actors	Voice actors	Rock singers	Rock singers
Very experienced singers are more specific					And the very experienced ones, don't really have a problem, but they come with very specific questions.
Metal singers are not different from other singers when it comes to vocal problems	I would say on average, I find that the screaming humans have less problems than the Clean Singers. Rock singers at risk	I would say the voice actors stands out in terms of having problem compared to people who are actual practitioner even beginners,	Rock singers at risk	But I don't think in general that metal vocalists have more voice problems.	So no, I wouldn't say that the extreme singers stand out when it comes to vocal health problems.
Substances	there's so much substance abuse, alcoholism, and all that stuff that it's really, really difficult to implement behavioural shifts (rock singers)				
Recommended warm-ups/cool-downs	It is extremely specific to the individual	For me, it depends on the main voice technique of the person first, it's individual	Generally, you are judging from your student, your client. You are making something for the specific person.	I like to just do minor warmups on the true vocal folds	If I were to give any general advice on warmup, it would be like the body awareness.

Themes	Speaker 1	2	3	4	5
SOVTs		Never in 30 something years, or let's say 15 years that I've been doing vocal coaching, have I recommended anything related to semi-included vocal track exercises.		So muscle memory and how to teach that.	So I don't really do warm-ups or cool-downs. And so far as that, I go right into the technique.
Mindfulness					It's more about being present and having some body awareness
Tailor-made instruction is the best way					
When to visit ENT	I'm mostly listening out for anything that sounds strange to me or abnormal in their cleans or their speaking voice.	look at what's happening when they're doing different types of vocal effect. Just that, not even related to vocal health	If I hear an anomaly in the speaking voice, I ask whether it's like that all the time.	If it's reoccurring and it does doesn't seem to be fixed with the exercises we do	If It's reoccurring
Prevention	know your body, know your voice, know your brain // Shut the fuck up	Vocal rest	Vocal rest	Shut the fuck up	Sleep well, eat well, drink well, take care of yourself, both physically and mentally // Shut the fuck up

Appendix 7

Ethics Form

APPLICATION FOR ETHICAL APPROVAL

In order for research to result in benefit and minimise risk of harm, it must be conducted ethically. A researcher may not be covered by the University's insurance if ethical approval has not been obtained prior to commencement.

The University follows the OECD Frascati manual definition of **research activity**: "creative work undertaken on a systematic basis in order to increase the stock of knowledge, including knowledge of man, culture and society, and the use of this stock of knowledge to devise new applications". As such this covers activities undertaken by members of staff, postgraduate research students, and both taught postgraduate and undergraduate students working on dissertations/projects.

The individual undertaking the research activity is known as the "principal researcher".

Ethical approval is not required for routine audits, performance reviews, quality assurance studies, testing within normal educational requirements, and literary or artistic criticism.

Please read the notes for guidance before completing ALL sections of the form.

This form must be completed and approved prior to undertaking any research activity. Please see Checklist for details of process for different categories of application.

Delete the Guidance Notes at the end of the form BEFORE submitting your application

SECTION A: About You (Principal Researcher)

1	Full Name:	Chrysa Tsaltampasi			
2	Tick all boxes which apply:	Member of staff:	☐	Honorary research fellow:	☐
3	Undergraduate Student	☐	Taught Postgraduate Student	☒	Postgraduate Research Student

4	Institute/Academic Discipline/Centre:	WAPPAR
5	Campus:	Carmarthen
6	E-mail address:	chrysatsaltampasi@gmail.com
7	Contact Telephone Number:	00306934728688
For students:		
8	Student Number:	2029618
9	Programme of Study:	MA in Professional Practice (Voice Pedagogy)
10	Director of Studies/ Supervisor:	Louise Emanuel/Julie Grossman/Debbie Winter

SECTION B: Approval for Research Activity

1	Has the research activity received approval in principle? (please check the Guidance Notes as to the appropriate approval process for different levels of research by different categories of individual)	YES	☒	NO	☐
					Date
2	If Yes, please indicate source of approval (and date where known): Approval in principle must be obtained from the relevant source prior to seeking ethical approval	Research Degrees Committee	☐		
3		Institute Research Committee	☐		
4		Other (write in) WAPPAR Ethics Board Representative	☒		

