

EXPLORING PARENTS' EXPERIENCES AND
PERCEPTIONS OF SINGING AND USING THEIR
VOICE WITH THEIR BABY IN A NEONATAL
UNIT: AN INTERPRETIVE
PHENOMENOLOGICAL ANALYSIS

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ABSTRACT

Music Therapy practices with premature and medically fragile infants and families have been widely researched and documented across the globe. Despite such a plethora of discourse, there remain many questions within the evidence base. In particular, exploring and understanding parents' perceptions of musically engaging with their baby, the role of the music therapist when working with the infant-parent dyad and understanding where music therapy practice is best placed to intervene within such a multifaceted and acute health care continuum. This qualitative inquiry, adopting Interpretative Phenomenological Analysis (IPA) methodology explores how parent's experience and perceive interactions with their baby through moments of singing and using their voice in a Neonatal Unit (NU). Findings emerged across four waves of analysis with recurrent themes including the intrinsic role of singing and voice to support the developing identity of parents and act as a fundamental bridge of connection to their premature baby; the powerfully supportive role of voice to meet the emotional needs of parents; and accessing voice as a self-soothing coping tool for parents. Moreover, the concept of time across differing stages of the acute neonatal journey and its influence on parents' experiences and perceptions of voice inductively emerged across cases. Moreover, findings highlighted singing and voice interactions as a critical dialogical encounter of perceived connection and recognition that validated the parent's developing relationship with their baby. Finally, the role of the music therapist was explored with dialogue emerging acknowledging the importance of this role in supportively educating and facilitating parents to find their voice and connect with their baby in the NU.

INTRODUCTION

This research study has emerged from my clinical practice as a music therapist working with hospitalized infants and their families in a Neonatal Unit (NU) in Melbourne, Australia. My practice includes working closely with the individual infant and their parents within a much larger and overwhelming medical model of care. My role involves partnering with families to ensure that both the infant and parent are supported and contained through the powerful appropriation of music in the beginnings of early life and development. I have had the privilege of witnessing the powerful role of the human voice to musically connect, communicate, create and mediate a fragile infant's way of being. The infants that I primarily work with in the NU have been born extremely prematurely and require intensive and extensive medical care across the neonatal intensive care unit (NICU) and the special care nursery to support and sustain life. This presents a myriad of additional physical, social and psychological complications and considerations for the infant and their parents. I have witnessed the often innate and intact musicality of the parent and infant relationship despite a complicated illness trajectory. Music therapists have an integral role to play in skillfully supporting such intimate and intricate moments between the infant and parent dyad in such a foreign and overwhelming hospital setting.

Music therapy practices with premature and medically fragile infants and families have been widely researched and documented for many decades. Despite this extensive discourse, many questions remain within the evidence and practice base. The following areas of inquiry seem especially important: 1) exploring and understanding parents' perceptions of musically engaging with their baby; 2) the role of the music therapist when working with the infant-parent dyad and family; 3) understanding where music therapy is best placed to intervene within such a long term and multifaceted hospital trajectory; and 4) exploring our identity as health professionals within such a model of care.

While I have personally encountered powerful benefits of music—and in particular, the role of singing and voice for supporting infants and their parents—questions have continued to arise related to the delivery, process and power dynamics within music therapy in such a setting. This study is an exploration of the experiences and perceptions of parents singing and using their voice with their baby in a NU.

The World of Neonatology

Major advances in medicine and technology have led to the increasing survival of premature and medically compromised infants. Such advances in developed countries have led to a dramatic increase in survival rates for very low and extremely low birth weight infants. Statistics show that in modern tertiary care

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centers more than 95% of premature infants survive, and infants born at 24 weeks gestation have a 50% chance of survival (Als & McAnulty, 2011). Within an intensive care setting, the focus of care is the survival of the vulnerable infant, which requires a great degree of invasive and relentless medical intervention. This presents a myriad of complex and traumatic conditions for infants and parents, threatening physical, psychological, emotional and social domains (Als et al., 2003; Sikorova & Kucova, 2012; Van Baar, Van Wassenauer, Briët, Dekker, & Kok, 2005; Vohr, 2014).

The Premature Infant and Parent

A premature infant is thrust into a noisy and artificial world that is far removed from the warm, safe, and contained intrauterine environment of the womb. The intensive, invasive medical intervention required to keep the infant alive is to the detriment of the infant's quality of life and to the critical connection with parents and family systems. Advances in neuroscience and brain research have prompted exploration of opportunities for very early developmental support and preventive intervention immediately after birth in the NICU (Als, 2009; Als & McAnulty, 2011; Spittle, Orton, Anderson, Boyd, & Doyle, 2012). While extensive studies have focused on the neurological and behavioral risks and outcomes for this fragile population, few have focused on the social and emotional needs of pre-term hospitalized infants, and on the effects of intensive hospitalisation on later development and functioning.

A strong interdisciplinary literature foundation documents the traumatic experiences of parents of premature infants requiring intensive care. Parents in the NICU experience high levels of psychological distress consistent with symptoms of post traumatic stress disorder (PTSD) (Shaw et al., 2009; Yaman & Altay, 2015). Specifically, parents experience feelings of helplessness (Preyde & Dingwall, 2011) loss of parental role (Holditch-Davis, 2000), overwhelming feelings of guilt and grief (Jotzo & Poets, 2005; Sikorova & Kucova, 2012) and lack of knowledge and control regarding medical treatment and uncertainty of their baby's prognosis (Sweet & Mannix, 2012). Just as infants are confronted with a premature arrival, so are parents as they grapple to come to terms with parenting a medically vulnerable baby. Parents live out stressful, traumatic and intimate moments of personal grief in a communal space in the NICU, surrounded by professionals and other parents (Anscombe, 2008, p. 147). Despite the rich discourse on parental experience, the experiences and perspectives of fathers are underrepresented within neonatal literature (Crathern, 2009; Deeney, Lohan, Spence, & Parkes, 2012; Feeley, Waitzer, Sherrard, Boisvert, & Zerkowicz, 2013).

Parent and Infant: A Critical Relationship in the NU

While neonatal medicine maximizes an infant's chance of survival, it also places

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barriers between parents and infants, minimizing opportunities for attuned interaction and the development of a healthy parent and infant relationship. Inconclusive results have emerged from the literature regarding attachment classifications and prematurity (Udry-Jørgensen et al., 2011). However, there are specific relational threats for the infant and parent, including the neurodevelopmental immaturity of preterm infants and related avoidance behaviors during interaction (Brisch, Bechringer, Betzler, & Heinemann, 2003; Newnham, Milgrom, & Skouteris, 2009); and parental trauma affecting a parent's representation of their infant and related capacity for responsive engagement with their baby (Keren, Feldman, Eidelman, Sirota, & Lester, 2003; Korja et al., 2010).

