

## Articles

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Capturing the magic

### Capturing the magic: A three-way dialogue on the impact of music on people and society

Dave Camlin, Laura Caulfield and Rosie Perkins

#### Abstract

This article sets out a dialogue on the impact of music on people and society. The perspectives of three researchers, from different experiential and methodological backgrounds, are presented. The article explores: how we define concepts of impact; how we seek to measure the impact of engaging with music, providing examples from our own recent work; and tensions in attempting to capture or measure the ‘magic’ of music, including how to meet the needs of different audiences and how to develop new ways to capture impact. The authors reflect on the political climate in which music interventions operate, including the need to ask different questions at different times for different audiences, concluding that it is vital to measure both if there is any impact, how this impact was achieved, and people’s experiences of engaging with music. We found consensus about the need to move evidence forwards through both the use of arts-based creative methods that focus on the music-making process itself as well as through collaborations that bring together varied perspectives, experiences, disciplines and research methods. We also argue that – as there is considerable evidence about the impact

of music, on different people, in different ways and in different settings – researchers should now aim to take stock of the evidence base. Finally, we posit that there is merit in engaging with a reflective dialogue like the one presented here, as a tool to help challenge, disrupt and influence our own thinking.

## Introduction

This article sets out to discuss and debate how to ‘capture the magic’ of music interventions<sup>[1]</sup> in terms of how they impact on people and society. It does so from the perspectives of three researchers each of whom come from different experiential and methodological backgrounds: Dr Dave Camlin is a lecturer in music education at the Royal College of Music and Trinity-Laban Conservatoire and formerly the Head of Higher Education and Research at Sage Gateshead. Living and working in Cumbria, he is a singer, composer, teacher, community musician and researcher, with research interests in community music; music, health and wellbeing; musician training; and group singing. Professor Laura Caulfield, Ph.D., is Chair of the Institute for Community Research and Development at the University of Wolverhampton. Laura is a psychologist and an expert in the evaluation of programmes designed to reduce risk of crime. She has particular expertise in evaluating arts and creative programme in the criminal justice system. Dr Rosie Perkins is Reader in performance science at the Royal College of Music and an honorary research fellow at Imperial College London. Rosie’s first degree was in music and her postgraduate degrees include music psychology and social science; for the last ten years her research has focused on arts-in-health and performers’ career development.

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We share an interest in the complex ways in which musical experiences intersect with paramusical effects, principally around the impact on people's health and wellbeing, and how these effects might in turn contribute to healthier and happier communities and societies. The subject of impact and measurement emerged quite naturally early in our conversations, as a way of being able to understand how we each think about our work and its effect.

In this article we set out to capture the emergent nature of our ideas. We therefore decided to capture a dialogue, rather than any more developed perspectives, principally as a way of highlighting for the reader how this kind of interdisciplinary knowledge emerges through reflective conversation. We suggest that it is the way that professionals negotiate and reflect on the meaning of their work, as much as their conclusions, which helps to shape discourse. Accordingly, we have left the dialogue in as unedited a state as we could bear, so that the process of this kind of dialogic knowledge development is made more explicit for a reader. This is not without some discomfort on each of our parts, as it means that each of us has had much less opportunity to revise our initial ideas than would be commonly expected, although the text has been cut to reduce the word count and minor edits have been included to enhance the flow and narrative of the article. We argue that the benefits of this approach are to illuminate the inconsistent, contested and dissensual ways in which knowledge of the field can be advanced.

The article is organized into three main sections, each of which was transcribed following a three-way discussion recorded in November 2018. Our aims were to discuss and debate what we mean by impact, how we can best capture impact and to consider next steps for developing new types of evidence and connecting with different

stakeholders. References have only been added to the transcription when we were certain that we were speaking with a particular reference in mind. Again, in this way, we hope to illuminate some of the ways in which this kind of dialogue synthesizes ideas from a wide range of sources and perspectives, often in quite tacit ways. Our aim is that this process of illumination will contribute to a more dialogic culture of knowledge exchange within the field of arts research, recognizing that truth, such as it is, is rarely singular.

## What we mean by impact?

**Rosie:** From my perspective, impact is a way of looking at the effect of an intervention.

One of the things I've thought about quite a lot in recent years is the direction of the effect, being careful not to assume that an effect is only on what we often see termed 'participants' within an intervention. The effect could also be on the people who are facilitating the intervention. Thinking about impact in that multi-directional way [in other words on both participants and facilitators] has become more important in the last few years in the type of research that I've been doing.