SECTION C: Internal and External Ethical Guidance Materials

Please list the core ethical guidance documents that have been referred to during the completion of this form (including any discipline-specific codes of research ethics, and also any specific ethical guidance relating to the proposed methodology). Please tick to confirm that your research proposal adheres to these codes and guidelines.		
1	UWTSD Research Ethics & Integrity Code of Practice	☒
2	UWTSD Research Data Management Policy	☒
3	<i>This may include codes of conduct of professional bodies or overseas laws (particularly for data protection).</i>	☐

SECTION D: External Collaborative Research Activity

1	Does the research activity involve collaborators outside of the University?	YES	☐	NO	☒
2	If Yes, please provide the name of the external organisation and name and contact details for the main contact person and confirmation this person has consented to their personal data being shared as part of this collaboration.				
3	Institution				
4	Contact person name				
5	Contact person e-mail address				
6	Has this individual consented to sharing their details on this form?	YES	☐	NO	☐
7	Are you in receipt of a KESS scholarship?	YES	☐	NO	☐
8	Is your research externally funded	YES	☐	NO	☐

9	Are you specifically employed to undertake this research in either a paid or voluntary capacity?	Voluntary	YES	☐	NO	☐
10		Employed	YES	☐	NO	☐
11	Is the research being undertaken within an existing UWTSD Athrofa Professional Learning Partnership (APLP)	If YES then the permission question below does not need to be answered.	YES	☐	NO	☐
12	Permission to undertake the research has been provided by the partner organisation	(If YES attach copy) If NO the application cannot continue	YES	☐	NO	☐

Where research activity is carried out in collaboration with an external organisation

13	Does this organisation have its own ethics approval system?	YES	☐	NO	☐
14	If Yes, please attach a copy of any final approval (or interim approval) from the organisation				

SECTION E: Details of Research Activity

1	Indicative title:	A course model for emergency aid for extreme metal vocalists		
2	Proposed start date:	16/01/2024	Proposed end date:	02/09/2024
3	Introduction to the Research (maximum 300 words) Ensure that you write for a <u>Non-Specialist Audience</u> when outlining your response to the three points below: • <i>Purpose of Research Activity</i> • <i>Proposed Research Question</i> • <i>Aims of Research Activity</i> • <i>Objectives of Research Activity</i> Demonstrate, briefly, how <u>Existing Research</u> has informed the proposed activity and explain • <i>What the research activity will add to the body of knowledge</i>			
4	Purpose of research activity The purpose of this project is to develop a course model for emergency aid for extreme metal vocalists based on methodologies used by ENT doctors, phonotherapists, laryngeal massage therapists, classical singing teachers and logotherapists.			
5	Research Question A course model for emergency aid for extreme metal vocalists Can the blending of the disciplines of phonotherapy, laryngeal massage, logo therapy, otorhinolaryngology and classical training result in the structure of a course model for emergency aid for extreme metal vocalists? (this box should expand as you type)			

6	Aims of Research Activity -To develop a model that will combine exercises for emergency aid for extreme metal vocalists drawn from different disciplines such as logo therapy, laryngeal massage therapy, phono-therapy, otorhinolaryngology and classical singing. - To develop my own knowledge as a teacher and a performer with new tools and teaching strategies. (this box should expand as you type)
7	Objectives of Research Activity -To meet with professionals from different disciplines and discuss about problem solving in the area of extreme metal vocals. -To review carefully the existing literature on emergency aid for extreme metal vocalists. -To use the new information to structure a course specifically designed for emergency aid for extreme metal vocalists. I will run the course and will test it to my private extreme metal students. -To increase my own knowledge on the matter and be able to be more flexible when giving vocal exercises for practise.
8	Proposed methods (maximum 600 words) Provide a brief summary of all the methods that may be used in the research activity, making it clear what specific techniques may be used. If methods other than those listed in this section are deemed appropriate later, additional ethical approval for those methods will be needed.

9	I will collaborate with experts from different disciplines concerning the voice with special focus on extreme metal vocalists. I will use the collected data to structure a course for giving emergency aid advice specially designed for extreme metal vocalists. I will be taking a mixed methods approach to the research. Methods: 1. Focus Group The data collection for the expert group will be in the form of a focus group that will be recorded and transcribed. I will act as a facilitator and we will discuss teaching strategies for extreme voice and the problems and barriers faced by those of working within this area. I will aim to identify a group of at least 6 people and the session will take place online for one hour. 2. Questionnaires I will use a list of questions to gather data concerning experiences and opinions of my respondents who will be one professional from each fore mentioned field. I aim to elicit rich data so the questions will be open ended. I may introduce a small number of likert scales to enable the questionnaires to be expediently completed. In the main, the questionnaires will be qualitative. I will include a follow-up option for semi-structured interviews to follow. 3. Semi-structured interviews Semi-structured interviews will be recorded and transcribed. These will be open ended to elicit rich data. There will be some structure to facilitate consistency but the questions will be designed for further probing. I will limit the time to 30 minutes in order to contain the data as I am conscious of it becoming too vast. 4. Reflective diary I will keep my own reflective diary documenting my own teaching strategies and I will compare and contrast it with the above data. 5. Literature review
---	--