Contemporary researchers recognize the vital importance of short-term interventions to support the parent and infant relationship within a NU through a greater emphasis on family-inclusive care (Brecht, Shaw, St. John, & Horwitz, 2012; Browne & Talmi, 2005; Herd, Whittingham, Sanders, Colditz, & Boyd, 2014; Newnham et al., 2009). While family-centered care as a model and philosophy of practice within neonatology is heralded, this does not appear to be consistently translated into practice approaches and existing models of care across the field (Dunn, Reilly, Johnston, Hoopes, & Abraham, 2006; Gooding et al., 2011; Staniszevska et al., 2012). Claims that robust evidence in support of family centered care within neonatal practice is lacking (Shields et al., 2012) may explain the current discrepancy between theory and practice. Such claims illuminate the medical model of neonatal care, one that prioritizes quantitative, controlled research. This presents an additional barrier to supporting and establishing family-centered care in neonatology.

Theoretical Lens: Infant Mental Health

A wealth of research and practice from a wide variety of theoretical perspectives documents infancy as a foundational period of physical, social and psychological development. This substantial research and practice contributes to the rapidly expanding field of infant mental health that has evolved over the last three decades, acknowledging infants' capacity for communication and understanding (Mares, Newman, & Warren, 2011). The following relevant theories are a theoretical scaffolding for this exploratory study.

Attachment theory (Bowlby, 1982) describes an enduring emotional relationship which develops over the first year of infancy, characterized by various strategies for maintaining proximity and eliciting care and protection from the primary care-giver. Contemporary attachment theorists reject this approach to categorizing and assessing the quality of attachment, arguing for greater acknowledgement of the complexity of the attachment relationship, family approaches to attachment theory, and a move to process-driven research and practice (Meyer, Wood, & Stanley, 2013; Mooney, 2010; Palm, 2014; Rutter, 1995; Slade, 2004).

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Systems theory considers the functioning of the parent-infant dyad and family system (Bronfenbrenner, 1979) and the transactions between the infant, parent and environment and the effects on each other and the environment (Sameroff, 1975). Grounded in systems theory, Family Centered Care (FCC) is an approach to medical care grounded in the belief that optimal health outcomes are achieved when patient's family members are actively involved in providing emotional, social and developmental support (Gooding et al., 2011; Staniszewska et al., 2012). It is now generally recognized that "family-centered" refers to a particular approach to intervention that supports and strengthens parents to nurture and enhance child well-being and development (Dunst, 1997, p. 75).

A seminal body of infant research exists encompassing multiple fields of infant psychotherapy, psychoanalysis and developmental psychology focused on the capacities of infants for interaction, communication, self-regulation, intersubjectivity and modulation of infant-caregiver interaction (Beebe & Lachmann, 1994; Stern, 1985, 1998; Stern-Bruschweiler & Stern, 1989; Trevarthen, 2001). Within this body of research, the musical capacities of the infant (Papousek, 1996; Trehub, 2001) and the potency of parental singing for infants has been well documented (Trehub, Hill, & Kamenetsky, 1997; Trehub, Unyk, et al., 1997), with a strong focus on pre-verbal parent-infant communication and the musicality of such interaction (Malloch & Trevarthen, 2010).

These theories bear relevance to the current study of parents' experiences and perceptions of singing and using their voice with their baby in a NU. Each theoretical area relates to an element of the developing infant and parent relationship, acknowledging the complex interplay of the environment and system that the dyad exists within and the importance of family-inclusive care to support the dyad.

Music Therapy within Neonatology

Diverging Practice Approaches

Music therapy practice and research within the field of neonatology has evolved and expanded for the past several decades. Within this burgeoning profession, different practitioners and researchers have different ideas about and approaches to the use of music. Some see music as a stimulus to pacify or stabilize; others see music as an interpersonal process for premature and newborn infants and their family and some consider both of these approaches to using music relevant to neonatal music therapy practice (Nöcker-Ribaupierre, 2013; Shoemark, 2012). The predominant scholarship suggests receptive use of recorded music as a beneficial stimulus to pacify and stabilize premature infants (Standley, 2012), although conflicting results are found within the literature. An analysis by Hartling et al. (2009) produced inconclusive findings regarding effectiveness of music for

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premature infants, stating that “the heterogeneity in study populations, interventions and outcomes precludes definitive conclusions around efficacy” (p. 1). More recently, Dearn & Shoemark (2014) found that preterm infants' physiological and behavioural regulation was affected by the presence of their mothers in the nursery, compared to their exposure to recorded lullaby music. A smaller number of studies involving active music therapy approaches for the infant (Haslbeck, 2014; Malloch et al., 2012; Shoemark & Grocke, 2010) and infant and parent (Abromeit, 2003; Filippa, Devouche, Arioni, Imberty, & Gratier, 2013; Loewy, 2015; Loewy, Stewart, Dassler, Telsey, & Homel, 2013; Whipple, 2000) describe other techniques, including contingent singing and infant-directed vocalization, music and multimodal stimulation techniques, and a variety of live instrumentation to musically support infants and families. These researchers conceptualise music therapy as part of an interpersonal process.

Some contemporary practitioners and researchers are calling for research into the multi-layered and flexible approaches needed for practicing neonatal music therapy. This research should focus not only on infants, but also parents and family systems, including fathers (Haslbeck, 2012; Shoemark, 2012). The fundamental role of singing within neonatal music therapy for supporting both infant and parent has been documented (Blumenfeld, 2006; Cevasco, 2008; Courtnage, 2000; Nocker-Ribaupierre, 2004; O'Gorman, 2007), with Shoemark's (2008, 2013; 2010) seminal research on singing as a therapeutic tool for application within music therapy practice and research. Moreover, family-inclusive music therapy practices have begun to challenge the “expert-driven” music therapist model of clinical care (O'Gorman, 2006; Shoemark, 2004, 2011; Shoemark & Dearn, 2008).

