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Voice Study Centre

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Module 4 –BMPF7013F
Independent Study

*Singing and Postnatal Depression: The Design and Implementation of a Research – Informed
Course*

Assessment 1 - Portfolio

Introduction

Through this study I intend to explore and gain a deeper understanding as to how singing can positively impact postnatal depression (PND). I will be focussing on core researchers in the field, those who have successfully contributed to my chosen specialism. From there, I will devise a course for mothers and infants that I can implement in my own work practice and community.

I will be exploring how singing can positively impact the bond and interaction between mother and baby, an aspect which is deemed essential to preventing and improving symptoms of postnatal depression, as ‘women who are depressed postnatally can fail to bond well with their baby and this can persist for a year’ (O’Higgins, et al., 2016, p. 381). This has only recently been determined, as previously it was thought that the interaction and communication was only beneficial to the infant (discussed in depth in the literature review). Due to recent discoveries by pioneering researchers Daisy Fancourt and Rosie Perkins, it is now known to be beneficial for the mother as well. Their study conducted in 2018 provided evidence that ‘singing has been recognised as a potential treatment for PND’ (Dovey, 2018). It is perceived that mother and baby are in a ‘two-way relationship in which both parties are active’ (O’Higgins, et al., 2016, p. 381). A cyclic pattern, where the parent and baby feed off each other. As Edwards states, ‘communication and relating in the early years of life are crucial to successful developmental outcomes in later childhood through to adulthood’ (Edwards, 2011, chapter 1).

There are currently organisations that use singing as a tool to aid and support mothers with their mental health, and therefore I will include and review these courses as it will be advantageous when devising my own course structure. I will be using the research to determine what elements are essential for inclusion, as well as to plan the duration and timescale of the classes.

My background and inspiration for investigating singing and postnatal depression

In my previous studies I investigated an overall review of how singing can positively impact mental health. My preliminary focus was specifically on community choirs, as a Musical Director for such groups, this coincided and successfully aided my work practice. During my research I came across articles and journals which were specific to postnatal depression. This was a pivotal turning point in my own development as a pedagogue as I had not previously contemplated working with mothers as an isolated group. I began to research the area further and I developed a new passion for a very definitive specialism.

As a mother to two young children, I particularly resonated with the subject as I believe my own circumstances are relatable from recent experiences. The studies I read ignited empathy for the mothers and infants, and I felt inspired to create similar support opportunities in my own community.

Postnatal Depression

“Enhanced mental health is not enough on its own to increase bonding.”

(Wisner, 2006 cited in Fancourt & Perkins, 2018)

‘Postnatal depression (PND) is a childbirth-related mental health condition’ (Van Puyvelde, 2014, p. 222), that ‘can affect between 10 – 15 women in every 100 women having a baby’ (Psychiatrists, 2018). The symptoms of the condition may include ‘fatigue and low energy, insomnia and anhedonia’ (Fancourt, et al., 2018, p. 1). It can be a ‘deliberating condition’ (Fancourt, et al., 2018, p. 1) and it may be ‘lonely, distressing and frightening’ (NHS, 2018). PND can ‘start any time in the first year after giving birth’ and ‘many women do not realise they have postnatal depression, because it can develop gradually’ (NHS, 2018).

PND can cause bonding issues between mother and her infant and ‘this can interfere with her ability to tune into her infant’s signals and in consequence may inhibit her capacity to provide the sensitive and emotionally nurturing environment the infant requires’ (Edwards, 2011, chapter 1). Poor bonding ‘is associated with adverse effects for infants’ (Fancourt & Perkins, 2018, p. 2) including ‘insecure attachment’ (Edwards, 2011, chapter 1), in addition to the infants ‘cognitive development, social competence, and general intelligence’ (Fancourt & Perkins, 2018, p. 2). In severe circumstances this may result in ‘subsequent child abuse or neglect’ and ‘may even play a role in the development of psychiatric symptoms in adulthood’ (Lima, 2010 cited in Fancourt & Perkins, 2018, p. 2).

The significance of ‘bonding not only has implications for babies but is also associated with psychological and behavioural states in mothers’ (Fancourt & Perkins, 2018, p. 2). Therefore, bonding between mother and infant is significant when discussing PND and its treatment. It is important to acknowledge that some mothers who have bonded well with their infant still experience symptoms and a diagnosis of PND. Although bonding is significant for many mothers, it is not always the cause of their symptoms. O’Higgins highlights this in a study at Mother Bonding at Year 1 where she states that ‘women with depression do not all experience problems with bonding and some women who are not depressed, do experience poor bonding’ (O’Higgins, et al., 2016, p. 382). Consideration of this may be necessary when designing the course in the second part of this project. Women who do not show signs of PND may find the singing course helpful for bonding, which in turn could be a positive consideration as it could target and facilitate a wide spectrum of mental health issues that are not isolated to PND. Music therapist Jane Edwards discusses how being ‘depressed can inhibit a mother’s ability to vary the pitch, tone and quality of her vocalizations. Singing in a group can support a mother in finding her own authentic voice and enable her to become more expressive and therefore more available to her baby’ (Edwards, 2011, chapter 5).

It has been recognised that ‘PND mothers are reported to be in need for supportive encounters with other mothers’ (Van Puyvelde, 2014, p. 222) and ‘identifying psychological interventions and positive parenting practices that can be encouraged among new mothers is of importance (Fancourt & Perkins, 2017, p. 149). Considering this, and that ‘the use of music and art methods in a parent–infant context has increased during the last decennium (Edwards, 2011, chapter 3), the singing for PND course could provide mothers with the support and therapy needed for those suffering, or preventing symptoms, of PND.

Considering such courses in oppose to pharmaceutical medication, may have its benefits as the ‘effects of medication on postnatal depression itself, have not shown strong effects of medication on mother-infant interactions and bonding’ (Fancourt & Perkins, 2018, p. 2). This is an issue I intend to explore further along in the project.

Planned programme of study

- Aims and objectives

- To investigate and understand the process of language (motherese) and bonding between mother and baby
- Gain a deeper understanding of postnatal depression, including symptoms, support and statistics
- Evaluate the implications the research may have on my own teaching practice
- Improve my research skills by gaining a better understanding of how to conduct a detailed literature review
- Conduct research within my project that is relevant to gaining a better understanding of the impact of how singing can impact mothers with postnatal depression or provide prevention

- Research objectives

- To carry out a thorough and comprehensive search for relevant articles, journals, books and websites that are specific to my project
- To consider conflicting arguments and claims against my proposal and the impact singing can have on mental health in general and specifically postnatal depression
- Conduct research through a method that is relevant and informative to my practice. This project will include a literature review
- Reflect on the learning process and research to encourage self-development as a vocal pedagogue
- Evaluate and consider the impact the reflection process may have on my own practice and course development
- Identify gaps in current knowledge and specify areas needed for future study