(e.g. [Perkins et al. 2018a](#), [2015](#))

**Dave:** And for me I guess when we start thinking about the question, I was thinking about some of the challenges that have been around demonstrating social impact, that there's somehow a straight line between inputs and outcomes, what we're actually looking for is being able to demonstrate that this particular intervention or this particular activity brought about this particular outcome, but obviously, it's way more complex than that ([Perry 2013](#)). But for me in terms of impact it comes down to the effect on individuals, and I wonder whether that almost takes priority above other effects. [I don't know whether I mean that actually, but] for me it feels like the real value of what I do if I'm getting it right, is that people feel somehow transformed by the experience of art and of a musical experience and it's revealed in the way that they talk about it.

I know sometimes people can be mistaken and can *believe* they feel better as a result of the thing they've done, but actually that might not be the case, there might be other effects that are at play. However, ultimately, we can't really understand the impact of something unless we're able to correlate it with something that's felt, that an individual experiences.

**Laura:** The way I think about impact overlaps with that quite a lot. My background is as a psychologist, so usually when I'm talking about impact I'm talking about how people think, how they feel, how they behave, how they go on to maybe change their behaviour in the future, and does participating in music have an impact on those things. I'm thinking about impact in those sorts of ways, but sometimes a little bit broader than that. Because my work mainly takes place in the criminal justice system some of the impact I'm looking at might be on things like social climate within a prison. Is there an impact of having a music or an arts programme in that space that helps people, even those who aren't participating in that project, feel safer, does it promote social cohesion?

In this brief section, we agreed that impact relates to the *effects* of a particular musical activity on the people involved. When we talk about these effects, we are attempting to understand how people feel or behave in response to an intervention or an experience. Clearly, none of us subscribe to a reductionist view of cultural participation, which can often be an assumption when it comes to wanting to 'measure' impact. Rather, we are interested in what an intervention means for all of those involved: individuals, groups, and wider social contexts. This is important in relation to some of the later issues that emerge – we each have different ways of measuring or capturing impact, but essentially it is with a similar purpose in mind, to understand whether or not our work is effective in the way we hope it is, by making a positive difference in the lives of the people involved in it.

How do we capture impact?

**Laura:** I've just finished a four-year project (Caulfield et al. forthcoming) working with a music programme that Birmingham youth offending service deliver for young people in contact with that service. The programme aims to: increase the musical ability and the creative outlet of the young people; improve young people's wellbeing, how they feel, how they behave, the youth offending service are particularly interested in is whether young people who take part in that programme comply or engage with their sentence. The hope is that if they can comply with their sentence, if they're more engaged, that their future chances of coming back into the criminal justice system are reduced. We took pre-test and post-test measurements of wellbeing, of attitudes and behaviours, and musical developments. Talking to the young people about their experiences as well, because the quantitative stuff can help us understand if something's happening, but to understand how the young people are experiencing that, we're not going to get from quantitative measures. We need to talk to them, to listen to them.

We've also been able to gather control group data, and found that people who have taken part in the music programme are more likely to comply with their sentence. For the youth offending service that's a particularly positive thing for them to find.

**Rosie:** That matches quite closely with the sort of approach we tend to take to the intervention projects we research here at the Centre for Performance Science [see [www.PerformanceScience.ac.uk](http://www.PerformanceScience.ac.uk)]. A recent example is the work we've done on postnatal depression (PND) – we wanted to know whether taking part in singing programmes for mothers with their babies would reduce symptoms of PND. We also wanted to compare that to women who weren't taking part in any singing sessions, but also to women who were taking part in a comparison activity of creative play. The reason we wanted to compare that was because just taking part in an intervention of *any* sort could lead to a reduction in symptoms, maybe because it provides a form of peer support, a routine, regularity, and all these other social factors. So, we wanted to try and unpick whether it was actually the music or just a social intervention per se.

We had three different groups of women (134 in total), randomly allocated into either ten weeks of group singing with their baby, ten weeks of group creative play with their baby, or ten weeks of care as normal. Using a standardised measure of postnatal depression (the Edinburgh Postnatal Depression Scale, EPDS) we found that the women in the singing group had a faster recovery.

(Fancourt and Perkins 2018a)

This poses a lot of questions about *why* that might have happened, and *why* we were seeing differences with the singing group. So we also did focus group work with the women in all three groups – the singing groups, the play groups and the control groups. Then we used the data from the singing and the play groups to do a comparative thematic qualitative analysis: what was going on in both of those groups and was there anything emerging that was different in the singing group? The women reported that the singing was a very authentic cultural experience, so they felt that they were able to contribute music that was meaningful to them, and be creative in a way that was meaningful to them at that moment in their lives. That gave it a sort of creative meaning for them, but also it allowed a sense of achievement – by being able to sing and learn new songs with their babies the women were able to feel accomplished as mums, where in other aspects of motherhood they explained that they didn't always feel so accomplished. These nuances of the experience came out through the qualitative data, helping us to understand what it was about the singing that seemed to make a difference in their recovery (Perkins et al. 2018b). Much like you were saying Laura, the quantitative data enabled us to see some of *what* was happening and *if* the music was having an effect, then the qualitative data enabled us to understand that effect better but also to understand *why* that effect might have been happening.