Despite the dialogue within the literature, there is dissonance between family-centered practice recommendations and prevailing research methodologies. The complex, individualised and multi-faceted appropriation of music for the infant and their parent calls for qualitative research that reflects this interpersonal and relational process. Since this discourse, a feasibility study (Shoemark & Arnup, 2013) has provided a foundational study within the field. The researchers surveyed mothers on their spontaneous vocal behaviour with their baby in the NICU to support the development of a family empowerment model of practice. A more recent case study on the process of neuro-based music therapy for the preterm hospitalised infant and family has contributed to this dialogue (Shoemark, Hanson-Abromeit, & Stewart, 2015). Furthermore, Haslbeck (2014) has documented the role of interactive music therapy with premature infants through qualitative video analysis to gain a deeper understanding of therapeutic processes.

With an unquestionable dialogue documenting the risks of a NU admission on the wellbeing and longer-term functioning of the relationship between the hospitalized infant and parent, there remains a paucity of neonatal music therapy research on parents' personal experiences and perspectives, particularly the father's. Moreover, the intricate and complex processes of interactive music therapy are underrepresented. The purpose of this qualitative study was to explore

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parents' thoughts, feelings, experiences and perceptions of singing and using their voice with their medically compromised baby in the complex setting of a NU. The primary research question driving this study was:

How do parents experience interactions with their baby through moments of singing and using their voice in a NU?

The two secondary research questions were:

- *How do parents perceive the impact of singing and using their voice on the quality of their relationship with their baby?*
- *How do parents perceive the role of the music therapist in supporting their singing and vocal interactions with their baby?*

I have defined the key concepts of parental “singing” and voice” that shape the central phenomena under investigation as:

- *Singing*: an action producing musical sounds with the human voice in the form of a song or tune.
- *Voice*: sounds produced by the human voice which differ from singing a song or tune but may involve musical qualities through speaking, reciting or humming.

Throughout this study, I acknowledge both singing and the use of voice. In my work, I consider ways to help parents positively engage with their baby through singing and voice interactions. Furthermore, “singing” may be limited to describing a “song” or structured activity and may restrict the capacity to also explore parents' experiences of improvised or spontaneous voice use with their baby. This musically rich process is the focus of this study. These understandings of key terms are informed by Trevarthen & Malloch's (2010) theory of “communicative musicality” exploring the intrinsic musical nature of human interaction.

METHOD

This qualitative inquiry represents the first phase of a larger study based on its findings. The research paradigm underpinning this qualitative research is *social constructivism* (Creswell, 2013). Methodologically, this study adopts Interpretative Phenomenological Analysis (Smith, Flowers, & Larkin, 2009) for data collection and analysis.

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Ethics

All parents involved in the study were provided with a plain language statement and consent form to ensure appropriate ethical conduct. An independent contractor was involved to complete informed consent for this study in order to reduce potential coercion of parents into participating in the study due to their existing relationship with me as their music therapist in the NU. Pseudonyms have been used throughout this monograph to protect the confidentiality of participants. Ethics clearance was obtained from the Human Ethics Committee at the University of Melbourne (#1442551.2) and the health organization's Human Research Ethics Committee (HREC Ref.14173L) prior to the commencement of the study.

Recruitment

Participants were recruited from a level three neonatal unit within a large tertiary metropolitan hospital where I practice as a music therapist. I purposefully recruited parents who could offer insights into their experiences and perceptions of singing and voice with their baby in a NU (Creswell, 2013). Parents were recruited from within my current music therapy caseload to participate in a single interview together. I intended to ensure that participants included both mothers and fathers within the NU. This was partly due to my own personal clinical experiences and the current gender inequality of healthcare delivery, in which fathers are inadequately represented.

The inclusion criteria for this study included:

- a) Parents of infants admitted to the NU for longer than four weeks at the time of recruitment. The rationale for this specific time frame was based on my own assumption that parents who have spent this long in the NU environment may be able to share and reflect on their experiences more deeply.

- b) Parents who had experienced music therapy services with me as researcher-clinician and who had experiences of singing and using their voice with their baby in the NU. This was to ensure a fairly homogenous sample, which is consistent with interpretative phenomenological analysis (IPA) studies (J. A. Smith et al., 2009).

- c) Parents who could participate in an interview in English. I gave preference to a culturally diverse sample of parents who had all shared an experience of singing and voice with their baby in the NU.

Parents were eligible to participate in the study if they met these three criteria. Once I identified eligible participants from within my caseload, I communicated

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eligibility with a research nurse from within the NU who was responsible for obtaining informed consent with eligible participants. All nine eligible parents consented to the study. Upon attaining informed consent, I made face-to-face contact with each participant to arrange an appropriate time to conduct the interview together.

Participants

Table 1 presents the nine participants recruited for this study across a two-month period. All names below are pseudonyms. All of the nine participants were parents of a premature baby requiring long-term medical support across the NICU and special case nursery within the NU. The average age of parents in the study was 37 years. Five different cultural backgrounds were represented across the participants, illustrating the cultural diversity of the NU in which this study took place.

Table 1
Participants

Participant	Total days in NU at time of interview	Baby's Gestational Age (GA)	Parenting History	Total weeks in NU prior to Music Therapy	Engagement in Music Therapy (MT)
"Harry"	54 days	26 weeks	First time father	8.5 weeks	8 weeks of weekly individual MT in NU prior to interview
"Carol"	56 days	26 weeks	First time mother	7.5 weeks	8 weeks of weekly individual MT in NU prior to interview
"Shelly"	105 days	23 weeks	First time mother	12 weeks	2 weeks of twice weekly MT in NU prior to interview
"Annabelle"	47 days	Twins 28 weeks	First time mother	5.5 weeks	1 parent group session in NU prior to interview
"Annie"	68 days	25 weeks	Second time mother	8.5 weeks	1 parent group session in NU prior to interview

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"Josephine"	45 days	28 weeks	First time mother,	1.5 weeks	4 weeks of individual weekly MT and 1 parent group session in NU prior to interview
"Simone"	64 days	27 weeks	First time mother	6.5 weeks	1 parent group session and individual MT contact across 3 weeks prior to interview
"Zander"	64 days	27 weeks	First time father	6.5 weeks	1 parent group session and individual MT contact across 3 weeks prior to interview
"Beth"	123 days	Twin 25 weeks	Second time mother	12.5 weeks	5 weeks of individual MT sessions with infant and family prior to interview

Data Collection

Data collection involved in-depth interviews with each participant. Each interview was audio-recorded and transcribed verbatim. Eight of the nine interviews took place at the hospital in which the NU is located to ensure convenience for participants. A private room within the hospital was used to conduct each interview. One participant's infant was unexpectedly discharged from the hospital prior to the interview. After obtaining ethics approval, I conducted this interview in a private space at the convenience of the participant. I adopted a relational and reflexive approach (Finlay & Evans, 2009). While the three interview questions related to the three research questions, I took a conversational approach throughout (J. A. Smith et al., 2009, p. 57). Table 2 provides an example of the interview questions and related prompts that were used to support discussion and exploration with participants in this study.

