

Institution: Royal College of Music (RCM)		
Unit of Assessment: 33		
Title of case study: Music and Maternal Mental Health		
Period when the underpinning research was undertaken: 2015-2018		
Details of staff conducting the underpinning research from the submitting unit:		
Name(s):	Role(s) (e.g. job title):	Period(s) employed by submitting HEI:
Perkins, Dr Rosie	Reader in Performance Science	2004–present
Fancourt, Dr Daisy	Research Fellow in Performance Science	2013-2017
Yorke, Sarah	Project Officer/ Research Assistant	2015-2017
Period when the claimed impact occurred: 2017–2020 ongoing		
Is this case study continued from a case study submitted in 2014? N		
1. Summary of the impact <p>This case study describes impact across four areas: (1) the research has led to a new, evidence-based lifestyle intervention based on group singing, leading to improved outcomes for women with symptoms of postnatal depression; (2) music and health practitioners have used the research findings to inform their practice, methods, and ideas; (3) the research has influenced the development of policy with respect to the provision of maternal and creative health services; (4) public awareness of the mental health benefits of singing has been raised via dissemination of the research and subsequent media coverage.</p>		
2. Underpinning research <p>The RCM has pioneered research into music, health, and wellbeing for the past decade. From 2015, with funding from Arts Council England, Dr Perkins and her team led the first large-scale, systematic project to investigate how music can be used to support maternal mental health. With around one in eight women in the UK experiencing postnatal depression (PND) and challenges with existing treatment models, the research met an important health need.</p> <p>The cornerstone of the research was a three-armed Randomized Controlled Trial (RCT) run in 2016 to establish whether group singing could support recovery from PND. 134 women with symptoms of PND were randomly allocated to either 10 weeks of group singing with their baby, 10 weeks of creative play with their baby, or 10 weeks of care as normal. Analysis revealed that, among women with moderate to severe symptoms of PND, group singing led to significantly faster reductions in symptoms of PND than either creative play or care as normal.^[1] In-depth qualitative research showed that group singing provides an authentic, social, and multicultural creative experience, calms babies, provides immersive 'me time' for mothers, facilitates a sense of achievement and identity, and can enhance perceived mother-infant bonding.^[2] Additionally, the singing workshops led to changes in maternal singing behaviours; women who had attended the singing workshops were significantly more likely to sing to their baby on a daily basis, were significantly more confident in singing, and had a significant increase in the number of songs they knew to sing to their babies compared with the control group.^[3]</p> <p>A set of further studies complemented and contextualized the main RCT. The first focused on the music facilitators who were recruited and trained by the RCM to run the singing and creative play groups in the RCT. A qualitative study with these facilitators evidenced the specific</p>		

practices necessary to run workshops successfully, including a balance of forward-planning with the need to retain flexibility and to provide women with autonomy and opportunities for bonding with each other and their babies. Key challenges included coping with the emotional nature of the work. A strong sense of team, the progressive rather than one-off nature of the sessions, and the use of appropriate spaces supported the facilitators in their role.^[4] The second focused on why singing in particular supports maternal mental health. A within-subjects experiment comparing group singing with group play showed that singing is associated with greater increases in maternal perceptions of emotional closeness than other social interactions. Mother–infant singing is also associated with greater increases in positive affect and greater decreases in negative affect, as well as greater decreases in both psychological and biological markers of anxiety.^[5] The third was an England-wide survey involving over 2,500 pregnant women and new mothers, in order to understand the wider context of their music use. Findings demonstrated that there are associations between singing to a baby and lower symptoms of postnatal depression, enhanced wellbeing, self-esteem, and perceived mother–infant bonding,^[6] suggesting that singing to babies at home, or outside of formal settings, may also be beneficial to maternal mental health.

3. References to the research

- [1] Fancourt D & Perkins R (2018), The effect of singing interventions on symptoms of postnatal depression: a three-arm randomised controlled trial, *British Journal of Psychiatry*, 212, 119–121. <https://doi.org/10.1192/bjp.2017.29>
- [2] Perkins R, Yorke S, & Fancourt D (2018), How group singing facilitates recovery from the symptoms of postnatal depression: a comparative qualitative study, *BMC Psychology*, 6 (41), 1–12. <https://doi.org/10.1186/s40359-018-0253-0>
- [3] Fancourt D & Perkins R (2018), Does attending community music interventions lead to changes in wider musical behaviours? The effect of mother–infant singing classes on musical behaviours amongst mothers with symptoms of postnatal depression, *Psychology of Music*, 47, 132–143. <https://doi.org/10.1177/0305735617742197>
- [4] Perkins R, Yorke S, & Fancourt D (2018), 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, 644–658. <https://doi.org/10.1177/0255761418771092>
- [5] Fancourt D & Perkins R (2018), The effects of mother–infant singing on emotional closeness, affect, anxiety, and stress hormones, *Music & Science*, 1, 1–10. <https://doi.org/10.1177/2059204317745746>
- [6] Fancourt D & Perkins R (2017), Associations between singing to babies and symptoms of postnatal depression, wellbeing, self-esteem and mother–infant bond, *Public Health*, 145, 149–152. <https://doi.org/10.1016/j.puhe.2017.01.016>