Learning development aims

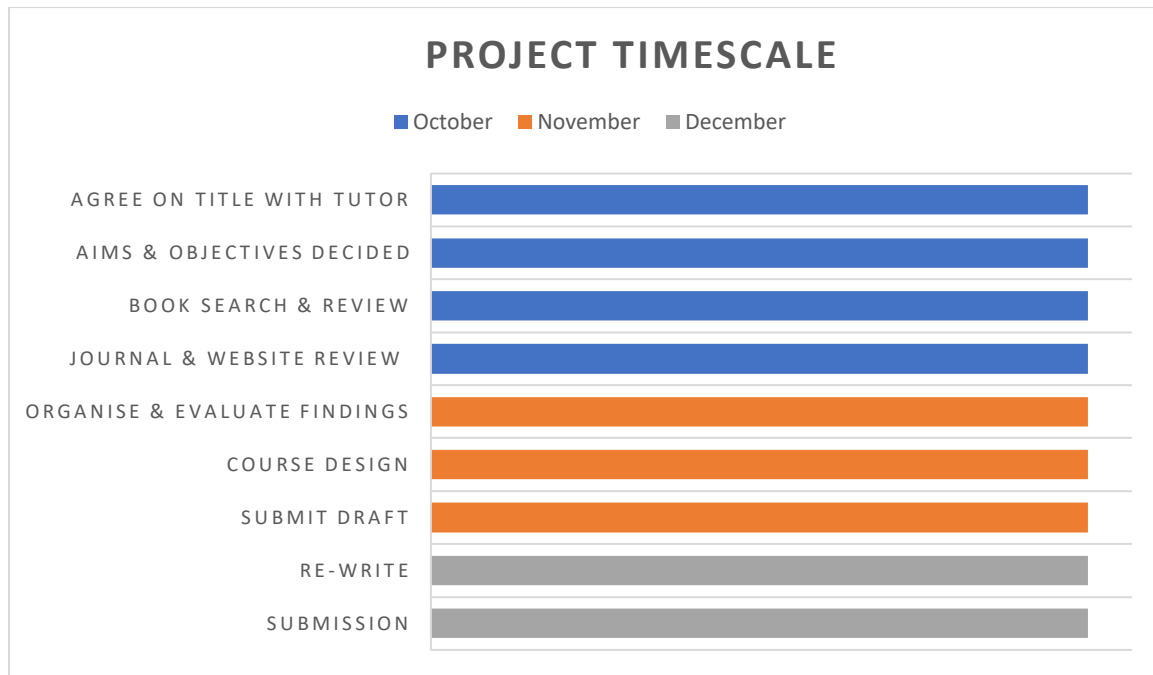
During this process, I hope to gain an awareness and understanding of the psychological and scientific process of language in infancy. I believe this will provide a foundation of knowledge from which I can explore how language and interaction between mother and baby impacts bonding. I believe this will provide a substantial amount of information and knowledge to underpin and explore how singing can be used to positively impact mental health in mothers. I will be using the work of leading researchers, Daisy Fancourt and Rosie Perkins, as a starting point to my exploration, and investigating the work of music therapists and other studies that have devised singing programmes for parents and infants.

Expected learning outcomes

The aim of this project is to use the knowledge gained during the literature review to create and devise my own course for mothers and their infants. One that has sound justification to provide support and aid those with symptoms of PND. I intend to have determined the duration of the course, length of each session, and provide a detailed and descriptive structure in the course design. This will be inspired from the knowledge gained from the literature review. I endeavour to have the course model finalised so that I can incorporate this into my teaching practice and run sessions within my own community.

Timescales and review dates

The following chart shows a proposed time scale for this independent project. Within this plan for competition, I outlined specific writing deadline dates for the subheadings within my project so that I stay diligent and disciplined throughout. I have found that structure within my research and writing creates a consistent and systematic work ethic. I believe that I flourish independently with clear structure and have found this beneficial when navigating a large project.



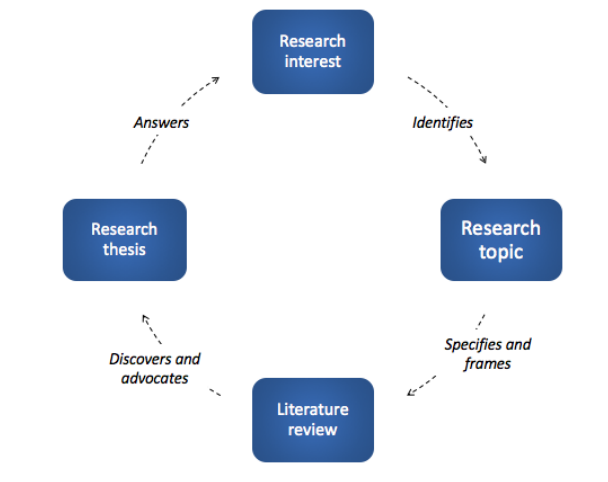
Literature review process

The literature review requires the ability ‘to locate, read and evaluate research documents, reports as well as thesis and other sources of academic materials’ (Open University Malaysia, 2010, p. 34). It is thought to be a ‘critical tool for success as an academic’ (Denney & Tewksbury, 2013, p. 1) and ‘it is an integral part of an entire research process’ (Cooper, 1989, p. 33). A successful literature review ‘demonstrates having a good grasp on available information for a topic, but it also assists in the learning process’ (Denney & Tewksbury, 2013, p. 1). There needs to be evidence of ‘a comprehensive overview of prior research regarding a specific topic’ (Denney & Tewksbury, 2013, p. 1). Throughout the process, I will ensure that I demonstrate ‘analytical thinking, critiquing ability and an empirical approach’ (Cooper, 1989, p. 33). By compiling and comparing ‘findings with those of others’ (Cooper, 1989, p. 33) this determines what is known about a topic, and what is not yet known’ (Denney & Tewksbury, 2013, p. 1).

To maintain focus and discipline during the project, I am aware that I need refer to my timescales and schedules throughout the process where I have set out ‘parameters and boundaries’ (Open University Malaysia, 2010, p. 39). This will provide consistency and during the research period and analysing of results, where it may be easy to be sidetracked by

data and findings. I am mindful that to conduct a purposeful literature review, I need to have designated subsequent time to develop and investigate results with the end focus of a completed course and the timescales have provided a structure to do this.

I have used the following template as a basis to navigate the literature review.



(Machi & McEvoy, 2009, p. 2)

- *Identifies*

As previously discussed, my interest in singing and PND grew out of my previous project where I investigated singing and mental health. This provided me with some prior knowledge of how singing can positively impact PND, as I was aware of leading researchers Daisy Fancourt and Rosie Perkins. I identified with the subject as it resonated with me personally. I felt compassion and empathy towards the women who were experiencing PND and passionate about how this could contribute and impact my own practice.

- *Specifies and frames*

I understand and comprehend information when I have clear and concise themes and therefore, whilst I was researching, I made notes of existing ideas and themes throughout the literature. In contrast to a historical methodology, the conceptual approach was beneficial when gaining a broad prospective on an array of documentation. This provided me with a goal 'to integrate and generalise findings across units, treatments, outcomes, and settings' (Randolph, 2009, p. 11) which I believe to be fundamental for creating and implementing an informed course.

The aim of the literature review for this project is to gain knowledge and awareness of singing and PND. Denney and Tewksbury state that ‘a well-done literature review includes all of the main themes and subthemes found within the general topic chosen for the study’ (Denney & Tewksbury, 2013, p. 1) and it should ‘identify and discuss/explain all of the main points or findings’ (Denney & Tewksbury, 2013, p. 2). Therefore, I have identified three themes and coherencies throughout the literature which will provide a strong foundation of awareness and understanding to create the course. I have divided my findings into the following groups:

- In the womb
- Motherese (Finlay, 2008)
- Singing and mother-infant bonding

- *Discovers and advocates*

In the literature review I intend to explore and analyse how these topics impact and influence the course design. These discoveries will implement and advocate the design, as the course must be implemented by the research. I intend for the course to be well structured with the content supported by the evidence determined and documented in the research.