Table 2
Interview Prompts

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Example Questions:	Example Prompts:
<i>Can you tell me what it's like for you to sing and use your voice with your baby here in the NU?</i>	<ul style="list-style-type: none">• <i>Ok, why is this?</i>• <i>How?</i>• <i>In what ways?</i>• <i>Why do you feel this do you think?</i>
<i>Do you think singing or using your voice has had any impact on your relationship with your baby?</i>	
<i>What do you think the role of the music therapist is in working with you and your baby?</i>	

Data Analysis

Data analysis using IPA methodology was based on Smith, Flowers & Larkin's (2009) recommended steps to analysis, as outlined in Figure 1 below.

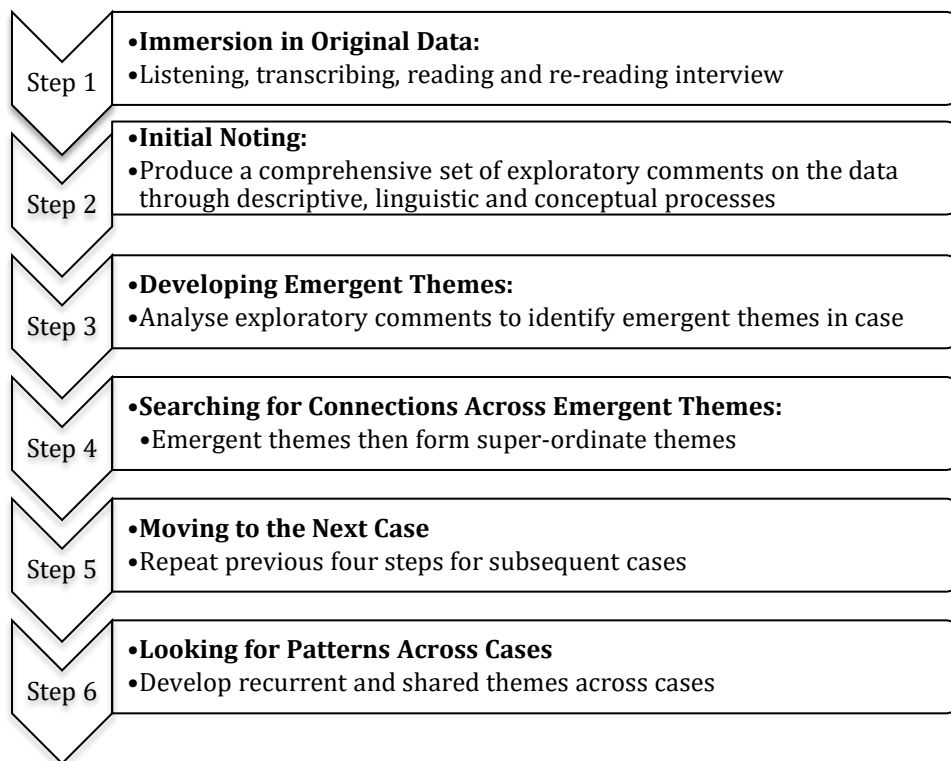


Figure 1. Steps of IPA Data Analysis

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Based on Smith, Flowers & Larkin's (2009) recommended steps of analysis, I developed "recurrent" themes by searching for patterns of similarities across each of the participant's superordinate themes. Themes were classified as "recurrent" if they were present in at least six to nine cases. This refers to a process of *numeration* within IPA analysis in which the frequency of themes can indicate the relative importance of some emergent themes across cases. Numeration within a qualitative paradigm "can be thought of as a patterning within the emergent themes" (p. 98) and is not the only indicator of themes' importance. Other indicators of the importance of "recurrent themes" were related to the richness of the data highlighting the theme and how the theme illuminated converging aspects of participants' experiences (J. Smith & Osborn, 2008). I developed sub-themes to represent the converging aspects of each "recurrent theme", revealing the rich nuances of each theme. In addition to "recurrent themes", I also developed "shared themes of interest" that emerged across some of the participants. I interpreted these as interesting and relevant to the "whole picture" of emergent findings when looking across the data.

I analyzed each interview individually following the process outline above before moving on to the next interview. This was to ensure that I remained focused on the idiographic nature of each individual voice.

Four Waves of Analysis

The iterative process of exploring potential patterns across all nine interviews can be described as four waves of analysis. I used the metaphor of "waves" to describe my analysis and present my findings. These waves are a metaphor of the process of analysis, characterized by constant, iterative motion. During this process, I reflected on the interpretative themes and details that emerged from the data and how I might represent them. This process appears congruent with the sub-methodology of "crystallization" within qualitative research, in which non-traditional approaches of analysis are employed through "interweaving, blending, or otherwise drawing upon more than one genre of expressing data" (Ellingson, 2009, p. 11).

In looking across the data as a whole, I initially began to generate recurrent themes inductively that I perceived to be shared across cases. This formed the first wave of analysis, aligned with a descriptive phenomenological approach. During the first wave of analysis, the concept of time and parents' experiences of voice interactions with their baby emerged from the data. This concept propelled a second wave of inductive analysis in which I specifically explored themes of time across all nine cases. The third wave of analysis aligned with one of the secondary research questions exploring parents' perceptions of their relationship with their baby. This research question formed one of the interview prompts for parents, providing a

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framework for discussion. I adopted a more interpretive stance during the third wave of analysis, analyzing the notion of the parent-infant relationship through my own theoretical lens. Finally, the fourth wave of analysis also aligned with one of the secondary research questions about my role as the music therapist. This research question provided a framework for discussion within interviews, propelling the final wave of analysis. The four waves of analysis are also represented in the presentation of the results. Figure 2 illustrates these four waves of analysis, with the completion of each propelling the next wave of analysis.