10	Location of research activity Identify all locations where research activity will take place.
11	The research will be conducted both in person and online. I will use zoom platform and google email for the online sessions. The in person sessions will be conducted at my participants work places in Athens/Greece. The exact addresses of all the locations will be confirmed during the process of the research. (this box should expand as you type)
12	Research activity outside of the UK If research activity will take place overseas, you are responsible for ensuring that local ethical considerations are complied with and that the relevant permissions are sought. Specify any local guidelines (e.g. from local professional associations/learned societies/universities) that exist and whether these involve any ethical stipulations beyond those usual in the UK (provide details of any licenses or permissions required). Also specify whether there are any specific ethical issues raised by the local context in which the research activity is taking place, for example, particular cultural and/or legal sensitivities or
13	http://www.eurecnet.org/information/greece.html Greece does not have as rigorous ethical codes as the UK and regulation so far only extends to biomedical research. The context of the position in Greece is laid down by the European Network of Research Ethics. The research project does not contravene the laws of Greece and ethics approval in the UK is above and beyond what would normally be required.

14	Use of documentation not in the public domain: Are any documents NOT publicly available?	NO	☒
		YES	☐
15	If Yes, please provide details here of how you will gain access to specific documentation that is not in the public domain and that this is in accordance with prevailing data protection law of the country in question and England and Wales. (this box should expand as you type)		

SECTION F: Scope of Research Activity

1	Will the research activity include:	YES	NO
2	Use of a questionnaire or similar research instrument?	X	☐
3	Use of interviews?	X	☐
4	Use of diaries?	X	☐
5	Participant observation with their knowledge?	X	☐
6	Participant observation without their knowledge?	☐	X
7	Use of video or audio recording?	X	☐
8	Access to personal or confidential information without the participants' specific consent?	☐	X

9	Administration of any questions, test stimuli, presentation that may be experienced as physically, mentally or emotionally harmful / offensive?	☐	X
10	Performance of any acts which may cause embarrassment or affect self-esteem?	☐	X
11	Investigation of participants involved in illegal activities?	☐	X
12	Use of procedures that involve deception?	☐	X
13	Administration of any substance, agent or placebo?	☐	X
14	Working with live vertebrate animals?	☐	X
15	Other primary data collection methods, please explain in this box For example, 'focus groups'. Please indicate the type of data collection method(s) in this box and tick the accompany box.	X	☐
16	Details of any other primary data collection method: I will be using a focus group. (this box should expand as you type)		

If NO to every question, then the research activity is (ethically) low risk and **may** be exempt from **some** of the following sections (please refer to Guidance Notes).

If YES to any question, then no research activity should be undertaken until full ethical approval has been obtained.

SECTION G: Intended Participants

1	Who are the intended participants:	YES	NO
2	Students or staff at the University?	☐	X
3	Adults (over the age of 18 and competent to give consent)?	X	☐
4	Vulnerable adults?	☐	X
5	Children and Young People under the age of 18? (Consent from Parent, Carer or Guardian will be required)	☐	X
6	Prisoners?	☐	X
7	Young offenders?	☐	X
8	Those who could be considered to have a particularly dependent relationship with the investigator or a gatekeeper?	☐	X
9	People engaged in illegal activities?	☐	X
10	Others (please identify specifically any group who may be unable to give consent) please indicate here and tick the appropriate box.	☐	X
11	Other – please indicate here: Complete this only if your participants cannot give consent. This includes animals.		