- *Answers*

One could argue that the purpose of any study is to create answers to the findings. Answers that advocate change and trigger progression. This could be on a large scale if the research is pioneering or revolutionary or it could be rather small if the focus is to improve and evolve one’s own practice as a practitioner. The purpose of this project is to expand my own practice which could have an impact on the community I work in.

Chosen Paradigm

It is essential to identify my own paradigm perspective when conducting an informed project. A chosen paradigm determines a ‘consensual set of beliefs and practices that guide a field’ (Morgan, 2014, p. 49). A paradigm is a ‘shared world view that represents the beliefs and values in a discipline and that guides how problems are solved’ (Shwandt 2007: 84). Bogdan and Bilken further describe a paradigm as ‘a loose collection of logically related assumptions, concepts, or propositions that orient thinking and research’ (Bogdan and Bilklen 1998: 22).

This will align my own perceptions, and in turn, navigate my project to one that coincides with my own beliefs and principals. 'It is the choice of a paradigm that sets down the intent, motivation and expectations for the research' (Mackenzie & Knipe, 2006, p. 2).

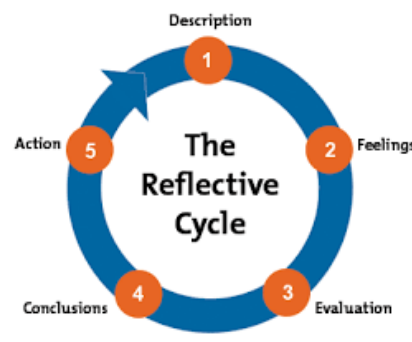
Having contemplated various paradigms, I consider social constructivism to resonate with this project. Constructivism 'grew out the philosophy of Edmund Husserl's phenomenology' (Mackenzie & Knipe, 2006, p. 3). 'Constructivists insist that the world is created by our own conceptions of it' (Morgan, 2014, p. 1048), and that 'reality is socially constructed' (Mertens 2005: 12). The 'primary focus on a person's thoughts about the nature of a research' (Morgan, 2014, p. 52) and the 'participants view of the situation being studies' (Creswell 2003: 8). As constructivism considers 'the world of human experience' (Cohen & Manion 1994: 36), 'the early comparisons between positivism and competing paradigm they called "naturalistic inquiry"' (Morgan, 2014, p. 52) it does 'not generally begin with a theory' but rather they 'generate or inductively develop a theory or parent of meaning' (Creswell 2003: 9). Constructivists, 'dispute the idea that any single reality exists it all depends on what angle you are coming from and from what perspective you have' (Denscombe, 2003, p. 134) For constructivists, therefore, reality only exists because of humans and there is no single truth and reality is interpreted. Its theoretical perspective is phenomenology, hermeneutics, and symbolic interactionism. The methodology used is often grounded theory and phenomenological research.

Epistemology is the theory of knowledge and explores how we find things out 'about the nature of knowledge and knowing' (Morgan, 2014, p. 52). It is closely connected to ontology as the epistemological position adopted will depend on researcher's beliefs about the ontological state of the world. Interpretivism is underpinned by constructivism, and argues that there are many different truths, therefore, interpretivist research priorities meaning and understanding over explanation and prediction.

Critical evaluation – The Learning Process

Critical evaluation is essential to develop and grow as an individual as 'reflective practice is often seen as the bedrock of professional identity' (Finlay, 2008, p. 2). Developing the 'individual practitioner in being self-aware and critically evaluating their own responses to practice situations' (Finlay, 2008, p. 1), they in turn 'gain new understandings and so improve future practice' (Finlay, 2008, p. 1).

For this assignment, and the portfolio section of this project, I will be reflecting-on-action. This is where ‘professionals consciously review, describe, analyse and evaluate their past practice with a view to gaining insight to improve future practice’ (Finlay, 2008, p. 3). ‘It helps educators make wise and principled decisions’ (Ghaye, 2010, p. 22) and ‘reflecting-on-practice means having a consistently reflective approach when teaching or learning’ (Ghaye, 2010, p. 23). I have used Gibbs reflective cycle as a format to work through the reflective process.



- *Description*

The purpose of this assignment was to collect evidence of how singing can positively impact PND and design a course that was supported by the data presented in the literature review. For part one of this assignment, the aim was to create a plan to navigate the project. This enabled a clear vision of what was required which in turn provided clarity of my intentions. These included:

- Timescales and reviews
- Aims and expectancies
- A literature review process
- An appointed paradigm
- A critical reflection of the process

- *Feelings*

Conducting the research, I could see clear themes across the material used, which in turn, created a sense of confidence when compiling and organising the data. Recognising and organising the themes confirmed that there is a strong connection between PND and singing which ignited and reaffirmed my initial passion for the subject.

Learning about the evolution of speech between mother and infants was a subject that was new to me and I found it extremely interesting. I consider the knowledge of how the relationship of language evolved between mothers and their young imperative to this project as it will offset and implement the course design. This wasn't an area I had previously considered to include, but it was clear during the research process that it was an important element theme.

I have felt very clear and in control of the process for this project. Creating structure for research, and timescales to write for each subject, provided effective time management from the onset to the submission date. I've felt confident that I will complete the project as best to my ability, and I have learnt from previous assignments that this structure is how I thrive and excel.

- *Evaluation*

The literature review has provided an array of knowledge in my chosen specialism from which I can base the course design. I have felt encouraged and inspired by the data collected as there is ample evidence to implement my ideas into fruition.

- *Conclusions*

The reflective process has provided recognition that although I enjoy the flexibility of distant learning, creating discipline through targets and timescales maintains focus during my studies.

As the pioneering researchers conducted their research during the past ten years, the topic of singing and postnatal depression is in its infancy. It is worth considering that there is potential scope for narrow and specific development and research, such as neonatal care, at home support, exploration of postnatal depression and singing past twelve months from delivery.

- *Actions*

Recognising the need for structure, I will continue to create timescales and structures for my future projects to maintain focus throughout my studies.

During the written assessment I will compile and present my findings of the literature review and offset this to design a singing course for mothers and babies. The two will be linked by the evidence and findings presented in the literature review. I will reflect again at the end of assessment two as to how I will implement and exhibit the course into my working practice

and community. I will also consider how I will navigate my studies further and how I will continue to develop singing and postnatal depression for future projects.

Assessment 2 – Written Assignment

Literature review

In the womb

The initial stages of the relationship between mother and infant begin ‘whilst still in the womb’ and the ‘connection to his or her mother is through the recognition of her voice’ (Edwards, 2011, chapter 1). The baby recognises the mothers voice ‘not only through airborne sound waves that penetrate the womb, but through bone conduction along her skeleton, so that her voice is felt as vibrations against the body’ (Colapinto, 2021, p. 25). Knowing that the ‘foetus’s primary sensory input, the mother’s voice makes a strong and indelible “first impression” (Colapinto, 2021, p. 25), is invaluable as cementing and validating the connection can begin early within the pregnancy. The impact of the mother’s voice continues to build throughout the pregnancy and ‘by the third trimester, the foetus not only distinguishes it’s mother’s voice from all other sounds, but is emotionally affected by it: her rousing tones kick up the foetal pulse; her soothing tones slow it’ (Colapinto, 2021, p. 26). This is vital information for when designing the course as there is scope to develop the concept further and create prenatal session(s).