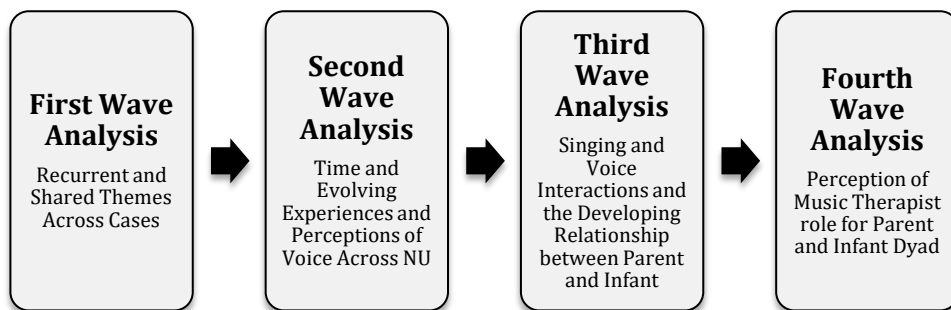


Figure 2. Waves of Analysis for Looking Across Cases

RESULTS

I have used the four waves of analysis as a framework to present the results of this study. For the purposes of this study, the overall themes are representative of the participants as a group. To differentiate between themes across the four waves of analysis I have given the themes different corresponding labels throughout the results.

I present raw data to exemplify each theme and honour the idiographic values of IPA.

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First Wave Analysis

Recurrent Themes

Recurrent Theme 1 is *Singing and voice were intrinsically linked to developing sense of parent identity within the NU*. Table 3 presents Recurrent Theme 1 and its sub-themes.

Table 3
Recurrent Theme 1 and Sub-Themes

Recurrent Theme 1: <i>Singing and voice were intrinsically linked to developing sense of parent identity within the NU</i>		
Subtheme 1A: Singing and voice offered gratifying role for parent to play in NU	Subtheme 1B: Pre-existing relationship to music influenced desire to adopt singing as part of parent identity in NU	Subtheme 1C: Sense of potency of own voice for baby strengthening parent identity
<p>Simone: <i>It's just nice to be able to do something for him, to give him — to calm him down because there is not much I can do</i></p> <p>Josephine: <i>so given the chance that I can sing to him so that would like, make the most of the time that I spend with him, so that is a good thing also... yeah, yeah so it is good to know that it is giving him benefits (giggles)... yeah, it is like I am also doing my thing as a Mum, also starting from now (giggles)</i></p>	<p>Zander: <i>Yeah, it is a big part of — for me I think it is a big part of what kind — the image of the kind of Dad that I want to be</i></p> <p>Annie: <i>I don't know if it is normal for all Mums to sing but it's, for me, that is how I grew up and singing is just — I sing to my son every day and every night... it is normal for me so to be able to sing to her, is like, yeah it is one of the only things that I can do</i></p>	<p>Beth: <i>Yeah you know, it is the sweetest thing to be recognised and — and you know, observing his cues, like his little eyebrows just, even if he is snoozing or dozing, he will, you can tell that he hears obviously so yeah... and so that he can identify me as his Mum.. I am not just another walk in nurse or somebody you know?</i></p>

Parents' descriptions and reflections of singing and voice with their baby regularly contained motifs related to their own developing identity as parents. Eight of the nine parents were represented within this recurrent theme, with several parents contributing across multiple sub-themes.

Parents described that using their voice gave them a gratifying role and an opportunity to connect with and begin to shape a musical identity for their baby. Furthermore, parents felt validated as the parent for their baby through their baby's

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response and perceived recognition of their voice in an often-marginalising environment for parents.

Recurrent Theme 2 is *Emotion of vocal moments: Emotional needs of parents were met through sharing voice with their baby*. Table 4 presents Recurrent Theme 2 and its associated sub-themes.

Table 4
Recurrent Theme 2 and Sub-Themes

Recurrent Theme 2: <i>Emotion of Vocal Moments: Emotional needs of parents were met through sharing voice with their baby</i>	
Subtheme 2A: Engagement in significant songs that were perceived as emotionally congruent to a parent's emotional world	Subtheme 2B: The act of singing and voice created a process of emotional catharsis that was overwhelming at times
<p>Harry: <i>And there is one song which also, the title sort of appeals to me, which was "No Alarms and No Surprises", because that was sort of... That was what you wanted for him—was no alarms and no surprises, particularly when he was sick... You just wanted it—you just wanted things to be still and comfortable and happy... But it sort of seems quite appropriate and that has been the song I have sung to him probably the most</i></p> <p>Beth: <i>It makes perfect sense in such um a cataclysmic situation, particularly being premature babies and new life and the stress of parents and just all of it... to have that um, music is a haven it really is... and so you know, choosing songs like "Dream a Little Dream" and "Swing on a Star" and—and things about love... You know, they are all such, they hold so much meaning</i></p>	<p>Shelly: <i>But yeah I talk to her and when I feel like the emotions are too much on me then I can sing and I release all that pain and anxiousness and then I feel that hope</i></p> <p>Annabelle: <i>Sometimes when I would be singing, you know, humming was different because you could sort of hum through a bit of a—a crack... where singing, I would just have to stop because I would just — tearing up too much and, I am like, "I just have to stop, I just have to stop", I couldn't push through a song when I was crying, you know</i></p>

The emotionality of vocal moments for parents through singing, humming or talking with their baby emerged strongly across seven of the nine interviews. Parents appeared to gravitate toward singing familiar songs that were acknowledged as congruent and reflective of their internal emotional state in the NU. For some parents, the physical act of singing or using their voice with their baby was a process that triggered emotional release that was at times overwhelming and challenging.

Recurrent Theme 3 is *Bridging a connection with baby through moments of singing*

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and voice. Table 5 presents Recurrent Theme 3 and its sub-themes.

Table 5
Recurrent Theme 3 and Sub-Themes

Recurrent Theme 3: <i>Bridging a connection with baby through moments of singing and voice</i>		
Subtheme 3A: Singing as the only way to connect with baby at times in NU	Subtheme 3B: Perceived familiarity of parent voice as central to restoring connection with baby	Subtheme 3C: The physicality of voice interactions created greater feelings of connection with baby
Carol: <i>It was a way of connecting and maintaining that bond at a really difficult time... and especially in the early days, that was the only way I felt I could bond with him</i>	Shelly: <i>Her recognition of my voice... it feels really good...there is so much attachment and wow — this is awesome, she knows me! (smiles and giggles)...Because I leave her for over 10 hours with other people...and still, she knows me!</i>	Harry: <i>I was sort of quite happy to touch him early on and so often when I was singing to him, I was, he was holding my finger at the same time, so there was that sort of that nicer connection</i> Carol: <i>So again, it is a way of, you know, interacting and um, I suppose it is like a virtual touch, you know, a virtual hug</i>

Parents often described feeling “more connected” or “connecting” with their baby during moments of singing or using their voice together in the NU. This theme of connection emerged strongly across six interviews as a fundamental element in singing and voice interactions between the parent and infant. Singing was perceived as the sole way for some parents to connect and bond with their baby in the NU. Parents’ perception of their voice being familiar and recognised by their baby was particularly integral to a parent’s sense of connection with their baby during these moments. For some parents, it was experiencing the physicality of voice interactions through accompanying touch or imagined touch that led to singing and voice strongly supporting feelings of greater intimacy and connection with their baby.