**Dave:** It sounds like what seems to be common in our experiences is a movement towards mixed methods (Plowright 2010) as a way of understanding impact. Would that always be the case in your situations, or just our particular experiences?

**Rosie:** I don't think it is always the case, I think each project is different and it very much depends on the questions being asked. In the PND project we wanted to have that quantitative data in order to be able to see patterns and trends, but also to be able to explain those through the qualitative data. But we could have equally done a fantastic study that had been an ethnography and written a really, really rich description and that would have been meaningful in a different way again. So, for me mixed-methods makes a lot of sense when looking at the totality of the picture but I certainly don't think it's the *only* way forward within the field.

**Dave:** The project I was doing over the summer was a commission for the National Trust, an AHRC-funded project where we were taking groups of singers up to the tops of mountains to sing (National Trust, no date). The way we were collecting the data from that was using a method called SenseMaker® (Snowden n.d.) which is a 'distributed ethnography' (Snowden 2016). It captures people's stories, so it's phenomenological, very qualitative, then people interpret their stories so essentially they're involved in the research process from the point of view of coding, or attributing meaning to the story they've just told, so it starts to give you a bit of both kinds of data and I thought that was really useful.<sup>2</sup> Not just in terms of understanding the stories of those who had been involved in the singing on the mountain tops, as opposed to those who had been singing regularly in choirs, but also because, from the stories there started to emerge more questions that we weren't really able to provide answers to, but we started to be able to make hypotheses about.

(Camlin et al. forthcoming)

It was interesting comparing the stories, we were asking questions about how the stories that people told about singing related to things like 'me, my people, my place' – i.e. comparing *positive* dimensions of the experience<sup>3</sup> – and most of the people in the full survey were talking about 'my people', so they were emphasising the social connections. What we were expecting to see in the stories of the [singers] in the mountains was then there'd be an increased sense of place. I think that's what the National Trust were hoping



would emerge from it, that we'd be able to actually see that the difference with people singing outdoors was people would feel a much stronger connection to a sense of place. However, that wasn't what people talked about in terms of their experience, they all talked about their connection to the people they were walking and singing with, that was the important part of it.

The other aspect was when we were asking them about 'physical, mental / emotional, spiritual' aspects of the experience – because we were taking people out on ten mile walks, hours and hours and hours – that people would talk about the physical exertion of the activity. But they didn't, most of the responses were all about the spiritual and emotional dimensions of it. Because singing has physical health benefits, that's become a way for advocating its value. So it was really interesting that when people talk about singing, even though there might be powerful benefits to people's physical health, that wasn't what they wanted to talk about in the stories that they shared.

**Rosie:** I do think that's a really interesting point because of course especially with the more quantitative approaches we're limited by what we choose to look at up-front. Our primary [main] and secondary [subsidiary] outcome measures are selected in advance but of course if you only look at those, you run the risk of missing other outcomes that might be equally or more important.

**Dave:** Yes, I think it's where qualitative data might point to gaps in knowledge, as well. One of the things that came out of the group singing project quite strongly, was the stories that people talked about the most powerful experiences were the moments that people felt that they were *transcending* the experience. So when they're singing together, and everyone's voice is blending into one, there are moments where people feel like they come out of themselves and they're part of this something else that isn't *them*, but isn't other individuals, it feels like it's *more than* the group. For me it started something, actually what is that? What's going on? That gets talked about a lot.

I think the NICE [National Institute for Health Care and Excellence] report from a few years ago ([NICE 2015](#)) talked about ways to support independence and mental wellbeing

in older people, group activities, top of the list of group activities is group singing. And they said it might be because people like music, it might be because people like the social aspect of being involved, it might be ‘something else’ (2015: 25). It’s the ‘something else’, what’s the actual mechanism that’s going on? For me, I have a hunch that it’s to do with the way that interpersonal biology and musical entrainment become entangled with each other in those kinds of moments when people feel connected; it’s amplified through the activity of entraining to other people rhythmically and musically; people build up a sense of connection from it. But it’s trying to find what is the mechanism rather than having to resort to the language people use when they’re talking about [it as a kind of] ‘magic’; how do we go from ‘magic’ to ‘understanding?’

A common theme that emerged through our conversation was the value of taking a mixed methods approach to understand both *if* there was any quantifiable impact and *how* this impact was achieved. Where single methods alone might point to particular kinds of impact (or not), mixed methods can provide useful validation or triangulation of any findings, as well as highlight discrepancies. Crucially, we all touched upon the need to understand *why* music might make a difference, using designs that compared music to other (or no) activities or that focused on how exactly people experienced music. Indeed, studies specifically scrutinizing the mechanisms of change within music interventions are emerging in the literature (see, e.g. [Warran et al. 2019](#); [Perkins et al. 2018a](#)), highlighting the need to focus on not only if and how music can have an effect but also why. Indeed, this was a point that we picked up as our conversation developed to focus on some of the tensions in attempting to capture or measure the ‘magic’ of music, including how to meet the needs of different audiences and how to develop new ways to capture impact.