12	Participant numbers and source Provide an estimate of the expected number of participants. How will you identify participants and how will they be recruited?	
13	How many participants are expected?	I expect a minimum of three participants and a maximum of ten participants. <i>(this box should expand as you type)</i>
14	Who will the participants be?	My participants will be health, medical and vocal experts. I anticipate ten professionals for the entire piece of research, ideally two from each discipline. The disciplines will be classical singing, logo therapy, phono therapy, otorhinolaryngology and laryngeal massage therapy. <i>(this box should expand as you type)</i>
15	How will you identify the participants?	They are all a part of the scientific team "Voice Mentoring" that is located in Athens/Greece. <i>(this box should expand as you type)</i>

16	Information for participants:	YES	NO	N/A
17	Will you describe the main research procedures to participants in advance, so that they are informed about what to expect?	☒	☐	☐
18	Will you tell participants that their participation is voluntary?	☒	☐	☐
19	Will you obtain written consent for participation?	☒	☐	☐
20	Will you explain to participants that refusal to participate in the research will not affect their treatment or education (if relevant)?	☒	☐	☐
21	If the research is observational, will you ask participants for their consent to being observed?	☒	☐	☐
22	Will you tell participants that they may withdraw from the research at any time and for any reason?	☒	☐	☐
23	With questionnaires, will you give participants the option of omitting questions they do not want to answer?	☒	☐	☐
24	Will you tell participants that their data will be treated with full confidentiality and that, if published, it will not be identifiable as theirs?	☒	☐	☐
25	Will you debrief participants at the end of their participation, in a way appropriate to the type of research undertaken?	☒	☐	☐
26	If NO to any of above questions, please give an explanation			
27	You should be able to tick YES for all of these questions. If not, then explain why not in this box.			

28	Information for participants:	YES	NO	N/A
29	Will participants be paid?	☐	☒	☐
30	Is specialist electrical or other equipment to be used with participants?	☒	☐	☐
31	Are there any financial or other interests to the investigator or University arising from this study?	☐	☒	☐
32	Will the research activity involve deliberately misleading participants in any way, or the partial or full concealment of the specific objectives?	☐	☒	☐
33	If YES to any question, please provide full details			
34	I will be using my Mac computer with an external usb microphone to conduct the focus group via zoom. I am expecting to use voice recorder for the interviews that will take place in person. There is also a possibility that I will use a camera for laryngoscopy when I will do the interview with the otorhinolaryngologist. <i>(this box should expand as you type)</i>			

SECTION H: Anticipated Risks

1	Outline any anticipated risks that may adversely affect any of the participants, the researchers and/or the University, and the steps that will be taken to address them. If you have completed a full risk assessment (for example as required by a laboratory, or external research collaborator) you may append that to this form.		
2	Full risk assessment completed and appended?	Yes	☐
		No	☒
3	Risks to participants For example: emotional distress, financial disclosure, physical harm, transfer of personal data, sensitive organisational information		
4	Risk to Participant: I will be recording the focus group and interviews and transcribing the data so there will be the risk of some personal data being disclosed. There is the risk of revealing who my participants are. <i>(this box should expand as you type)</i>	<i>How will you mitigate the Risk to Participant</i> I will mitigate this risk by ensuring I use a code for all the participants and having all data stored on my password secured computer of which only I have access. I will read extensively on how to facilitate a focus group. I will give everyone a chance to speak before inviting free dialogue. I will reveal the full context of the project enabling people to make an informed judgment before agreeing to take part in the research. I will also inform them of their right to withdraw. I will follow strictly the GDPR/DPA2018 legislation.	
5	If research activity may include sensitive, embarrassing or upsetting topics (e.g. sexual activity, drug use) or issues likely to disclose information requiring further action (e.g. criminal activity), give details of the procedures to deal with these issues, including any support/advice (e.g. helpline numbers) to be offered to participants. Note that where applicable, consent procedures should make it clear that if something potentially or actually illegal is discovered in the course of a project, it may need to be disclosed to the proper authorities.		
	N/A		
6	Risks to investigator For example: personal safety, physical harm, emotional distress, risk of accusation of harm/impropriety, conflict of interest		

	Risk to Investigator: There may be some conflict of interest with the expert participants as they are also professionals that work with singers and provide emergency aid to extreme metal singers as well when it is needed. Compromised data through experts withholding information either through feeling intimidated within the focus group or through protecting valuable commercial information. <i>(this box should expand as you type)</i>	<i>How will you mitigate the Risk to Investigator:</i> The expert participants are in different disciplines than mine and rarely work with extreme metal vocalists which will minimise the conflict of interest that might arise from an eventual course offered. The full context of the project will also be disclosed, and any conflict of interest will be transparent. Participants will be informed of their right to withdraw. <i>(this box should expand as you type)</i>
7	University/institutional risks For example: adverse publicity, financial loss, data protection	
	Risk to University: There are always risks. Do not write NA. The risk to the university relates to data protection. <i>(this box should expand as you type)</i>	<i>How will you mitigate the Risk to University:</i> This will be mitigated by all data being coded to ensure anonymity and securely stored in my computer which has a password and is only accessed by myself. All data will be destroyed at the end of the project.