Recurrent Theme 4 is *Singing and voice as a self-soothing coping tool for parents in NU*. Table 6 presents Recurrent Theme 4 and its sub-themes.

Table 6
Recurrent Theme 4 and Sub-Themes

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Recurrent Theme 4: <i>Singing and voice as a self-soothing coping tool for parents in NU</i>	
Subtheme 4A: Singing favoured songs to support parent coping at times in NU	Subtheme 4B: Singing and voice experienced as comforting baby which resulted in comforting parent
<p>Carol: <i>So there was one night when he was really... you know, he alm... he had bilateral lung collapse and, you know, he was on 100-percent oxygen and um...(pause) I literally just sang to him all night and it was a way actually of me coping as well... So for me it was actually a way of — I could switch off cause there is only sort of two or three songs that that I sang to him and in that way I could kind of um — not have to think about what I am doing, but I am still connecting with him sort of — and you know, showing him that I was there</i></p> <p>Beth: <i>Yeah and to cope--to cope with the situation that's bigger than — than a person you know?... And you know, in such a stressful situation it is so easy to get inside yourself and you know, you are churning thoughts all the time and you are worried and you are anxious... and so thank goodness for song in that sense!</i></p>	<p>Josephine: <i>Like, especially if you see your baby like very comfortable and very like peaceful, you feel comfortable also</i></p> <p>Beth: <i>Um ok, well I am a big hummer and I have a little repertoire of songs that I go to, they are my safety zone sort of thing (giggles)... and it gives me comfort and it comforts him too so...</i></p>

Parents described engaging in singing and vocal moments during some periods of distress, emotional difficulty and trauma related to their experience in hospital with their baby. The parents' use of singing and vocal interactions to provide a safe and contained structure to "be with" their baby emerged across six of the interviews, particularly through singing familiar songs or reading poetry. The dual role of song and voice to settle themselves and their baby was also a recurring theme across three participants, acting as a support for parental coping in the NU.

Shared Themes of Interest

Five additional "shared themes of interest" emerged during this first wave of analysis. I have included these themes separately from the "recurrent" themes", as they were not represented as frequently across cases and offered less rich and converging aspects of participants' experiences compared to the "recurrent themes." However, I interpreted them as relevant to the broader first wave of descriptive findings when looking across the data. They are depicted in Table 7.

Table 7

Parents' Experiences of Singing

Shared Themes of Interest

<p>Shared Theme 1. <i>Singing and voice offering the “only” control at times in a powerless situation</i></p>	<p><i>Annabelle: If we can't get them out for a cuddle, there is a good reason why and I respect that and I relinquish that control... I learnt my place and learnt what I was allowed to do and I relished in it. I relished in my voice</i></p> <p><i>Carol: It is like the only thing that I can do that no one is going to say to me, and no one once said to me “stop singing to your baby”... but everything else, I can assure you.... it was — the one thing I had complete control over as well...</i></p>
<p>Shared Theme 2. <i>Baby's responses during voice interactions were considered essential for creating satisfying feelings of mutual understanding with baby</i></p>	<p><i>Harry: Without the sense of their sound of voice um — I think it takes on a different level, when you can actually hear him cry, there is a very immediate sense that he is unhappy or that he is, or that there's a murmur and that he is waking or whatever...and so the sense of his voice was really kind of, for me, was really important as well</i></p>

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<p>Shared Theme 3. <i>Singing with baby was perceived as an exclusively private family moment, which created feelings of vulnerability for some parents</i></p>	<p>What was that like for you? For you, with him playing the guitar and those sessions or that session?</p> <p>Simone: <i>It was — (deep breathe and pause) it made us feel like a family I suppose because he spends a lot of time at home noodling on guitar, just you know, he will pick it up and play for 10 minutes and then put it down again... or work out a song or you know, that kind of thing... um, and so to have it, I guess it is something that we normally do in our home or it is a situation that is fairly normal for us... and to be able to bring that in made it feel much more like we were a real family instead of just this sort of (laughs) crazy thing that is going on</i></p> <p>Annie: <i>And then I thought, I am just going to sing songs that (Mum) doesn't know, that no one knows... so they can't judge it, which is kind of stupid but, it works! (giggles)... yeah they would just be like "oh that's kind of weird dialect" but they wouldn't actually know the tune or the words or — I could get it wrong and it would be ok... yeah, so I sing to her in Maori and not in — I don't really sing to her in English</i></p>
<p>Shared Theme 4. <i>Singing and voice with baby was cautiously accessed by some parents when mortality was a frightening reality</i></p>	<p>Zander: <i>He has become — he has changed — he has gone from something which is so fragile and we were so worried about into being just more — more able to take challenges, to be pushed a bit... and the first um and so I haven't sung to him um up to that point because it was sort of a — I didn't know that there was anything in it for him</i></p>
<p>Shared Theme 5. <i>The interview process as therapeutic</i></p>	<p>Yeah, the process of um, responding to questions sometimes yeah, can really make us reflect</p> <p>Annie: <i>mmm, it's like a counselling session!</i></p>

Second Wave of Analysis: Time and Evolving Experiences and Perceptions of Voice Across NU Journey

Parents' Experiences of Singing

I conducted the second wave of analysis in response to the results emerging from the first wave of analysis. Themes of time simultaneously emerged as I identified recurrent and shared themes in the first wave. I examined the data from the perspective of time across the NU journey, which led to five themes associated with time and parents' experiences and perceptions of voice use within the NU. Each Time Theme is presented individually within separate tables, followed by a visual representation of the collective themes and their relevance across the stages of the NU journey for participants.

Time Theme 1: Contrasting engagement in singing and voice with baby during early days of NU journey was related to the individual coping behaviour of parents

This early stage of the NU journey is characterised by diverging approaches to engagement in singing and voice as several parents moved into relentless and repetitive singing with their baby while more often, parents retreated hesitantly from using their voice with their baby. These behaviours of accessing voice and singing appear to be strongly related to the individual coping behaviour of each parent at the time. This theme strongly emerged across eight of the nine cases.

