

## Script for Aural Diversity Workshop 5, January 2023

### Musicians' Accessing Audiology.

Hello, it's such a pleasure to be with you all today. I've been conducting research into Musicians Accessing Audiological services. But before I share my findings, why have I been researching this, and why does it matter?

According to the World Health Organisation, 1.1 billion young people are at risk of noise induced hearing loss. Currently I'm working as an audiologist, but my background is in music performance. Having practised and studied music all my life, before eventually graduating as an orchestral percussionist in 2019, I'm very familiar with the long hours and high noise levels musicians are exposed to for their work. I'm also personally aware of the impact hearing impairment can have, having worn hearing aids since the age of 17. A study by Jansen et al. in 2008 concluded that 'Musicians show more Noise-induced Hearing Loss than could be expected on the basis of age and gender.' Furthermore, Greasley et al.'s 2020 study showed that, whilst 50% of professional musicians were concerned about noise, and 40% had experienced hearing-related issues, less than a third had **ever sought** a hearing test. That's where audiology steps in. I'm sure that everyone here will be, but for those who might not be aware, audiologists are trained experts in hearing healthcare and musicians can utilise their skills for hearing tests, custom hearing protection and hearing rehabilitation.

You might have spotted hearing loss in the media recently. Christopher Goldscheider famously sued the Royal Opera House in 2018, KT Tunstall cancelled a tour in 2021 due to hearing loss concerns and Darius Marder's film, 'Sound of Metal' recently captivated millions across the world on the big screen.

So, taking into account both mine and others' experiences, I believed more needed to be known about how to help this 'at risk' population. Firstly, I conducted a literature review, aiming to discover what we know already about musicians, the music industry and the role hearing healthcare currently plays.

-2 min 30 sec

Using Science Direct and Google Scholar, the terms "Music and Hearing" and "Music and Audiology" raised over 20,000 articles. I put these through two stages of inclusion criteria, with each stage becoming more focused towards musicians' access of audiology. In total 67 items met the criteria and were taken forward for analysis.

To summarise, four key themes arose.

Firstly, Associated Risk – Thirteen articles highlighted how musicians are disproportionately affected by noise exposure, alongside two articles saying that amateur musicians are equally at risk.

Secondly, Conservation/Intervention – Twelve articles discussed how educating musicians on noise exposure could improve hearing health, with four articles stating that audiology can play a bigger role.

Thirdly, Protective Action – Seven articles weighed the balance between positives and negatives of using hearing protection, with nine articles observing that few musicians actually choose to use them.

And finally, hearing aids for music, with seven articles discussing the difficulties faced by musicians using hearing aids.

- 4 mins

So, what did I learn? Despite only being able to use 67 items out of over 20,000, the research available provides valuable insights into the risks faced by musicians, their behaviours and their lifestyles. However, ***no research*** came to light that discussed whether musicians feel able to access audiology in the first place. Therefore, my research wants to focus on the potential facilitators and barriers that currently exist, helping or preventing musicians from accessing audiological services. Only then can we assess how best to support more musicians entering the audiological system

The second stage of my research involved conducting structured interviews and focus groups, asking musicians from a broad range of genres, instruments and career stages, their thoughts and feelings towards accessing audiology.

I used a topic guide, to help navigate the conversations. There were six themes, with each having a key question. The arrival at these themes and questions was born not only out of the findings from the literature review, but also through discussion with my supervisors. The aim was to remain as open as possible and encourage broad and ranging conversation.

In total, fourteen individuals took part, ten male and four female. The chart on the right displays their instrument or role, but most interestingly, the chart on the left shows that there was an even split between those who had seen an audiologist previously, and those who had not.

- 5 mins 50 secs

With the interviews completed, I was able to analyse the transcripts. Following Braun & Clarke's six-step process for an inductive thematic analysis, I coded the data using the NVivo software, collated the codes into potential themes, and gathered all the data relevant to each theme. Whilst at an advanced stage, this work is still ongoing, and my supervisors are going to provide their input refining the coding that has taken place with a systematic reflexive thematic analysis.

And so, the fourth stage is where we are today, presenting the findings as they currently stand to you all, and I'd love to dive into that with you now.

The interviews produced six possible themes of facilitators and barriers, which you can see on the screen. As we go through, the white boxes on the left of each screen will show the discovered facilitators and the red boxes show the barriers.

Firstly, Audiological Expertise. All participants were asked if they had ever seen an audiologist before and what their experience had been like when trying to access their services. Five individuals felt that they received a personalised service, with one participant being especially grateful to their audiologist for speaking to them about how their hearing loss was not necessarily career-ending.

However, three individuals found that accessing audiology at their point of need was complicated. Crucially for musicians, there were five mentions that the audiologist had lacked musical knowledge, making the information provided difficult to fully understand.

Herein lies a problem. There were an equal number of mentions between the personalised information being received and the audiologist lacking musical knowledge. Currently there are **zero** modules across audiological courses in the UK about treating musicians and understanding their circumstances. As suggested in Dr. Alinka Greasley's work on the Music & Hearing Aids project, it may be beneficial for future research to investigate whether creating guidelines for audiologists on treating musicians' needs would be beneficial for their care.

- Eight mins twenty secs

Secondly, emotional access. Seven participants said that they would seek help if they were concerned for their hearing, with seven further mentions that they would feel at ease discussing hearing protection with colleagues or teachers. Furthermore, there were ten mentions that traditionally held opinions and stigmas surrounding hearing within the music industry do seem to be changing positively, as exemplified by the quotation in the top left of the screen. However, there are several emotional barriers still at play. Eleven mentioned their anxiety about receiving a diagnosis or revealing hearing concerns, particularly if they had experienced audiological symptoms, as they didn't feel ready to receive 'bad' news from an audiologist. One participant shared, ***"I worried that my career might be ending"***. Despite currently evolving opinions, as mentioned in our facilitator column, the stigmatising cultures towards hearing still present in the music industry were mentioned twenty times, which could relate to the fifteen mentions that those with hearing-impairment are 'worse musicians' as a result, alongside seven mentions that it is 'easier to ignore' hearing problems as musicians than it is to seek help.