All articles are published in leading, international, peer-reviewed journals across health and music. The research was shortlisted for the ‘Best Research Award’ in the competitive AHRC/Wellcome Medical Humanities Awards 2020. It has formed part of the evidence base for securing four current RCM projects totalling over £1.5m: (1) HEartS: The Health, Economic, and Social Impact of the Arts in the UK (AHRC); (2) ProMiMic: Professional Excellence in Meaningful Music in Healthcare (Dutch Research Council); (3) ZikMus: Using Music to Meet the Psychosocial Needs of Families Affected by ZIKA Virus (British Academy); and (4) Songs from Home: Addressing Postnatal Depression and Loneliness Through Online Songwriting (ESRC, Network+ funding).

4. Details of the impact

Impacts on the health and wellbeing of people: outcomes for women

As a direct result of the research, a new evidence-based lifestyle intervention has been established for women with symptoms of postnatal depression. The 10-week programme that was designed and tested in the original RCM research was implemented in 2017 as an ongoing service – *Melodies for Mums* – by Breathe Arts Health Research, a social enterprise spin-out of Guy's and St Thomas' Charity. The research led to the formation of this service, as explained by Breathe's interim director (2019): "Our *Melodies for Mums* service came about directly as a result of the Music and Motherhood research; it would not have happened without it. The research study has both informed how we deliver the programme (in that we closely follow the study's 10 week course structure, style and screening process) and been the basis on which we've been able to fund the service; individuals, the NHS and a large grant funder have all supported the programme financially because we have evidence from the RCM study that the programme is effective". To date, £282,309 of funding has been secured for delivery of *Melodies for Mums* on the basis of the research. 300 women have benefitted with a further 620 set to benefit in the next two and a half years (with the roll-out delayed in 2020 due to COVID-19).^[1] Women participating in the *Melodies for Mums* programme report that it supports their recovery, for example: "I remember the first *Melodies for Mums* that I went to and it made me cry because I just felt quite invisible at that point and quite useless, and I think that having something that I could do with her [my baby] made a real difference. It was something to look forward to every week, and things started to get better. The feeding got better and she started to put on weight...and I think it was a turning point for me".^[2]

Impacts on practitioners and the delivery of professional services: music and health practitioners

For music practitioners, the research has provided evidence to underpin and support the development and continuation of singing groups for new mothers. For example, the Bristol-based Folks & Bairns Choir, London/Sheffield based Pram Chorus, London-based Big Red Bus Club, and UK-wide Music Bus all cite the research in their marketing materials, using it to develop and justify programmes, to attract participants, and to publicize the mental health benefits of singing.^[3] The research has also supported continued professional development for both musicians and health professionals. In March 2019, the research formed the basis for a Thinktank hosted by Snape Maltings, where music practitioners worked alongside researchers and health professionals to consider how to develop their own use of music with mothers and families. Outcomes included a residency to develop training for practitioners wanting to deliver this work and a proposal to funders to upscale the *Melodies for Mums* programme (subsequently granted).^[4] A music practitioner and one of the thinktank participants, commented (2019): "The Music and Motherhood research has contributed significantly to my professional development and direction over the past two years. Whilst I've worked with parents and young children for many years, it helped me to 'connect the dots', and gave greater depth and meaning to what I do. I regularly reference this research when either writing funding applications, or advocating the work I do, as being foundational to the projects that I design and lead".

For healthcare practitioners, the research has been used to raise awareness of the role of music in maternal healthcare. For example, the evidence of music's effectiveness was featured at the Central and North West London Trust Learning Round in November 2018, as well as at the Psychological Medicine Clinical Network Perinatal Mental Health Stream in September 2020, with participants describing the input as "interesting", "informative", and "relevant". A thinktank participant and perinatal healthcare practitioner from South London and Maudsley NHS Foundation commented (2020): "Experiencing first-hand the discussion and practical session offered enabled me to confirm my knowledge around the importance of music and the mental health benefits to women. Music has always been a part of interventions in my work over the years, and having this research and knowledge as a practitioner is empowering to build on the knowledge and confidence as a tool to promote positive wellbeing, throughout some of the most difficult times as a new mum and parent".