It is interesting to note that the ‘father’s voice sparked no special interest in the newborn’ (DeCasper & Prescott, 1984) as ‘the male’s lower pitch penetrates the uterine wall less effectively and his voice is also not borne along the maternal skeleton (Colapinto, 2021, p. 27). This information could support the decision to focus on the relationship between mother and baby in the prenatal months. The variations of pitch are discussed further in the motherese subheading.

Motherese

Motherese is described as a ‘medium in which infants around the world initially perceive and eventually process their respective languages (Falk, 2004, p. 491). It is the conversation between mother and infant and ‘the main feature that distinguishes motherese from adult-directed (AD) speech, namely tone of voice or prosody, as a component of a primate gesture-call system that is totally separate from language’ (Falk, 2004, p. 491). It is a universal

language as the ‘prosodic exaggerations are adopted by parents in all cultures and languages and that every adult uses them when talking to babies’ (Colapinto, 2021, p. 36).

It is deemed that motherese ‘evolved as a way of supporting mother-infant interactions’ (Fancourt & Perkins, 2018, p. 2) and ‘anthropological theories suggest that one behaviour that may have evolved with the aim of enhancing mother – infant bonding is infant-directed singing’ (Fancourt & Perkins, 2018, p. 1). It is thought that motherese evolved into the ‘language acquisition today’ (Falk, 2004, p. 492). The anthropological theories of language ‘universally scaffolded onto motherese, and that the selection for vocal language occurred after early hominin mothers began engaging in routine affective vocalization toward their infants, a practice that characterizes modern women’ (Falk, 2004, p. 492). The journey of language begins at a young age as ‘human infants discover how rhythm organizes their native languages between birth and 2 months of age (Karmiloff & Karmiloff-Smith 2001) (Falk, 2004, p. 495). From there the play of motherese between mother and infant begins. Motherese characteristics include the ‘artificially high pitch which holds the infant’s attention and, when used along with the simplifications and repetitions, it becomes part of an elaborate voice-based language-tutoring system’ (Colapinto, 2021, p. 37). The pitch of the mother’s voice is significant as they may try to ‘match their pitch to infants’ vocalisations’ (Saint-Georges, et al., 2013, p. 7) and unbeknown to parents beforehand, ‘babies are best at detecting high pitched sounds’ (Colapinto, 2021, p. 37). It’s as if the infants ‘conspire with parents in their own language tutoring – and, with their own baby voices, help guide it (Colapinto, 2021, p. 53). Motherese is to ‘crucial to cognitive and emotional development’ (Saint-Georges, et al., 2013, p. 1) of the infant and for building and cementing the bond between mother and baby.

It is interesting to note that ‘mothers spoke entirely differently to children of one month to two years old that to children who are ten years old’ (Colapinto, 2021, p. 35). This shows that the development and maturity of the child is matched with the development of speech and language, and as the child matures, the tone and style of the speech also evolves.

Remarkably, both young children and childless women express characteristics of motherese when talking to infants and young children, including a higher pitch, repetition and referring to themselves in third person. It has been reported that ‘children as young as four adopt the infant-directed singsong when talking to two-year olds – or to their dolls’ (Colapinto, 2021, p. 36). ‘and that the childless women also adopted these unique features of infant-directed

speech' (Colapinto, 2021, p. 35). Consideration of how singing could help solidify and develop bonding between mothers and adoptive children is an interesting perspective.

Singing and Mother-Infant Bonding

Women who sing to their babies in the 3 months following birth have significantly higher self-reported mother-infant bond as well as lower perceived stress.

(Persico, 2017 cited in Fancourt & Perkins, 2018)

There are many studies and reports documenting the positive impact singing can have on both physical and mental health wellbeing. It is thought that 'of all the arts, music may just claim to have the greatest significance in relation to health and healing' (Clift & Hancox, 2001, para.1). Although there is such evidence and many support groups and organisations that implement these findings, 'there remains a lack of psychological creative intervention studies for women with PND' (Fancourt, et al., 2018, p. 2).

Studies have shown that 'singing has been shown to calm heart rate, increase oxygen saturation and caloric intake, and decrease the number of negative and critical events in infants in neonatal intensive care units' (Desquiotz-Sunnen, 2007 cited in Fancourt & Perkins, 2018). Singing is perceived to be a 'fast promoter of social cohesion between mothers and babies' (Fancourt & Perkins, 2018, p. 7) and that it 'increases maternal perceptions of emotional closeness in comparison to other social interactions' (Fancourt & Perkins, 2018, p. 1).

A recent study by Daisy Fancourt and Rosie Perkins documents data collected from 391 mothers spanning from 4 – 40 weeks postpartum. They categorised the frequency of singing of mother to baby from 'daily vs non-daily' and used regression models to 'explore associations between both singing to babies and listening to music and symptoms of postnatal depression' (Fancourt & Perkins, 2017, p. 150). Singing was significantly associated with fewer symptoms of postnatal depression and enhanced wellbeing, self-esteem and self-reported mother-infant bond' (Fancourt & Perkins, 2017, p. 150). This study was pioneering as it was the first to demonstrate 'that daily singing to babies is associated with fewer symptoms of postnatal depression and higher levels of wellbeing, self-esteem and perceived mother-infant bond' (Fancourt & Perkins, 2017, p. 151). Fancourt suggests that there are 'four factors that account for the benefits of musical engagement such as singing: the music

itself, the social engagement, the physical act of singing and personal responses to what is sung (Fancourt & Perkins, 2017, p. 151).

Another study conducted by Fancourt, Perkins and Yorke ‘compared the effects of a 10-week programme of group singing for new mothers and their babies with 10 weeks of usual care’ (Fancourt, et al., 2018, p. 2). The study showed that ‘symptoms of PND reduced significantly faster amongst mothers in the singing group with moderate – severe PND than for mother in the usual care group’ (Fancourt, et al., 2018, p. 2). The study showed that ‘singing - but not play – led to more rapid reductions in moderate severe symptoms of PND than usual care’ (Fancourt, et al., 2018, p. 9). The study categorised the subsequent points into ‘transversal mechanisms’ which deem beneficial for ‘more generic creative interventions for postnatal mental health recovery’:

- 1) A shared experience for mothers of seeing babies a
- 2) Learning new activities which increased confidence
- 3) Enhanced self-esteem
- 4) Social cohesion and the sense of belonging
- 5) Created structure and routine into daily life
- 6) Calm and inclusive environment

(Fancourt, et al., 2018, p. 9)

It is worth noting that ‘mother-mother bonding increased more during the non-music comparison’ and this ‘could suggest that mothers felt more at ease with one another in the social conditions’ (Fancourt & Perkins, 2018, p. 7). Considering the importance of a network of support, and how bonding with other mothers may be vital for mental health wellbeing, including time for social interaction may be an important element to the course design.

In preparation to designing this course, I have researched similar structured organisations and the work of music therapists for inspiration and guidance. These included the Australian group *Sing & Grow*, music therapist Jane Edwards and the work of researchers Daisy Fancourt and Rosie Perkins. There were a number of factors that need consideration, including the following;

- Length of course
- Duration of sessions

- Style & genre of music taught
- The possibility of including social time
- The incorporation of mindfulness and wellbeing

Sing and Grow is structured with ten weekly sessions whilst some groups have used fewer, suggesting a 'minimum of four sessions are needed (Rodrigues et al., 2008) (Van Puyvelde, 2014, p. 223). Daisy Fancourt also used 10 weekly sessions in her PND and group singing study.