Measure what you treasure? Competing agendas(?) and developing new ways to capture impact

**Laura:** So how do we capture the magic?

**Rosie:** In terms of why music can have an effect – the mechanisms of change – researchers have looked at the physiological impacts of music interventions. Some of our work with mental health service users, for example, showed reductions in inflammation across 6- and 10-weeks of group drumming (Fancourt et al. 2016). There's quite a lot of work happening in this area led by other colleagues (e.g. Fancourt et al. 2014; Kreuz 2014), pointing to the physiological changes in the body that music can elicit which may help us to tap into the mechanisms of change.

**Laura:** Trying to explore how – physically or emotionally – this happens, it's really interesting but I'm conscious that often if I'm talking to practitioners (whether music practitioners, or work that I do more broadly in the arts) one of the criticisms or debates that I have is that by thinking about impact in this way is a bit problematic in not foregrounding the music. Looking at music almost as a journey towards something else. I'd be interested to hear if either of you have had those sorts of criticisms from practitioners in particular?

**Rosie:** It's certainly something that I've thought about a lot. In RCT-type designs based on pre-post testing we sort of isolate a state beforehand, and maybe something in the middle, then a state afterwards and we measure it (this point is made by DeNora and Ansdell 2014). Even with the methods we've used to look more qualitatively, such as focus groups, we often cut out of this the music itself. And so I think there's a real gap in the way we think about this and for more arts-based methodologies that actually make use of the music and the musical product and process as the data (see, for example, Fraser and Sayah 2011; Ledger and Edwards 2011). I think generally speaking we haven't really done that so much – we've relied on measures, relied on what people say and sometimes watching what people do, but we could make a lot more of the actual music.

**Laura:** I don't think we've quite cracked it, but we're working with the Irene Taylor Trust looking at a programme they run called Sounding Out for ex-prisoners as they

move into the community. We're doing a fairly small qualitative study looking at people's experiences, the impact on people, but we're also doing a process evaluation to look at whether there is anything about the programme that can be improved or enhanced. A Research Fellow [Dr Rachel Massie] I'm working with made a suggestion that we should use the lyrics – the music that they're writing – as part of the data. It hadn't occurred to me, but I'm really excited about that at the minute, about what that might be able to add to this understanding of the journey that those individuals have been on.

([Massie et al. 2018](#))

**Dave:** I think that's right, I think that goes back to what we were talking about a couple of minutes ago. We're building up a really good understanding now, I think, of what music does, what results in using it, but we still don't really know why those effects occur. I think that might be fine. Plenty of people, myself included, would say if the thing you want to do most about the music is measure it, then you've really missed the point of what music is about. But at the same time, if we're going to make stronger arguments, I think this is what the AHRC was suggesting ([Crossick and Kaszynska 2016](#)), if we believe music is something that does have a powerful impact or potential for everybody, then we need to understand why music might have that effect in order to advocate for it in the strongest sense. Having that language of 'magic' to explain why people should engage in music doesn't help us advocate for it.

**Laura:** It leads me onto thinking about the political case we sometimes have to make. It might be the government, or for me it might be prisons or the Ministry of Justice. The sort of evidence of impact that they're looking for is often very different from the conversations I might be having with practitioners. To allow, facilitate, or even to fund music programmes happening in the criminal justice system, what they need to see in terms of impact is often quantitative measures. When I was talking about compliance before with the youth offending service, for them to be able to continue to support it they need that evidence to be able to show that, but then Youth Music (who were co-funding that programme), are more interested in the experience of the young people, the musical

understanding. There is a complex picture that we have to keep in mind to answer the right questions and that presents challenges.

**Rosie:** I feel very similarly. There can often be different starting points, different assumptions about knowledge, assumptions about music, assumptions about the point of it all. I can completely see the different viewpoints and perhaps part of how we think about impact moving forward should be to bring these positions closer and to have more cross-over. This sort of cross-over, in this conversation and in this network, helps to facilitate some of that. I think you're right Laura, it's a really complex thing in terms of being a discussion about knowledge, and impact and evidence, it's very political as well.

**Dave:** And the political dimension for me goes in a different direction as well. For me, it's something about music making that gives people an opportunity; being musical gives people an opportunity to encounter other people in a different way to the way that we're required to under the conditions of the economic system that we currently live in. We know that we face huge challenges over the next thirty years as a species, as a country, never mind Brexit and all of that, but everything that's coming down the line, we're going to be living in a very different world in thirty years' time ([Camlin 2016](#)). And I do believe that politically, music – being musical – provides a window on a different way of being that might illuminate a path towards a different way of how we might coexist on the planet.