Impacts on public policy

The research has contributed to key policy documents which have established the evidence and need for the role of the arts in healthcare. For example, it was cited in the World Health Organization (WHO, 2019) scoping review on the role of the arts in improving health and wellbeing which “in light of the size of the evidence base mapped...raises a number of policy considerations for members of the WHO European Region to support the development of long-term policies or strategies that will provide more synergized collaboration between health and arts sectors that could realize the potential of the arts for improving global health” (p.57). Further, it was listed in the All-Party Parliamentary Group on Arts, Health, and Wellbeing 2017 Creative Health report as evidence for the recommendation that “local authorities might ensure that health visitors, midwives, GPs and antenatal teachers are informed of the health and wellbeing benefits of arts participation for expectant mothers and those with pre-school and school-age children, and that these benefits are communicated to expectant and new mothers. Where there is little or no provision, local authorities might encourage partnership projects with local arts organisations” (p.86) and was cited in the All-Party Parliamentary Group on Arts, Health, and Wellbeing Submission to the Arts Council Strategy Consultation (2019) as “just one example of the enormous potential the arts has shown” in supporting maternal health.^[5] Additionally, the research has been cited in public-facing discussions as evidence for the importance of the rapidly expanding social prescribing movement in the UK.^[6]

The research was featured in the *Tomorrow's Child Exhibition* at the Houses of Parliament, 26 June–1 July 2016: “This was a powerful showcase of mixed media art and science that ignited a lively and informed dialogue amongst participants and the 4,000 politicians and staff, generating greater awareness of the importance of the conception to age two period with an overwhelmingly positive response”.^[7] The Mayor of London City Hall blog also cites *Melodies for Mums* and the “pioneering research” as “one of the programmes that inspired us as we researched how arts and culture can positively affect mental health and wellbeing”.^[8] Finally, the research has underpinned health policy via stakeholders. A consultant perinatal psychiatrist at St Mary's Hospital, London, commented (2019): “The research Music and Motherhood [MM] has had a profound impact on the newly established perinatal mental health services [PMHS], and as clinical lead of one of the largest services, I will ensure that the outcomes of the research will shape the future development of the PMHS in the context of the 10-year NHS plan. The current services target specifically women with severe acute or enduring mental illness providing assessment, psychosocial and pharmacological interventions. However, there are limited provisions to promote the recovery after discharge from specialist services and to maintain well the large proportion of women with mild to moderate degree of illness who do not meet criteria to access secondary specialist services. The research of MM indicates that this gap in provisions can be filled by participatory music-based initiatives”.

Impacts on understanding, learning and participation: Public awareness

Public awareness of the role of singing in maternal mental health has been raised via extensive media coverage of the research. In January 2018 the research was featured in 99 news outlets around the world, including in the UK, Europe, Asia, and North America,^[9] resulting in over 14,500 engagements. The research was also featured as a ‘Top 100 breakthrough’ by MadeAtUni, a campaign to bring to life the impact of universities on people, lives, and communities. After its opening at the Houses of Parliament, the *Tomorrow's Child Exhibition* toured to Oxford, Brighton, and London,^[7] with the exhibition Director commenting (2019): “[We had] lots of visitors and very good feedback...Pretty much everyone said it made them think differently about the 1001 days period, definitely raised awareness, even prompted changes in behaviour. One lady and her brother came three times from quite a distance to see it over the weekend as it had such an impact on them and said it helped them to understand their childhood! Everyone said it was inspiring”. Finally, in 2019 the research featured on BBC2 Trust Me I'm a Doctor (Series 8 Episode 4) as part of a broadcast to 1.27 million people focusing on the “health evidence you can really trust”: “the study gives new insight into how singing can help you recover from postnatal depression...as the mums in this group have shown, finding the right support or treatment can lead to a full recovery”.^[10]

5. Sources to corroborate the impact

[1] All individual testimonials available as emails on request. Contact details of individuals are also provided in the attached information.

[2] Breathe Arts Health Research Melodies for Mums. Testimonial evidenced in the video.
<https://breatheahr.org/melodies-for-mums/>

[3] e.g. Pram Chorus: <https://www.pramchorus.com/singforpnd>; Music Bus:
<https://musicbus.com/2019/02/baby-singing-groups-help-post-natal-depression/>

[4] Snape Maltings Think Tank, 13-14 March 2019: <https://snapemaltings.co.uk/project/singing-and-maternal-mental-health/>

[5] All-Party Parliamentary Group on Arts, Health and Wellbeing Submission to the Arts Council Strategy Consultation (2019) <https://culturehealthwellbeing.files.wordpress.com/2019/02/appg-submission-to-ace-consultation-1.pdf>

[6] Evidence for social prescribing: <https://theconversation.com/how-creativity-on-prescription-can-improve-mental-and-physical-health-93818>

[7] Tomorrow's Child Exhibition and tour: <https://www.zero2expo.com/parliament-2016/>

[8] Mayor of London City Hall blog: <https://www.london.gov.uk/city-hall-blog/melodies-mums>

[9] Media metrics: <https://www.cambridge.org/core/journals/the-british-journal-of-psychiatry/article/effect-of-singing-interventions-on-symptoms-of-postnatal-depression-threearm-randomised-controlled-trial/534122E539704BAEAC0824F9FCACC5A8#metrics>. Media engagements calculated by social media engagement, where available, per press article. Data available on request.

[10] Trust Me I'm a Doctor episode link, Episode 4, Series 8 broadcast on 26 September 2018 (from 23:08)
<https://www.dropbox.com/sh/cp1tpnhd43gxuiq/AADdVpCcSXhuyq4lcZVtvcv81a?dl=0>