Many of the groups specified the importance of a welcome song which is repeated at the start of each session. The welcome song is significant as 'the lyrics of these songs included the names of all participants, fostered companionship and established a predictable ritual or structure' (Van Puyvelde, 2014, p. 224). Edwards confirms the importance of 'singing the baby's name whilst making eye contact as thus can help to support development of this connection further by creating a stronger sense of identification' (Edwards, 2011, chapter 4).

When considering the choice of repertoire for the group it is worth considering whether to use traditional songs, such as nursery rhymes, or to explore alternative genres and styles of music. Fancourt 'moved away from more standard repertoire for mothers and babies (such as nursery rhymes) to include songs and music from around the world. This enabled mothers to contribute songs from their own culture and backgrounds' (Fancourt, et al., 2018, p. 9). This is an interesting consideration if working with mixed ethnicities. Commenting on the tuition of global songs, one participant made the following statement.

I love that some were quite global songs, like some are Indonesian. That's just a wonderful thing. To be in a group of women singing global songs was quite powerful I though, so that was nice. Not just nursery rhymes [Sing 4].

(Fancourt, et al., 2018, p. 5)

The inclusion of lullabies within the repertoire is considered important to boost and encourage bonding between mother and infant. It has been reported that the purpose of lullabies can enhance 'feelings associated with motherhood and in the understanding babies' responses' (Fancourt, et al., 2018, p. 5).

Other participants commented on how the singing group was ‘a time for mothers’ ‘me time’ ‘good for the baby, but at the same time it’s something for us as well’ [Sing 3] (Fancourt, et al., 2018, p. 6). Another noted that the ‘spaces were non-judgmental, particularly in relation to their baby’s behaviour’ (Fancourt, et al., 2018, p. 8) which can be important in the initial stages of parenthood. Receiving and recognising support from the group leader and peers within the group can be encouraging and supportive.

It was noted that ‘relaxation techniques could support recovery from depression’ (Fancourt, et al., 2018, p. 9) which is where the use of mindfulness could be integrated into the class structure. I hold a Yoga and Mindfulness teaching qualification and therefore I would feel confident in including some simple breathing and relaxation techniques in conjunction with the singing. This could support the need for a calm and relaxing environment which was an element discussed by participants in Fancourt’s study as ‘the sessions were reported to be calm’ (Fancourt, et al., 2018, p. 8).

It is worth noting that although there is ample evidence to suggest that singing can improve and solidify a bond between mother and infant for women who are suffering with PND, as discussed in part 1, not all women experiencing PND will have an issue of bonding with their baby. Therefore, singing as a stand-alone activity (with or without their baby) could improve their mood and lift feelings of depression. Mothers could experience improvements in their symptoms from singing and being a part of a group. As discussed in my previous assignment where I explored singing and mental health, ‘it is not groups per se that cure depression, but rather groups with which we *identify* that cure depression’ (Cruwys, et al., 2014). For those who are not experience any difficulty bonding with their baby, the social inclusion and relatability from singing within a group may offer aid and support to reduce symptoms of PND.

Singing for postnatal depression course design

PND has been linked with reduced mother-infant bond, and it appears that singing may provide one mechanism for supporting this bond.

(Fancourt, et al., 2018, p. 10)

Mums & Cubs – Group Name

Having a title for the group is vital for promoting the sessions within the community. I envisaged the name to embody and reflect the bond and relationship between mother and baby. I also wanted it to be gender neutral, so it did not distinguish between boy and girl infants. ‘Mums & Cubs’ captures the nurturing and dependency of the mother-infant relationship and is adaptable to its purpose of singing and social engagement.

Length of course

I have decided to design and initially run the course for six weeks. Drawing from the research, similar groups recommended between four – ten sessions. Six sessions provide the opportunity to gain feedback from the attendees, as well as to reflect and journal the experience. From here I can develop and make changes to the schedule and course design where necessary.

Duration

From the information gained from the literature review, I am aware that most of the comparable singing classes were approximately an hour. I have worked within the same time frame and have structured the sessions into the following format.

0 – 5 minutes	• Music playing on entry • Welcome • Overview of the session • What to expect
5 – 15 minutes	• Welcome song • Gentle voice warm-up • Seated yoga stretches

15 – 45 minutes	• Chosen song taught via call and response • Backing track shared for those who want to sing at home
45 – 55 minutes	• Gentle vocal cool down • Mindfulness/Breathing exercise
55 – 1 hour	• Verbal encouragement and close

Room layout & equipment

I would organise the room so that the participants would sit on the floor and would suggest bringing a yoga mat or a blanket. There is a possibility these could be provided at the venue. For those who did not want to sit on the floor, chairs would be available. Sitting on the floor would be more manageable for the attendees when supporting their babies at various stages of development, whether they are sitting/nursing/tummy time. In turn this would also create an informal and relaxed atmosphere. Sitting in a circle would create an inclusive environment and would allow the participants to engage with each other throughout the session.

The equipment I would require for each session would be a speaker to play backing tracks and music, a yoga mat to sit on during the sessions, piano or keyboard to accompany or teach any melody lines, lyric and lead sheets.

Social Engagement

Each session will run for one hour with time to socialise with other attendees before and after the session. I will do this by opening the space at least fifteen minutes prior to the starting time. This will allow the women to arrive with ease and have time engage socially with each other. At the end of the session, if the venue has sufficient facilities, I will consider the possibility of incorporating time for social interaction through refreshments and open discussion. This would not necessarily need to happen every week but could be on week 2, week 4 and on the final session of week 6. This has worked well with other community singing groups I have ran, as it gave an opportunity for social interaction but didn't interrupt the singing class by having a break and then resuming afterwards. It also provides the attendees with a choice as to whether they want to socially engage through conversation and the flexibility not to have to commit to it each week.

Welcome Song

As acknowledged within the literature review, there was a unified contentment that the incorporation of a 'welcome song' held high significance. To make it unique to the 'Mums & Cubs' course design, I have composed a short welcome song. I was conscious for it to have a simple melody line with lots of repeated patterns so that it is easy for the participants to learn and remember. I was keen to include the group name of 'Mums & Cubs' so it related to the title of the singing group. I also incorporated a section where the whole group, including each mother, sings the name of their baby. The song is composed in F major which gives it an uplifting quality and the vocal range of the song would suit most female singers. The song is written in a jazz swing to create a bouncy feel to the piece. I have included a lead sheet of the welcome song within the appendix.

Repertoire

When I first had the inspiration to run the postnatal singing classes, I wanted the repertoire to reflect the genres I work with as a singing teacher. I envisaged popular music and well-known musical theatre songs, where the lyrics or sentiment would be poignant to the mothers. My justification for this was that during my experience with community singing groups, contemporary music choices resonated with many members overall and it would also differ from some of the other more traditional mother and child singing groups where the focus would be on nursery rhymes. This choice is supported through the literature review where I discovered many mothers wanted to steer away from the nursery rhyme repertoire and focus on songs that were relevant to them.

I have included an appendix which include some lead sheets for the repertoire chosen, but I will discuss the reasons for a handful of the songs selected.