**Laura:** Is this in social and communication terms, about how people relate to each other? If I'm working in a prison, one of the things that will be very apparent is how relationships are formed. How people move from a point where outside of that space they would have been arguing – maybe even aggressive incidents – to be able to actually solve problems together. Seeing that happen in a week is quite powerful ([Cursley and Maruna 2015](#); [Henley 2012](#); [Wilson et al. 2009](#)).

**Dave:** Yes, I think so. Some of the things that are rights, the 'right to enjoy the cultural life of the community' ([United Nations 1948](#)), the right to be part of a family, that actually if you're in prison you don't really have those rights anymore. If music making

can be a way of actually experiencing some of those human rights that you're deprived of – I imagine, I've not done much work in prisons but the little I have done – that's quite stabilizing. Even though you might feel dehumanised in some ways, and not just in prisons but if you're homeless, if you're experiencing mental health challenges, that there are actually ways of feeling human again.

**Laura:** I couldn't agree more with that point. This humanising experience, particularly in the settings I work in, is so important ([Allen et al. 2004](#)). But while it's important from our perspective, there are many people who disagree and think prisoners don't have the right to expect that. It goes back to this thinking about how we articulate impact, it's almost having to say actually, okay, the humanising bit, that's lovely, but the impact of that on reducing incidents of aggression or violent behaviours ([Wilson et al. 2009](#); [Miles and Strauss 2008](#); [Caulfield 2015](#)). It's having to translate it into those terms. I feel slightly uncomfortable about some of this, having to translate it into those terms to make the case for something that just is the right thing and should be enough on its own, but it's not.

**Rosie:** Again I think that takes us back into the political climate, because there's been a lot in the news recently about the huge cuts to music education in schools in this country. So there's a need for us to justify the arts and music. We're in this slightly strange place of needing to justify music but not always being able to use what we all actually know and feel about music *to* justify it. You often have to look at other impacts. In some ways that opens up new possibilities for us – it allows us to talk to criminal justice, it allows us to speak to healthcare and to build new bridges and connections. But it also puts us in this complicated place of needing to hold on to what it is that we're doing and practice that for itself *and* also translate that, like you say, to different contexts as well.

**Laura:** I feel like this brings us full circle and brings me to the point where I see why I get criticised sometimes, but it's very difficult to think how I would take my own work out of that cycle. I did have a very interesting conversation with someone recently who suggested we should be empowering music organisations to stop having to think about

quantitatively evidencing their work, and to try and shift the narrative. My feeling is that to put any individual organisation – particularly the voluntary sector organisations I work with – in a position where they might try to challenge that thinking about evidence, puts them as an organisation in quite a precarious position because of the funding arrangements they have and the evidence they need to give.

**Rosie:** I also think that we should be cautious, not to feel like the quantitative evidence is missing the point or taking us down the wrong path. Within all the research methods that we have at our disposal, it's of course a valid method, it tells us very useful things, and so I think that although our practice and the music is subjective and complicated, we can apply scientific method to that and use that to good effect. So we should be careful not to suggest that it's not the right way to go.

**Dave:** I agree with that, I think if we're trying to understand what music is for – what is the purpose of music? Even within the scientific communities, within evolutionary biology, you've got Steven Pinker saying that music is 'auditory cheesecake' (Pinker 2003: 534) and there's no evolutionary advantage of 'making plinking noises' (2003: 528), and Daniel Levitin suggesting now that music operates along the same neural pathways as other basic human drives (Levitin et al. 2017).

So I think being able to say what music is for, coming back to your point about the institutions or organisations, I think that's a really good issue to raise actually, because we've had these debates for a long time now in terms of music as a force for introducing social change or all of these things and yet it hasn't necessarily resulted in those changes. I think it's important that all of us working in the cultural sector are able to look really critically at our practices to say are we really making the difference that we think we are? It's really important organisations do that.

Increasingly, I think that the point of real impact in music making is the point of encounter, it's the relationships that are formed between practitioners and participants and all of the combinations of those. If more resources were available at the point of encounter, that ought to be what's at the forefront of the minds of those organisations and

institutions – how are we using what resources we have to support this, to support the encounter between people? (Camlin 2020)

**Laura:** That comes out so strongly in all of my work. For the young people I've been working with who often have not had positive relationships with adults in the past, having that relationship with the music practitioners has been really important (Caulfield et al. forthcoming). The other thing that has come out is the value and the respect they placed on those music professionals not being teachers or their case workers, but people who were doing this in the real world, producing music.