8	Disclosure and Barring Service			
9	If the research activity involves children or vulnerable adults, a Disclosure and Barring Service (DBS) certificate must be obtained before any contact with such participants.	YES	NO	N/A
10	Does your research require you to hold a current DBS Certificate?	☐	☒	☐

SECTION I: Feedback, Consent and Confidentiality

1	Feedback What de-briefing and feedback will be provided to participants, how will this be done and when?
	I will provide my contact details to the participants so that they will be able to contact me for further details or results. <i>(this box should expand as you type)</i>
2	Informed consent Describe the arrangements to inform potential participants, before providing consent, of what is involved in participating. Describe the arrangements for participants to provide full consent before data collection begins. If gaining consent in this way is inappropriate, explain how consent will be obtained and recorded in accordance with prevailing data protection legislation.

	I will inform all participants prior to gaining formal consent via email and give details of their time involvement and what information I am seeking and its purpose. I will send a formal consent form via email for them to sign. <i>(this box should expand as you type)</i>
3	Confidentiality / Anonymity Set out how anonymity of participants and confidentiality will be ensured in any outputs. If anonymity is not being offered, explain why this is the case.
	I will use a code for each participant, the key to which will be stored in a password secured file on my computer <i>(this box should expand as you type)</i>

SECTION J: Data Protection and Storage

In completing this section refer to the University's Research Data Management Policy and the extensive resources on the University's Research Data Management web pages (<http://uwtsd.ac.uk/library/research-data-management/>).

	What counts as 'sensitive' will differ between cultures. Any information on behaviour that is not in accordance with cultural norms would count as sensitive personal data. N/A <i>(this box should expand as you type)</i>
--	--

5	Will the research activity involve storing personal data and/or special category data on one of the following:	YES	NO
6	Manual files (i.e. in paper form)?	☐	X
7	University computers?	☐	X
8	Private company computers?	☐	X
9	Home or other personal computers?	X	☐
10	Laptop computers/ CDs/ Portable disk-drives/ memory sticks?	X	☐
11	"Cloud" storage or websites?	☐	X
12	Other – specify:	☐	X
13	For all stored data, explain the measures in place to ensure the security of the data collected, data confidentiality, including details of password protection, encryption, anonymisation and pseudonymisation: All data will be kept in password protected computer storage on my personal MAC laptop which will not be shared. Audio/visual data will be transcribed and would be shown to participants to check accuracy of reporting. Any USB sticks used to store or transfer data will be password protected. All participants will be given a unique identifier to ensure confidentiality and this list will be kept securely in the password protected folder. <i>(this box should expand as you type)</i>		
14	All Data Storage		
15	Will the research activity involve any of the following activities:	YES	NO
16	Electronic transfer of data in any form?	X	☐
17	Sharing of data with others at the University?	☐	X
18	Sharing of data with other organisations?	☐	X
19	Export of data outside the European Union or importing of data from outside the UK?	X	☐
20	Use of personal addresses, postcodes, faxes, emails or telephone numbers?	X	☐
21	Publication of data that might allow identification of individuals?	☐	X
22	Use of data management system?	☐	X
23	Data archiving?	☐	X