- Yellow – Coldplay

*Look at the stars
Look how they shine for you
And everything you do
They were all yellow*

- Yellow by Coldplay (2000)

The melody of the verses for this song is relatively simple in terms of pitch and rhythm and it is also very repetitive. The lyrics are beautifully written with a sacrificial undertone, where the meaning could be interpreted as to what lengths the love of a mother would go for their child. The focus of this being around stars gives it a connection to childhood and innocence and therefore it deemed a good choice for the opening week.

As the song progresses there are a couple of lines in the second chorus which could be substituted for the lyrics in the first chorus to keep the mood and momentum of the song light-hearted for the purpose of this course. This is also creates repetition and defers from overwhelming the mothers with extensive lyrics.

- Isn't She Lovely – Stevie Wonder

*“Isn't she lovely?
Life and love are the same
Life is Aisha
The meaning of her name”*

- *Isn't She Lovely by Stevie Wonder (1976)*

I chose to incorporate this song as the melody is uplifting and the tempo is lively, and it has a 'feel good' vibe. The lyrics are extremely poignant as Stevie Wonder wrote the song about the birth of his daughter, Aisha. The content of the lyrics is full of gratitude and encompassing love which is described throughout the three verses of the song.

As discovered through the literature review, personalising the songs for individual mothers and their babies was very important. By replacing 'Aisha' for their own child's name in the lyrics of the third verse, personalises the song and singing experience. This creates a special version for each mother and their baby when singing this song.

The same idea can be adapted when learning 'Songbird' by Fleetwood Mac. The lyrics at the end of the chorus can be substituted for the name of the mother's baby which again would reflect the significance of mother's connecting to their babies through speaking their name.

*'I love you, I love you, I love.... (insert infants name)'
Songbird by Fleetwood Mac (1977)*

- Summertime – George & Ira Gershwin

I have included a lullaby within the course as discussed in the literature review that previous research has shown that singing lullabies has boosted the feelings connected to motherhood and enhanced the mothers' perceptions of their baby's needs. For this purpose, I selected '*Summertime*' written by George and Ira Gershwin for the musical *Porgy & Bess*. This song is often associated within the jazz genre as it is recognised as a jazz standard but in its true form it was a lullaby. The lyrics host a soothing and comforting melodic line which is written in a comfortable range for a female voice. The first verse talks of consoling the child with the lyrics '*hush little baby, don't you cry,*' and the second verse touches on adolescence and the infant growing older where '*you'll spread your wings, and take to the skies*' (lead sheet in appendix).

Mindfulness

The appendix also includes a visual diagram and description of each of the yoga poses. All of those selected for the course can be performed seated on the floor or a chair, and were selected to ease tension in the upper body. In a previous assignment, I had investigated the connection between yoga and singing and how it can release unwanted tension in relation to the voice and body. 'Yoga offers relaxation techniques for both mind and body that allow the singer to perform with a sense of ease and confidence' (Carman, 2012, p. 5). The inclusion of some simple yoga stretches will support attendees in relaxation so they can continue the session with ease and release of any upper shoulder and neck tension. It will also be advantageous to lose any unwanted tension and discomfort the mother may have from holding and carrying their baby.

	Warm Up	Song Choice	Cool Down	Additional Notes
Session 1	Gentle vocal warmups including sirens and tongue twisters. Seated yoga stretches including neck roll, neck side stretch and seated cat cow. Teach welcome song.	Yellow - Coldplay Learn song via call and response from memory. Share backing track with attendees for those who wish to sing at home.	Box breathing exercise – counting to four breathing on a slow inhale and exhale. Gradually slow down the counts.	
Session 2	Repeat previous weeks vocal warm up and yoga stretches. Recap and sing the welcome song.	Isn't She Lovely - Stevie Wonder Encourage mothers to replace Aisha with their own child's name. Share backing track with attendees for those who wish to sing at home.	40 – 0 breathing exercise Inhale and exhale on each count from 40 – 20. Inhale and exhale on each count from 20 – 0.	Invite attendees to stay afterwards for refreshments and social interaction.
Session 3	Provide background information on today's song	Summertime - Gershwin	Include 'You are my Sunshine' for cool down as	

	choice that it was written as a lullaby, even though it is regarded as a jazz standard. Welcome song, gentle vocal warm up and yoga stretches. Additional poses; butterfly and seated twist	Continue to share backing tracks and encourage singing at home with baby between sessions.	well as box breathing exercise.	
Session 4	Welcome song followed by vocal and physical warm up. Additional pose including eagle.	True Colours - Cyndi Lauper Continue to share backing tracks and encourage singing at home with baby between sessions.	Recap songs from previous weeks. Alternate nostril breathing exercise. Using the thumb and ring finger and little finger of the right hand gently close the right nostril, breathing in through the left.	Invite attendees to stay afterwards for refreshments and social interaction.

			Then close the left nostril, open the right and breath out fully. Repeat a few times, then breathe out fully through the left nostril and rest, taking a few full breaths.	
Session 5	Welcome song followed by vocal and physical warm up through yoga asanas. Additional pose – cow/face pose Inspire attendees to find their own pace with the warm up and to try out at home.	Three Little Birds - Bob Marley Encourage fun and interaction between mother and baby with this upbeat and feel-good song.		
Session 6	Welcome song. Integrate all vocal exercises	Songbird - Fleetwood Mac	Recap all songs learnt throughout the	Invite attendees to stay afterwards for

	and physical yoga asanas into the final warm up.	Encourage mothers to replace the final 'you' of the chorus with the name of their child.	previous five sessions. Close with reflection through box breathing exercise.	refreshments and social interaction.
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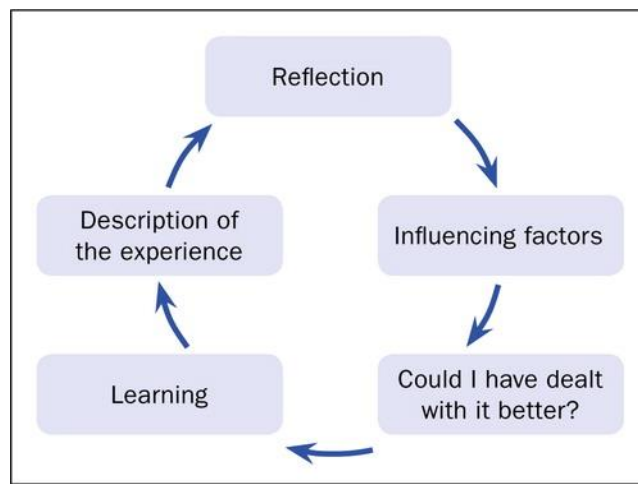
Reflection of learning

“At one end stands reflection, defined simply as ‘thinking about’ something after the event. At the other end stands reflexivity: a more immediate and dynamic process which involve continuing self-awareness. Critical reflection lies somewhere in between.”

(Finlay, 2008, p. 6)

As it is deemed that ‘all professionals should reflect on practice – both in general and with regard to specific situations’ (Finlay, 2008, p. 3), I will critically evaluate and reflect as I continue to learn and develop as a vocal pedagogue.

I will be using John’s model for the basis of reflective practice for second part of this project. John’s model uses five probing sections which provide scope to aesthetics, personal knowing, ethics and empirics and then the opportunity to explore how this has changed their own practice.