Whilst discussions about hearing conservation are routine for audiologists, and form the very fabric of the audiological profession, these interviews showed that hearing loss is the unspeakable enemy of the music industry. It's unmentionable. It's career-ending. It makes musicians feel less worthy.

- 10 minutes, 10 secs

Thirdly, Hearing Protection Equipment. Positively, three individuals stated that when free or discounted, they wouldn't hesitate to use hearing protection devices (HPDs) in loud environments, with one individual saying that getting free generic hearing protection from their university was *"A really fantastic thing to do"*. Interestingly, musicians appear very drawn towards the protective 'soundscreens'. One participant highlighted that *"there's an expectation from players that there should be screens... and [if not available] those people will improvise and they'll get a music stand and put a cloth over it"*.

However, there are logistical and emotional barriers at play. Twelve participants said that HPDs are unaffordable for them, or simply not available at their places of work, whilst many were anxious about the reactions of others towards them. Furthermore, there were 20 references that using HPDs left them feeling detached from the music.

Reflecting on the data here, one of the key elements in getting musicians to use custom hearing protection is cost. When it is free or discounted, they tend to use them, but otherwise they are unaffordable. With custom protection costing between £140 and £170, it is easy to see why many musicians may not be able to afford such provision. Schemes, such as the Musicians' Hearing Health Scheme, are available to bring down the cost, so how can we ensure musicians are made aware of what's available?

- 12 mins

The Musicians' Audiological Awareness theme focuses on whether what musicians know already about hearing health has positively or negatively impacted their behaviours. Positively, access to hearing healthcare through discounted schemes, alongside recent high-profile cases, has facilitated an increased awareness and understanding of the risks of noise-exposure, leading to positive discussions with teachers and fellow music-industry professionals. However, the lack of education received about noise-exposure risks was mentioned 38 times, the most in the study. "It just wasn't mentioned to us at all", one participant said. Most knowledge about hearing health seems to have been gained through subjective experience, where the participant has 'felt' that the sound around them was too loud, however, this didn't necessarily result in a change in their behaviour. For some of the amateur musicians, I was the first person to speak to them about hearing over their thirty-year playing career, further emphasising that education about the risks is lacking for all musicians, not just professionals. This was not only devastating, but also deeply concerning. The literature review revealed that amateur players are equally at risk, but these individuals have managed to go an entire thirty years of playing without anyone ever mentioning how to protect their hearing. Audiologist Paul Checkley notes that "noise induced hearing loss is 100% preventable and 100% irreversible". Therefore, education is key to preventing hearing damage and, from these interviews, we cannot assume that enough is being done to protect musicians' hearing health. Information regarding hearing conservation needs to reach further than it currently does.

- 14:10

Musicians' Lifestyle. The lifestyle of a musician is often complicated, with the need to juggle many commitments on a weekly basis across all hours of the day. This ranges from teaching, to rehearsals and concerts. Four individuals believed it is possible to organise appointments for healthcare concerns when required. However, three individuals mentioned their concerns about insufficient time for appointments being available within their routines, specifically due to travel constraints and a lack of audiological expertise for musicians locally.

Interestingly, those who stated that it was possible were those in contracted jobs of employment and had been working as a professional for longer periods of time. Those who didn't believe time was available tended to be those currently working as freelance musicians, who had recently graduated from their respective schools of music. One participant said *"If you know there's a problem, you'll do something about it. Whether you feel ready to hear what the solution is, is another thing"*.

- 15 mins, 22 secs

Lastly, Performance Spaces. All the participants gave valuable insights into their feelings towards the performance, rehearsal and teaching spaces they inhabit, regardless of the stage of their career. Eight individuals felt that performance spaces were suitable for the music being produced. This included four mentions about soundscreens having a positive impact, as exemplified in the top left of the screen. However, concerns for audiological health arose in spaces used for teaching, rehearsals and in specific environments, such as opera pits or wedding venues. 18 mentions were made regarding the unsuitability of the spaces for the sound levels they were exposed to. Four individuals also mentioned how they felt unable to discuss their concerns about the spaces provided for them with their employers, with one participant stating they felt *"so far down"* the pecking order that they had been told to *"just get on with it."*

-16 mins, 33 secs

So, to conclude. Even though the analysis of the interview content is still in its early stages, it's clear that there are both barriers and facilitators at play when it comes to musicians accessing audiological services. Some of these are physical, such as travel constraints or difficulty accessing services through their GP, but there is also a wealth of information regarding both emotional concerns and a lack of educational awareness regarding the risks of noise exposure. Whilst

musicians' hearing is appearing more frequently in the media, both the literature review and the interviews imply that musicians are not being given the information they require to protect their hearing, which has subsequently left musicians feeling vulnerable and anxious, due to the stigma that still exists within the industry.

Aural Diversity is a network I'm very proud to be a part of. It's already doing fantastic work, not only by pushing the boundaries of our understanding of an aurally diverse population, but also of aurally diverse music itself, as exemplified by some of the wonderful installations yesterday. I hope that if you take anything away from my talk today, it's helped emphasise some of the barriers musicians have had to overcome to even arrange a consultation with an audiologist. I hope that in making these factors known, audiological professionals can deliver their clinical expertise with a deeper understanding and furthered compassion.

Thank you very much.

- 18 mins, 15 secs.