**Dave:** It raises an interesting question for me in terms of measurement, if we think that the impact of the arts is around relationships and interpersonal aspects of relationships, how do you measure that? How do we understand that effect? Most of the measures that we have at our disposal measure at an individual level, rather than at a group level or relational level. If the complexity of the arts is in how it affords relationships, then we need to be developing methodologies to be able to understand that (Crossick and Kaszynska 2016: 39).

**Laura:** That comes out qualitatively for me. It seems that while there's quite an overlap in the ways we think, but we've drawn out some points that are quite crucial in continuing to move some of these conversations forward. Thinking about relationships and how we measure and capture that, a lot of my work has moved towards working with organisations to understand some of the processes and how they're going about their work and then to situate it either in previous research evidence or some of the theoretical perspectives from criminology and psychology to help them refine the way they're working to try and do better. The other point that's come out for me is thinking about the methods we're using in more creative terms, so to use the music.

**Rosie:** Absolutely, I take from this that we're in consensus about the need to draw on different methods at different times and to use methods to show different things about impact, in widely defined terms. But, that generally speaking, we can incorporate more creative approaches that are arts-based or music-based in that process in order to help us



move to the next step of the argument. Often, you *see* the impact. If you go and watch one of these sessions that any of us have been describing, you can see very clearly what the impact is, but we know that's not enough in terms of pushing the agenda forward. So being able to use multiple methods, but also to use the method of the actual practice itself to help move that argument forward is going to be important.

**Laura:** There's so much there about bringing together different disciplines, not just different methods. Apart from the work with the Irene Taylor Trust I mentioned, where we're thinking about how we can use the lyrics and the writing that the men have done, I'm working on other creative arts projects that move me slightly out of music, but that idea of working collaboratively, co-design, and taking different disciplinary perspectives feels like that's going to move that conversation on. The other conversations I've been having are with the National Criminal Justice Arts Alliance. In their evidence library there are about one hundred different research studies, which are about the arts more generally but I would guess about a third of those are music studies in criminal justice. Rather than saying 'let's continue to collect more evidence', the conversation I've had recently is 'let's take a step back'. Let's look at all of that work that exists (and that's just in the UK). A group that I work with in the U.S. (the Southwest Correctional Arts Network) have got about seventy or eighty studies, so why don't we pull all of this together and synthesise it and look at what that tells us. I feel like almost stopping and taking stock of that would be a really good next step before we move on.

**Rosie:** I really feel like that taking stock is needed. We need to really question what the next steps are, and where we need to head next as a field. Because although I think the case has been made for music's effects in some ways, I think we can still make it better. In order to make it better we need to reflect on what questions we now need to ask, and not just continue asking the same questions.

**Dave:** And what questions for what purpose as well. What difference are we hoping to bring about as a result of asking those questions? For me, I'm very recently in my first employment within the academe so this is all quite new for me, but I'm really excited

about the possibilities of SenseMaker as a distributed ethnography as a really useful methodology for people to be able to tell stories in their own language, to be able to collect stories in lots of different native tongues, but for those stories to be interpreted against the same set of signifiers so we can build up a rich data set in that way.

SenseMaker feels like it can work, it's been designed to work at scale.

(Cognitive Edge 2014)

The other thing for me is trying to find out this hunch, I certainly don't have the resources to do it, but I know that if there's a way of being able to design and conduct experiments to show actually there is something related to the music itself and the way that people connect through interpersonal neurobiology, if there's a way of demonstrating that those two things that can be measured independently actually do correlate, you start to build. There's a study that a (group of) [Scandinavian] scientists did where they demonstrate that when we sing together our heartrate variability synchronizes (Vickhoff et al. 2013), we're on the edge of that kind of understanding but it feels like there's a lot more needed. But it's not stuff that I can [do on my own]. I'm just a musician.

**Laura:** It's finding the right people to work with.

**Dave:** Yeah, it's finding the right people to work with to be able to know how to do those kinds of things.

This discussion reflected on the political climate in which music interventions operate, including the need to ask different questions at different times for different groups of people. In doing so, it entered the realm of epistemology, touching on how knowledge about music interventions can and should be generated. The intrinsic benefits of music and its humanizing effects were discussed as they relate to the increasing need – and opportunity – for also evidencing the benefits of music on wider social priorities such as criminal justice or education. Linked to this, it became clear that it can be challenging to

capture some of the subtler ways, such as relational or musical, in which musical experiences can be impactful.

Our conversation leads to three proposals for taking these discussions forwards: First, through interdisciplinary exchange and collaborations that bring together varied perspectives, experiences, disciplines and methodologies; second, through taking stock of the existing evidence through synthesis work, in particular, focusing on *why* music is impactful and; third, through using arts-based creative methods that focus on the music-making process in order to elucidate how music itself can be used to evidence its impact.