24	If YES to any question, please provide full details, explaining how this will be conducted in accordance with the GDPR and DPA (and/or any international equivalent):		
	This includes data such as drafts of your work as well as experimental or survey data. An example of suitable text is given below. All data will be encrypted and kept in password protected cloud storage on the Company's Office 365 system which will not be shared. Any USB sticks used to store or transfer data will be password protected. All data transfers will be encrypted and password protected. All participants will be given a unique identifier to ensure confidentiality and this list will be kept securely in the password protected folder. The data will be stored until the completion of the project and then deleted. In accordance with the DPA2018, participants will have the right to ask to see what data is held relating to them, and this data will be deleted immediately if the participant requests this, in which case the data will not be used in the project. <i>(this box should expand as you type)</i>		
25	List all who will have access to the data generated by the research activity:		
	Normally the principal researcher, Only myself, the principal teacher. <i>(this box should expand as you type)</i>		
26	List who will have control of, and act as custodian(s) for, data generated by the research activity:		
	Usually the principal researcher. Only myself, the principal teacher. <i>(this box should expand as you type)</i>		
27	Give details of data storage arrangements, including security measures in place to protect the data, where data will be stored, how long for, and in what form. Will data be archived – if so how and if not why not.		
	It is unlikely that Bachelors or Masters projects will need to be archived. All data will be encrypted and kept in password protected cloud storage on the Company's Office 365 system which will not be shared. Any USB sticks used to store or transfer data will be password protected, and will be reformatted at the end of the project in order to destroy the data. The data will be stored until the completion of the project and then deleted.		
28	Please indicate if your data will be stored in the UWTSD Research Data Repository (see https://researchdata.uwtsd.ac.uk/). If so please explain. <i>(Most relevant to academic staff)</i>		
	N/A		
29	Confirm that you have read the UWTSD guidance on data management (see https://www.uwtsd.ac.uk/library/research-data-management/)	YES	X
		NO	☐
30	Confirm that you are aware that you need to keep all data until after your research has completed or the end of your funding	YES	X
		NO	☐

SECTION K: Declaration

31	The information which I have provided is correct and complete to the best of my knowledge. I have attempted to identify any risks and issues related to the research activity and acknowledge my obligations and the rights of the participants. In submitting this application I hereby confirm that I undertake to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice which is published on the website: https://www.uwtsd.ac.uk/research/research-ethics/		
	Signature of applicant:	Chrysa Tsaltampasi	Date: 15/11/2023

For STUDENT Submissions:

32	Director of Studies/ Supervisor:		Date:
33	Signature:		

For STAFF Submissions:

34	Academic Director/ Assistant Dean:		Date:
35	Signature:		

Checklist: Please complete the checklist below to ensure that you have completed the form according to the guidelines and attached any required documentation:

X	I have read the guidance notes supplied before completing the form.
X	I have completed ALL RELEVANT sections of the form in full.
X	I confirm that the research activity has received approval in principle
X	I have attached a copy of final/interim approval from external organisation (where appropriate)
☐	I have attached a full risk assessment (and have NOT completed Section H of this form) (where appropriate) ONLY TICK IF YOU HAVE ATTACHED A FULL RISK ASSESSMENT
X	I understand that it is my responsibility to ensure that the above named research activity will meet the University's Research Ethics and Integrity Code of Practice.
X	I understand that before commencing data collection all documents aimed at respondents (including information sheets, consent forms, questionnaires, interview schedules etc.) must be confirmed by the DoS/Supervisor, module tutor or Academic Director.
X	I have deleted the guidance notes before submitting the PG2 for consideration

RESEARCH STUDENTS AND STAFF ONLY

All communications relating to this application during its processing must be in writing and emailed to pgresearch@uwtsd.ac.uk, with the title 'Ethical Approval' followed by your name. You will be informed of the outcome of your claim by email; therefore it is important that you check your University and personal email accounts regularly.

STUDENTS ON UNDERGRADUATE OR TAUGHT MASTERS PROGRAMMES should submit this form (and receive the outcome) via systems explained to you by the supervisor/module

This form is available electronically from the Academic Office web pages: <https://www.uwtsd.ac.uk/academic-office/appendices-and-forms/>

Application Process

All staff research projects and all research students must submit the Ethical Approval Form to the **University Research Ethics Committee** via the Academic Office (pgresearch@uwtsd.ac.uk). Staff research directly in relation to personal study for taught undergraduate or Masters programmes should be submitted via the Institute procedures explained below.

Taught masters and taught undergraduate research Ethical Approval Forms are considered **within Institutes**. Institutes will provide details of the specific processes for this. Where the Ethical issues within any single ethical application are of particular concern the Institute will refer these to the University Research Ethics Committee. Any student activity that involves the collection of primary data needs to undergo Ethical approval, this includes assignment work as well as dissertations.

Appendix 8

Permission letter

Chrysa Tsaltampasi Vocal Coach
9th August 2022

Dear UWTSD,

Re : An interdisciplinary approach to voice care for Extreme Metal singers.

I confirm that I approve of the research proposed into “An interdisciplinary approach to voice care for Extreme Metal singers” to be carried out by Chrysa Tsaltampasi, of Chrysa Tsaltampasi Vocal Coach during private Zoom sessions between January 2024 and May 2023.

Kind Regards

Chrysa Tsaltampasi