- John’s Reflective Model (1995)

- *Description of the experience*

I felt a sense of enthusiasm from the offset as my chosen specialism had developed during the process of the previous module, where I had been investigating singing and mental health. Having narrowed my area of study to a specific community and mental health issue, it created a sense of purpose to my studies. I felt passionate about investigating how PND negatively impacts mental health and how singing could improve symptoms and wellbeing.

I was also eager to learn more about the process of language in the early months of an infant's life and what impact the relationship with their mother can have on the development speech and language. These two themes, although separate topics, began to appear influential to each other the more I investigated the subject. As I began to explore the purpose and effect of language, clarity on the subject became transferable onto the art of singing.

Investigating the literature available, I was aware that I needed to gather information on the evolution and development of motherese. This was fundamental to the project as understanding the significance of motherese provided a solid starting point from which I could divulge into infant language and development.

The course design was research led, and therefore the structure and content needed to be justified and influenced by the literature review. Each decision was supported from the research and resources documented which, as a result, navigated the course design. This ensured that the class was not just a singing class for mother and babies to enjoy but that it was research led. As a result it can offer support to women and potentially improve the symptoms of PND and mother-infant bonding.

- *Reflection*

I felt that I was organised and prepared for this assignment and that I already had some pre-existing knowledge from the previous project. Being aware of the leading researchers in the field, I was able to revisit their journals which provided a strong start to the research process.

The literature review was essential for this project as it directed the course design and supported the decisions needed when creating the structure and content. It was an integral part to the process, and in return it has provided me with confidence to deliver the classes. As I hope to lead the course within my local community, I now feel knowledgeable on the subjects covered within the assignment, such as PND, motherese and mother-infant bonding. Without gaining this information first, I wouldn't be able to lead the sessions with integrity as there would be gaps in my comprehension and understanding.

As this assignment concludes, I have recognised how my studies have inspired my development as a vocal pedagogue. I have completed further teaching qualifications in yoga and mindfulness which was inspired by the completion of my first assignment. I have also

launched a male voice choir because of my project on mental health and singing. Recognising my development is encouraging and uplifting to appreciate how my studies have had a direct impact on my work portfolio. I am also aware that the three previous assignments have positively contributed to this project. The skills and knowledge I have attained have impacted the development of this project which is encouraging when considering the potential fruition of my future assignments.

- *Influencing Factors*

At times I found it difficult to distinguish the literature available to those significant for music therapy and those that would be relevant as a vocal practitioner. Occasionally I had to reevaluate the significance of the literature I was reading as to whether it was relevant to the project. As the project is based on mental health and well-being, some music therapy literature was relevant and extremely useful when designing the project, but I had to be aware not to become too engrossed with the music therapy literature available.

I feel passionate about PND and the prospect of how singing could support women through the symptoms surrounding the mental health condition. I have been conscious not to allow my own experiences of motherhood to inadvertently influence the course design. Although this could be perceived as advantageous, as my own experiences could assist in shaping the format and content. I am aware that as an individual, my experiences and preferences could be skewed to my likings. Naturally the course will be a projection of my work as a vocal practitioner and musician, but I believe it is important to keep an open mind when planning a group session so that they are accessible to the majority.

I made decisions in the course design that I believe reflect my style as a musician. Selecting popular music and musical theatre songs for the repertoire deemed appropriate as they are an extension of my abilities as a vocal pedagogue. One could question why I did not include any world music in the course design, as it was documented in the literature review. I did this as I wanted to be confident in the repertoire selected and so that the course reflected my musical ethos. In reflection, this also makes my course design a little different from others available as it could be more relatable for the participants who know and enjoy the genres selected.

- *Could I have dealt with it better?*

When conducting the literature review, I occasionally became overwhelmed with the prospect of including research relating to the evolutionary process of language and motherese. The scientific nature was different to any of my previous studies and there was a fear of the unknown. I was aware that when I was approaching some of the previous projects my viewpoint as a researcher was conceptual and subjective. Exploring material that was under the umbrella of biology and evolution was a new area for me as a vocal pedagogue. I could have dealt with this issue better and altered my mindset when approaching the material. I have often explored sources that are of a scientific nature in relation to singing and the voice and therefore I should approach this in a similar fashion. Being aware that singing and the voice overlaps and coincides with many other aspects of learning will allow me to be open minded in the future.

- *Learning*

I have learnt that I work better when working within a timeline with structured goals. By breaking down the project and devising a timeline made the learning process more manageable. It provided focus, rather than being overwhelmed by the magnitude of an extensive project and this is something I will implement in future assignments.

Through this assignment I have become aware that an investigation of voice often overlaps into different fields. For instance, my project investigating PND and singing has initiated exploration of mental health, music therapy, evolution and language development. My own reflection has led me to contemplate how the voice is a part of the human body and therefore the subject of singing can seep into many different subjects. Although I may have already been aware of this, during the reflection process I have acknowledged the necessity to keep an open mind during research and investigation.

The exploration of this project has provided clarification that I want to explore singing and PND within my own practice and community. I hope to pilot the course and use the next assignment to gather research to fine tune and develop the course further.

Conclusion

This project has produced clarity and focus as how I intend to progress with this specialism. As documented in part 1 of this assignment, it has been stated that pharmaceutical prescriptions of antidepressants were advantageous for the symptoms of PND but they do not aid in the bond between mother and infant. Therefore, it is possible that such courses could be helpful in supporting women in bonding with their babies through social prescription. As I intend to develop this area of study further, I will consider how 'Mums & Cubs' could support mothers and infants with issues of bonding and symptoms of PND, in particular those with diverse backgrounds, through the consideration of funding, social prescription or in conjunction with the NHS.

As previously discussed, there is potential to develop the course for different specialisms which may include prenatal mothers and mothers and their adopted children.

Bibliography

- Beck, C. T., 2002. Postpartum depression, qualitative health research. *SAGE*, 12(4), pp. 453-472.
- Bicking Kinsey, C., Baptiste - Roberts, K. & Kjerulff, K. H., 2014. Birth-related, psychosocial, and emotional correlates of positive maternal–infant bonding in a cohort of first-time mothers. *Midwifery*, Volume 30, pp. 188-194.
- Bieleninik, 2016. Music Therapy for Preterm Infants and their Parents. *Pediatrics*, 138(3), p. 971.
- Bozette, M., 2007. A Review of Research on Premature Infant-Mother Interaction. *Newborn and Infant Nursing Reviews*, 7(1), pp. 49-55.
- Carman, J. E., 2012. *Yoga for Singing*. New York: Oxford University Press.
- Clift, S. M. & Hancox, G., 2001. The perceived benefits of singing: findings from preliminary surveys of a university college choral society. *The Journal of The Royal Society for the Promotion of Health*, 121(4), pp. 248-256.
- Colapinto, J., 2021. *This is the Voice*. 1st ed. New York: Simon & Schuster.
- Coombes, E. & Al-Muzaffar, I., 2020. The Singing Unit - A pilot study investigating the efficacy of a music therapy singing intervention. *Journal of Neonatal Nursing*, 27(1), pp. 47-51.
- Cooper, H. M., 1989. *Integrating research: a guide for literature reviews*. 2nd ed. s.l.:SAGE Publications.
- Cruwys, T. et al., 2014. Feeling connected again: Interventions that increase social identification reduce depression symptoms in community and clinical settings. *Journal of Affective Disorders*, Volume 159, pp. 139-146.
- DeCasper, A. & Prescott, P. A., 1984. 'Human Newborns' Perception of Male Voice: Preference, Discrimination and Reinforcing Value'. *Developmental Psychology*, 17(5), pp. 481-91.
- Denney, A. S. & Tewksbury, R., 2013. How to Write a Literature Review. *Journal of Criminal Justice Education*, 24(2), pp. 218-234.
- Denscombe, M., 2003. *The Good Research Guide for small-scale social research projects*. 2nd ed. Maidenhead, England: Open University Press.
- Desquiotz-Sunnen, N., 2007. Singing for preterm born infants music therapy in neonatology. *Bulletin de la Societe des sciences medicales du Grand-Duché de Luxembourg*, Volume 1, pp. 131-141.