Table 8
Time Theme 1

Relentless Singing in Early Days	<p>Carol: <i>So there was one night when he was reall... you know, he alm... he had bilateral lung collapse and, you know, he was on 100-precent oxygen and um — (pause) I literally just sang to him all night... and it was a way actually of me coping as well</i></p> <p>Shelly: <i>I use to sing—I used to sing so much though those days... because it was so hard to see her in that state, so as I sang I felt better... I use to finish and pick on another one and pick on another one, Ok I am getting some little energy, the pain in my heart is getting less, I am less weary like</i></p>
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Parents' Experiences of Singing

<p>Hesitant Use of Voice in Early Days</p>	<p>Annie: <i>I mean I probably talk to her to her directly a bit more because she is well... and she is more alert um, where as before she was quite sick and it was just quite hard to — and she just wasn't engaged at all and I just wanted her to rest... so I didn't talk and when you do talk or sing she would kind of strive to open her eyes or... and I was like — yeah I didn't want her, you know, pushing herself?</i></p> <p>Annabelle: <i>I didn't sing to them early on, in the first few couple of weeks...as I said, I just hummed it to them, I didn't want my voice to be too much. A gentle introduction basically I wanted to give them to my voice</i></p>
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Time Theme 2: Songs as symbols of emotional transition across NU journey

Accessing familiar songs validated the emotional world of some parents across their journey through the NU. Four parents described the emotional nature of songs with themes of “sadness,” “melancholia”, “happiness” and “hope” in representing their current perception of their situation with their baby. These songs acted as transitional symbols across both early and later stages of the NU, expressing parents’ emotional state at specific time points in this journey. Singing songs offered parents not only a medium for emotional expression in the NU, but also an opportunity to reflect on their emotional and psychological trajectory through the NU based on song material.

Table 9
Time Theme 2

<p>Harry: <i>So you could almost, you could almost track the songs that are being sung, by the stage that he is in and his condition...and so now the songs seem to be becoming a bit more fun and a bit more playful and a bit happier, um— as his condition has tracked the same way... so early on they were very melancholic if you think about it</i></p> <p>Carol: <i>I can sort of talk to him (baby) about how I was sort of singing the melancholic, sort of, you know, sort of sad — sadder version and now I can actually, sort of, introduce a bit more of a happier version</i></p> <p>Zander: <i>At first it was overwhelming... probably because I only really know sad songs (laughs) um and they tend to be songs that are about loss and longing and that is not--they are not easy themes to go with in the NICU? (laughs)</i></p> <p>So to express--that wasn't going to be easy for you to then feel you could sing?</p> <p>Zander: <i>No, not at all... And, at first that was very um, very difficult... but as he has become less passive... it has become more--it has become easier</i></p>

Parents' Experiences of Singing

Do you still sing those songs now that it is maybe not the early days as much?
Shelly: *Yeah, I still sing them... cause they are songs that um give you hope during hard times...being in NICU still makes me feel like, I still like I am in a hard position in life... and once I come out into the special care nursery I will feel better but I will still continue to sing the same songs because I want us to be home...hopefully*

Time Theme 3: *Prominence of Singing to Connect with Baby during Early stages of NU Journey*

The early stages of the NU journey were characterised by separation of the parent and their baby, leading parents to describe singing and voice as one of the only ways to feel connected to their baby at this time. Five parents described the potency of voice at this particular time to connect them with their baby when no other opportunities were possible due to medical fragility of the infant, which limited physical intimacy and active involvement in the care of their baby.

Table 10
Time Theme 3

Annabelle: *My voice was the only connection that we had from now and in utero... Yeah, so I had to use that as much as I could to keep that relationship there. So whilst they were in an untouchable bubble, so to speak, I could touch them with my voice*

Harry: *He was extremely sick and septic and the whole thing. And so you weren't able to get your hands on with him or hug him or hold him... And so to a certain extent, the singing became that connection I think... The very least we could do was open t— open the door of the cot and sing to him...*

Carol: *Especially in the early days, that was the only way I felt I could bond with him... and, you know, you can't touch them and you know — for me to it was really, really important way to stay--to stay connected*

Time Theme 4: *Passing Time Spent in NU and Developing Confidence in Finding Voice*

For some parents, time acted as a healer in moving towards greater confidence and less intimidation in finding their voice within the NU. Annabelle and Simone described that self-consciousness and lack of confidence in the early stages of their journey prevented voice engagement with their baby. This was associated with the environmental challenges of the NU, including lack of privacy and appropriate space, their baby's fragile medical condition, and lacking a sense of identity as a new parent.

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Table 11
Time Theme 4

<p>Less Confidence in Early Days</p>	<p>Annabelle: <i>I think probably it really was initially my own self-confidence but it does depend on the bay that you are in</i></p> <p>Simone-<i>But now, being able to talk — feeling more confident talking to him... and I think mostly that's time, mostly that is me getting use to the situation and the weirdness with the situation and just being more comfortable in there... and getting to know the nurses and also him getting stronger I think and him feeling more like a baby instead of this tiny little fragile... thing!</i></p>
<p>More Confident in Growing and Developing Stage</p>	<p>Annabelle: <i>thankfully by that time, I had got over my own self-consciousness... where I had made the decision, no I don't care what anybody else thinks. I am not doing it at a level to offend anybody</i></p> <p>Simone: <i>but um now, as I have got more comfortable in the environment I suppose — we are at 9 weeks now... so I basically feel like it's a job (laughs)... I just try and talk to him as much as I can so that he can hear me</i></p>

Time Theme 5: *Parents' experiences of singing and voice shifting from an intrapersonal through to an interpersonal process with baby across NU journey*

Both Harry and Zander spoke of their experience of singing and using their voice with their baby as a process that evolved across time from initially feeling like a “one way” conversation or interaction with their baby through to shifting into a shared process or exchange with their baby in the growing and developing stages of the NU journey.

