# Performance science

## with Professor Aaron Williamon

## Talking *points*

### Knowledge
1. What is performance science?
2. What is the aim of Healthy Conservatoires?
3. What were the key findings of the HEartS PROFESSIONAL project?

### Comprehension
4. What physical and mental problems can professional performers be particularly vulnerable to?
5. What factors made the arts and culture sector particularly affected by the COVID-19 pandemic?

### Application
6. What key similarities and differences do you think exist between music performance science and sports performance science?
7. Aaron talks about the role of digital innovation in building a network of arts and culture workers. What types of innovation might he be referring to – including both existing innovations, and possible future innovations?

### Analysis
8. Based on the findings of the HEartS PROFESSIONAL project, what key actions could governments take to help prepare the arts and culture sector in case of possible future pandemics or widespread disruptions?
9. Why do you think that sports performance science is more established than music performance science?

### Evaluation
10. During the COVID-19 pandemic, careers in arts and culture were largely deemed 'non-essential' by the UK government. Some creative professionals were encouraged to retrain in sectors such as cyber security. To what extent do you agree with these perspectives and decisions by the government, and why?
11. What would you find rewarding about a career in performance science? What elements of performances would you like to investigate as a performance scientist, and why? What research would you conduct to help the long-term careers and wellbeing of performers?

## Activity

### Surveying the arts

Think about the psychological factors that may draw people to, or turn people away from, a career in the performing arts. Design an anonymised survey for your classmates that explores the emotions they associate with performance. It is likely that many are involved in the performing arts in some way, be it through music, drama or dance. Others may not be interested in performance or may have other reasons not to get involved. Design the survey with the intention of using the results to suggest ways to make the performing arts more accessible to a wider range of people.

Your survey may include questions that:

- Explore the emotions the respondent felt during a recent performance
- Explore the emotions the respondent feels when imagining themselves performing
- Whether any specific incidents affected their perception of performance
- How they would describe themselves as a person (e.g., outgoing/shy, confident/nervous, talented/untalented)
- Perceived barriers to getting involved in the performing arts
- Whether their career or recreation goals include performance
- Perceptions around performance careers (e.g., whether it is fulfilling, challenging, etc.)
- How they feel that the performing arts could be made more accessible for them and their peers.

Emotions or feelings associated with performance may include:
• Joy
• Freedom
• Confidence
• Excitement
• Anxiety
• Nervousness
• Fear
• Worry

When writing your questions, keep the following points in mind:
• Use a mix of quantitative (numbers/ranking-based) questions that are easy to analyse and compare directly, and qualitative (descriptive) questions that can offer deeper insights into respondents' perceptions.
• Anonymity is vitally important in surveys such as these. Make sure that no questions ask for identifying information and that survey collection is done in a way that keeps surveys anonymous.
• Make sure that questions do not lead participants to a specific answer. For example, "Does performing make you feel like you can freely express your emotions?" leads participants to agree. A better, more neutral question would be, "What emotions and feelings do you associate with performance?" This question could be open-ended or

participants could select all relevant emotions and feelings from a list.
• Consider in advance how you will analyse your results to ensure that respondents' answers are usable to you.
• Respect participants' time. There should be enough questions to get useful information but not so many that participants have to spend a long time filling it out.

When you have designed your survey, distribute it among your classmates and collect the completed surveys once they have filled them in. Process and analyse your results. Then, create a short presentation that highlights your main findings. Design your presentation so that it focuses on applying your findings to ways to make the performing arts more accessible. Present to your class and see if they agree with your interpretation of your results.

When everyone has finished their presentations, discuss all your findings together as a class. How could you use your results to make the performing arts more accessible within your school? What could staff and students do to remove barriers to getting involved, to support students' emotional engagement, and to promote careers surrounding the performing arts?

## More *resources*

• This video from the Centre for Performance Science provides an introduction to the scientific investigation of performance and why it is important: **www.youtube.com/ watch?v=gS8QK0HLdLg**

• This editorial from Frontiers provides an overview of fourteen research projects into music performance anxiety and how it can be managed: **www. frontiersin.org/articles/10.3389/ fpsyg.2023.1328762/full**

• This guide from the British Association for Performing Arts Medicine (BAPAM) and the Musicians' Union provides an overview of how musicians can maintain good health and wellbeing: **musiciansunion.org.uk/events-career-development/career-development/career-guides/ musicians-wellbeing-guidance-pack/a-young-freelancer-s-guide-to-mental-health-and-the-music-industry**