## Reflections and conclusion

This article presented a dialogue between three researchers from different experiential and methodological backgrounds. The dialogue explored ways we might be able to ‘capture the magic’ of music interventions in terms of how they impact on people and society, and ended in the three proposals listed above. Measuring impact in music and the arts is often a thorny subject, and one which is prone to dividing opinion between the ‘intrinsic and instrumental camps’ ([Crossick and Kaszynska 2016](#): 5). Our dialogue, therefore, proved useful as a means of exploring some of the complexity of the subject between three researchers from different disciplines. Approaching the topic in this dialogic way helped to draw out the complex circumstances of how we all approach our work. Demonstrating the effectiveness of what we can mean something different for artists, researchers, funders, participants and audiences, but the central need to do so is vitally important.

We hope that the emergent nature of our understanding, which came from the process of discussion, comes across in this article. As researchers whose work seeks to

evidence the impact of music in different ways, it was important to us to explore what we mean by impact from our different disciplinary perspectives, to understand how we each capture impact, and to push one another to think critically about new types of evidence and connecting with different stakeholders. Each of us has come away from this conversation with new ideas, and while those ideas always may not come across fully formed in the transcription of our discussion (and will likely develop into more fully formed ideas over time), what is more important is to lay bare the process by which other people's ideas influence our own thinking. In approaching the complexity of the impact of the arts in socially engaged settings, we need to account for multiple, competing – and sometimes contradictory – views on the subject, and it is the process of dialogue which helps us to do that. What our discussions reveal is the value of reflective dialogue as a tool to help disrupt our own thinking, and to find richer 'polyphonic truths' (Bakhtin 1984: 6) that speak across settings. Being effective – whether as researchers, practitioners, teachers or performers – requires us to think critically about any assumptions we might have about what we think *is* effective, and to challenge those assumptions where necessary in order to advance a more sophisticated understanding of effective practice.

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## References

Allen, K., Shaw, P. and Hall, J. (2004), *The Art of Rehabilitation: Attitudes to Offenders' Involvement in the Arts*, London: Esmée Fairburn Foundation.

Bakhtin, M. M. (1984), *Problems of Dostoevsky's Poetics* (ed. C Emerson), Minneapolis, MN: University of Minnesota Press.

Camlin, D. (Nov 2016), 'Libraries gave us power', *ICCM Student Research Conference*, York St John University.

——— (2020), 'Mind the gap', in *Walking the Boundaries, Bridging the Gaps*, by Lee Willingham. Waterloo, ON: Wilfrid Laurier University, pp. 14–16.

Camlin, D. A., Daffern, H. and Zeserson, K. (forthcoming), 'Group singing as healthy public'.

Caulfield, L. (2014), *Final Evaluation of the Artist in Residence at HMP Grendon*, Bath: Bath Spa University.

——— (2015), *Exploring Good Vibrations Projects with Vulnerable and Challenging Women in Prison*, Bath: Bath Spa University,

<http://www.artsevidence.org.uk/media/uploads/goodvibrationsprojectswithvulnerableandchallengingwomenfinal.pdf>.

Caulfield, L. S., Devi-McGleish, Y., Simpson, E. and Jolly, A. (forthcoming), "'This has changed me": The impact of music on young people in contact with the youth justice system', submitted to Youth Justice.

Cognitive Edge (n.d.), *Girlhub Sensemaker Case Study*, <http://old.cognitive-edge.com/wp-content/uploads/2015/04/GH-SenseMaker-brief.pdf>. Accessed 13 November 2018.

Crossick, G. and Kaszynska, P. (2016), *Understanding the Value of Arts and Culture: The AHRC Cultural Value Report*, Swindon: Arts & Humanities Research Council, <http://www.ahrc.ac.uk/documents/publications/cultural-value-project-final-report/>.

Cursley, J. and Maruna, S. (2015), *A Narrative-Based Evaluation of 'Changing Tunes' Music-Based Prisoner Reintegration Interventions: Full Report*, London: Paul Hamlin Trust.

DeNora, T. and Ansdell, G. (2014), 'What can't music do?', *Psychology of Well-Being*, 4:23, pp. 1–10.

Fancourt, D., Ockelford, A. and Belai, A. (2014), 'The psychoneuroimmunological effects of music: A systematic review and a new model', *Brain Behavior and Immunity*, 36, pp. 15–26.

Fancourt, D. and Perkins, R. (2018a), 'The effect of singing interventions on symptoms of postnatal depression: A three-arm randomised controlled trial', *British Journal of Psychiatry*, 212: 2, pp. 119–21.

——— (2018b), 'Singing for mother-infant bonding: The effects of mother-infant singing on emotional closeness, affect and anxiety', *Music & Science*, 1, pp. 1–10.

Fancourt, D., Perkins, R., Ascenso, S., Carvalho, L. A., Steptoe, A. and Williamon, A. (2016), 'Effects of group drumming interventions on anxiety, depression, social resilience and inflammatory immune response among mental health service users', *PLoS One*, 11:e0151136, pp. 1–16.