Dovey, D., 2018. *News Week*. [Online]

Available at: <https://www.newsweek.com/singing-your-baby-can-help-new-moms-recover-faster-postnatal-depression-775682>

[Accessed 8 12 2021].

Edwards, J., 2011. *Music Therapy and Parent Infant Bonding*. London: Oxford Scholarship Pub.

Edwards, J., 2011. The use of music therapy to promote attachment. *Arts of Psychotherapy*, Volume 38, pp. 190-195.

Falk, D., 2004. Prelinguistic Evolution in Early Hominins: Whence motherese?. *Behavioral and Brain Sciences*, Volume 27, pp. 491-541.

Fancourt, D. & Perkins, R., 2017. *Associations between singing to babies and symptoms of postnatal depression, wellbeing, self-esteem and mother-infant bond*. [Online]

Available at: www.elsevier.com/locate/elsevier

[Accessed 18 08 2021].

Fancourt, D. & Perkins, R., 2018. The effects of mother–infant singing on emotional closeness, affect, anxiety, and stress hormones. *Music & Science*, Volume 1, pp. 1-10.

Fancourt, D., Perkins, R. & Yorke, S., 2018. How group singing facilitates recovery from the symptoms of postnatal depression: a comparative qualitative study. *BMC Psychology*, 6(41).

Finlay, L., 2008. *Reflecting of "Reflective Practice"*, s.l.: Open University.

Ghaye, T., 2010. *Teaching and Learning through Reflective Practice: A Practical Guide for Positive Action*. 2nd ed. s.l.:Routledge.

Lima, A., 2010. The role of early parental bonding in the development of psychiatric symptoms in adulthood. *Current Opinion in Psychiatry*, Volume 23, pp. 383-387.

Machi, L. A. & McEvoy, B. T., 2009. *The literature review: Six steps to success..* Thousand Oaks, CA: Corwin Press.

Mackenzie, N. & Knipe, S., 2006. Research dilemmas: Paradigms, methods and methodology. *Issues in Educational Research*, Volume 16.

Morgan, D. L., 2007. Paradigms Lost and Pragmatism Regained: Methodological Implications of Combining Qualitative and Quantitative Methods. *Journal of Mixed Methods Research*, 1(1), pp. 48-76.

Morgan, D. L., 2014. Pragmatism as a Paradigm for Social Research. *Qualitative Inquiry*, 20(8), pp. 1045-1053.

NHS, 2018. *Overview - Postnatal depression*. [Online]

Available at: <https://www.nhs.uk/mental-health/conditions/post-natal-depression/overview/>
[Accessed 17 10 2021].

O'Higgins, M., St James Roberts, I., Glover, V. & Taylor, A., 2016. Mother-child bonding at 1 year; associations with symptoms of postnatal depression and bonding in the first few weeks. *Womens Mental Health*, Volume 16, pp. 381-389.

Open University Malaysia, 2010. *Research Methodology*. [Online]

Available at:

https://dtk.tankonyvtar.hu/xmlui/bitstream/handle/123456789/12515/22._research_methodology.pdf?sequence=-1&isAllowed=y&fbclid=IwAR0NIAmPhGzZsm_sMOuNVnPm8Zwd6J_hgqJbDCjWyZiOig0R9EPPwyl_Mhw

[Accessed 09 05 July].

Papousek, 1996. Intuitive Parenting: A Hidden Source of Musical Stimulation in Infancy. *Musical Beginnings*, Volume Oxford University Press, pp. 88-112.

Perrelli, J. G. A., Zambaldi, C. F., Cantilino, A. & Sougey, E. B., 2014. Mother-child bonding assessment tools. *Sociedade de Pediatria*, 32(3), pp. 257-265.

Persico, 2017. Maternal singing of lullabies during pregnancy and after birth: Effects on mother–infant bonding and on newborns' behaviour.. *Women and Birth*, Volume 30, pp. 214-220.

Psychiatrists, R. C. o., 2018. *Royal College of Psychiatrists*. [Online]

Available at: <https://www.rcpsych.ac.uk/mental-health/problems-disorders/post-natal-depression>

[Accessed 9 October 2021].

Randolph, J. J., 2009. A Guide to Writing the Dissertation Literature Review. *Practical Assessment, Research & Evaluation*, 14(13), pp. 1 - 13.

Renshaw, M., Hennegan, J. & Kruske, S., 2014. Holding the baby: Early mother–infant contact after childbirth and outcomes. *Midwifery*, Volume 30, pp. 177-187.

Saint-Georges, C. et al., 2013. Motherese in Interaction: At the Cross-Road of Emotion and Cognition? (A Systematic Review). *PLOS ONE*, 8(10).

Van Puyvelde, M., 2014. Shall We Dance?. *Infant Mental Health Journal*, 35(3), pp. 220-232.

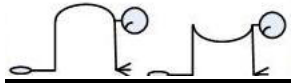
Wisner, K., 2006. Postpartum depression: A randomized trial of sertraline versus nortriptyline. *Journal of Clinical Psychopharmacology*, 26(4), pp. 353-360.

Appendix

1. Yoga Poses
2. *Mums & Cubs - Welcome Song* lead sheet
3. Yellow lead sheet
4. *Isn't She Lovely* lead sheet
5. *Summertime* lead sheet

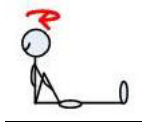
Full versions of lead sheets are attached to the pdf file.

- *Cat/Cow pose*



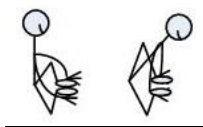
On all fours, or seated on a chair or the floor, inhale to arch the back towards the ground, bringing the chest forward and lifting gaze. Exhale to round the back, pressing into hands and knees, lifting space between shoulder blades.

- *Seated twist*



Place right hand on floor behind, and place left hand on opposite knee. Inhale to lengthen through spine, exhale to twist to right, turning through the whole body.

- *Butterfly*



From sitting, bend knees and bring feet together, allowing knees to release out. Holding feet (or with hands on ground behind) lengthening spine on inhale and fold forward on exhale. Draw chest forward and shoulder blades back.

- *Cow face pose*



Link arms behind the back, with one hand reaching over the shoulder and the other behind the waist, interlacing the fingers (or reaching towards). Legs can mirror the stretch of the arms by folding one on top of other (optional).

- *Eagle pose*



Place one hand vertically in front and wrap the other hand around the outside and interlink fingers. To increase stretch, lift hands upwards. Legs can imitate hands by crossing and wrapping over (optional).

Welcome Song

Mum's & Cubs

Charlotte Mendly

Charlotte Mendly

Swing

F



C

F



F



C

F