Fraser, K. D. and al Sayah, F. (2011), 'Arts-based methods in health research: A systematic review of the literature', *Arts & Health*, 3: 2, pp. 110–45.

Henley, J. (2012), *Good Vibrations: Music and Social Education for Young Offenders*, London: University of London.

Kreutz, G. (2014), 'Does singing facilitate social bonding?', *Music and Medicine*, 6:2, pp. 51–60.

Ledger, A. and Edwards, J. (2011), 'Arts-based research practices in music therapy research: Existing and potential developments', *The Arts in Psychotherapy*, 38: 5, pp. 312–17.

Levitin, D., Mallik, A. and Chanda, M. L. (2017), 'Anhedonia to music and mu-opioids: Evidence from the administration of naltrexone', *Scientific Reports*, 7, p. 41952, <https://doi.org/10.1038/srep41952>.

Massie, R. Jolly, A. and Caulfield, L. (2018), *An Evaluation of the Sounding Out Programme*, Grant Report to the Irene Taylor Trust and Big Lottery.

Miles, A. and Strauss, P. (2008), *The Academy: A Report on Outcomes for Participants, June 2006–June 2008*, Manchester: University of Manchester,

<http://www.artsevidence.org.uk/evaluations/academy-report-outcomes-participants/>.

National Trust (n.d.), *Songs on the Summits 1918–2018*, National Trust,

<https://www.nationaltrust.org.uk/borrowdale-and-derwent-water/features/songs-on-the-summits-1918-2018>. Accessed 14 March 2018.

NICE (2015), *Older People – Independence and Mental Wellbeing (Guidelines No. NG32)*, London: National Institute for Health and Care Excellence,

<http://www.nice.org.uk/guidance/ng32/resources/older-people-independence-and-mental-wellbeing-1837389003973>.

Perkins, R., Aufegger, L. and Williamon, A. (2015), 'Learning through teaching: Exploring what conservatoire students learn from teaching beginner older adults', *International Journal of Music Education*, 33: 1, pp. 80–90.

Perkins, R., Yorke, S. and Fancourt, D. (2018a), 'Learning to facilitate arts-in-health programmes: A case study of musicians facilitating creative interventions for mothers with symptoms of postnatal depression', *International Journal of Music Education*, 36:4, pp. 644–58.

——— (2018b), 'How group singing facilitates recovery from the symptoms of postnatal depression: A comparative qualitative study', *BMC Psychology*, 6:41, pp. 1–12.

Perry, J. (2013), 'Social impact measurement: Time to admit defeat?', *The Guardian*, 11 April, <http://www.guardian.co.uk/social-enterprise-network/2013/apr/11/social-impact-measurement-defaeat>. Accessed 7 May 2013.

Pinker, S. (2003), *How the Mind Works*, 1st ed., New York: W. W. Norton and Company.

Plowright, D. (2010), *Using Mixed Methods: Frameworks for an Integrated Methodology*, Los Angeles, London, New Delhi, Singapore, Washington DC: Sage Publications Ltd.

Snowden, D. (2016), 'Ethnography part II', Cognitive Edge, 10 February, <http://cognitive-edge.com/blog/ethnography-part-ii/>. Accessed 1 March 2018.

——— (n.d.), 'SenseMaker®', Cognitive Edge, <http://cognitive-edge.com/sensemaker/>. Accessed 1 December 2016.

United Nations (1948), 'Universal declaration of human rights', United Nations, <http://www.un.org/en/universal-declaration-human-rights/>. Accessed 20 April 2017.



Vickhoff, B., Malmgren, H., Astrom, R., Nyberg, G., Ekstrom, S. R., Engwall, M., Snygg, J., Nilsson, M. and Jornsten, R. (2013), 'Music structure determines heart rate variability of singers', *Frontiers in Psychology*, 4, p. 334.

Warran, K., Fancourt, D. and Wiseman, T. (2019), 'How does the process of group singing impact upon people affected by cancer? A grounded theory study', *BMJ Open*, 9:1, <https://bmjopen.bmj.com/content/9/1/e023261>.

Wilson, D., Caulfield, L. and Atherton, S. (2009), 'Good vibrations: The long-term impact of a prison-based music project', *Prison Service Journal*, 182, pp. 27–32.

## Notes

[1] By intervention, we broadly mean a programme of activity that seeks to engage people and provide a positive experience. This term is though, complex and there is potential for misunderstanding and disagreement. These debates formed a part of the MUSOC network debates and we encourage readers of this article to engage with that debate through the online resources here.

[2] The method is described in more detail in a forthcoming paper (Camlin et al. forthcoming). See <http://cognitive-edge.com/sensemaker/#sensemaker-cases> for other examples of the method in use.

[3] Rather than a more simplistic comparison of positive vs. negative.

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