Table 12
Time Theme 5

<p>Intrapersonal in Early Days</p>	<p>Harry: <i>In those early days when, you know,</i></p>
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Parents' Experiences of Singing

<p>Interpersonal in Growing and Developing Stage</p>	<p><i>those first sort of 6-8 weeks when he was intubated... you know, you are kind of, you are looking for a response, or you are kind of hoping there is a response... or even if you don't see a response, you do it anyway, you know</i></p> <p><i>Zander: Yeah and there is an exchange in that. It is not — it is not just — not a “one way street” and up until recently...with him being in the isolette, it's been very “one way”, it is not easy to tell that he needs something from us</i></p> <p><i>Harry: Yeah, well he is more responsive now with more facial expressions now and there are different sounds from him now...He will sit there and make his little cooing and sort of baby sounds, and I will sit there and have a conversation with him... and he keeps going, you know?</i></p> <p><i>Zander: Recently it has been a lot more, he seems to be seeking out things, he is looking around, he is much more you know, um, you can tell there is a lot more going on from a cognitive point of view... so it's more, he is asking us to do it in a way</i></p>
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Figure 3 illustrates this way of structuring the findings from the second wave of analysis. The five themes that emerged from the data are plotted on a trajectory across the stages of a NU journey to highlight the concept of time in relation to a parent's experiences and perceptions of voice with their baby. I adapted this diagram from a seven-stage model of the NU journey from the parent's perspective (Staniszewska et al., 2012). All five themes center mostly around the “early days” and “growing and developing” stages of the NU journey. These results highlight the significance of time across the NU journey for these parents and its influence on a parent's experiences and perceptions of voice with their baby.

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 Journey Through The Neonatal Unit (NU)							
Themes	Before Admission to NU	Admission	Early Days	Growing and Developing	Preparing for Discharge and Transition Home	Transfers between Different Levels and Units	At Home
Contrasting Engagement in Singing and Voice			Relentless Singing or Hesitant Engagement with Voice				
Songs as Symbols of Emotional Transition	Songs as Symbols of Emotional Transition Across NU Journey						
Prominence of Singing to Connect with Baby			One of the sole ways to feel connected to baby during this critical stage of NU Journey				
Passing Time and Developing Confidence in Finding Voice			Less confidence in finding voice in NU	More confidence in finding voice in NU			
Interactions move from Intrapersonal to Interpersonal			Intrapersonal	Interpersonal			

Figure 3. Visual representation of time and evolving experiences and perceptions of voice across NU journey

Parents' Experiences of Singing

Third Wave of Analysis: Singing and Voice Interactions

During the third wave of analysis, I built on the foundations of the two previous waves, but took a different approach to interpreting meaning. During this wave I interpreted the relationship-based themes in the data, drawing on my theoretical lens of infant research and psychotherapy. I began to move away from a purely inductive approach and focused on the secondary research question about parents' perceptions of the impact of singing and using their voice on the quality of their relationship with their baby. I developed four Relationship Themes across the nine cases as presented in Table 13 below.

Table 13
Relationship Themes

<p>Relationship Theme 1. <i>Baby's response to parent voice was critical in beginning a mutual moment of exchange together</i></p>
<p>Zander: <i>When you have got that there is an exchange there — there is communication, you can — when you are singing to him, it gives me the impression that he is not — he is getting more from that than just talking to him... So it is a — for me, it is a deeper connection and a deeper bond, bonding experience than just talking to him through the isolette</i></p> <p>Annie: <i>I think it just — it seems to sort of tie us together a bit... to have that — that give and take and to know that I have something that works for her</i></p>
<p>Relationship Theme 2. <i>Parents felt validated in their role and relationship through their baby's perceived recognition of their voice</i></p>
<p>And do you think singing and using your voice has had an impact on your relationship with (baby)?</p> <p>Shelly: <i>Yeah cause she has gotten to know my voice ...Her recognition of my voice... and also her feeling of comfort, her feeling of comfort and she feels good, She knows someone is here — she relaxes... it feels really good...there is so much attachment and wow — this is awesome, she knows me! (smiles and giggles)...Because I leave her for over 10 hours with other people...and still, she knows me (giggles)</i></p> <p>Beth: <i>Um, it is the sweetest thing to be recognised and — and you know, observing his cues, like his little eyebrows just, even if he is snoozing or dozing, he will, you can tell that he hears obviously so yeah</i></p> <p>Hmmm, so seeing that recognition from him of your voice behaviourally as well, is a big part of that relationship development as well?</p> <p><i>Yeah, very much and so that he can identify me as his Mum... I am not just another walk in nurse or somebody you know?... So it has been a massive, massive element in our developing relationship and will continue to be obviously</i></p> <p>So, um, I am interested in, um whether you think singing or using your voice has had an impact on your relationship with (baby)?</p> <p>Carol: <i>Oh--undoubtedly! Undoubtedly! ... because, I mean, he knows my voice</i></p>
<p>Relationship Theme 3. <i>Baby's responses during voice interactions supported parents to be reflectively aware of their baby's internal world</i></p>

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<p>Harry: <i>Well he is more responsive now with more facial expressions now and there are different sounds from him now... and so he is becoming more — more and more of a little — sort of little human being</i></p>
<p>Shelly: <i>She knows there is a certain lady who comes, of course who knows what she calls me in her heart (laughs)... I know she has that feeling of “oh, there is someone that normally comes and she is gentle to me, she is good to me, she loves me” — they know what love is, trust me they do</i></p>
<p>Relationship Theme 4. <i>Parents used their voice to respond sensitively to their baby's unique needs within the moment</i></p>
<p>Simone: <i>Yeah, well I kind of look though and find things because obviously it is about meter and rhythm and timing that is really important to them... and so I just — in that was looking for poems that seem to have that kind of cadence that he would find, or seems to find soothing</i></p> <p>Annie: <i>Yeah, well even the “run rabbit” one that I sang... yeah, I wouldn't — if I was singing that to ... (baby's brother), I would sing it in a completely different way... because he is different ... so with her, even though it is kind of a more up tempo, kind of nursery rhyme kind of song, I would still sing it slowly and in a more lulling fashion</i></p>

This third wave of analysis revealed commonalities in many of the parents' perceptions of the deeply interpersonal, relational process of singing and voice with their baby in a NU. I have interpreted this wave by describing a process occurring between parent and infant.

The process begins when parents offer their own voice to their baby through song, rhyme, humming or poetry. The baby's active response to the parent then appears to be critical in creating a moment of shared intimacy and connection. Through this, the parent perceives their baby as recognizing and distinguishing them as a parent, which is validating for parents of a hospitalised infant as they struggle to develop or hold onto their sense of identity as a parent. This encounter allows parents to reflectively perceive their baby and attempt to read and understand their baby's feelings and intentions in this moment together. From here, parents may use their voice to respond sensitively to their baby's perceived needs and desires. Engaging in this complex vocal interplay, parents express feelings of a positive impact on their relationship with their baby through sharing in a series of interactive encounters together that lead to a greater sense of connection, validation and understanding for the dyad. Figure four provides a representation of singing and voice interactions and the developing relationship between a parent and their baby in the NU.

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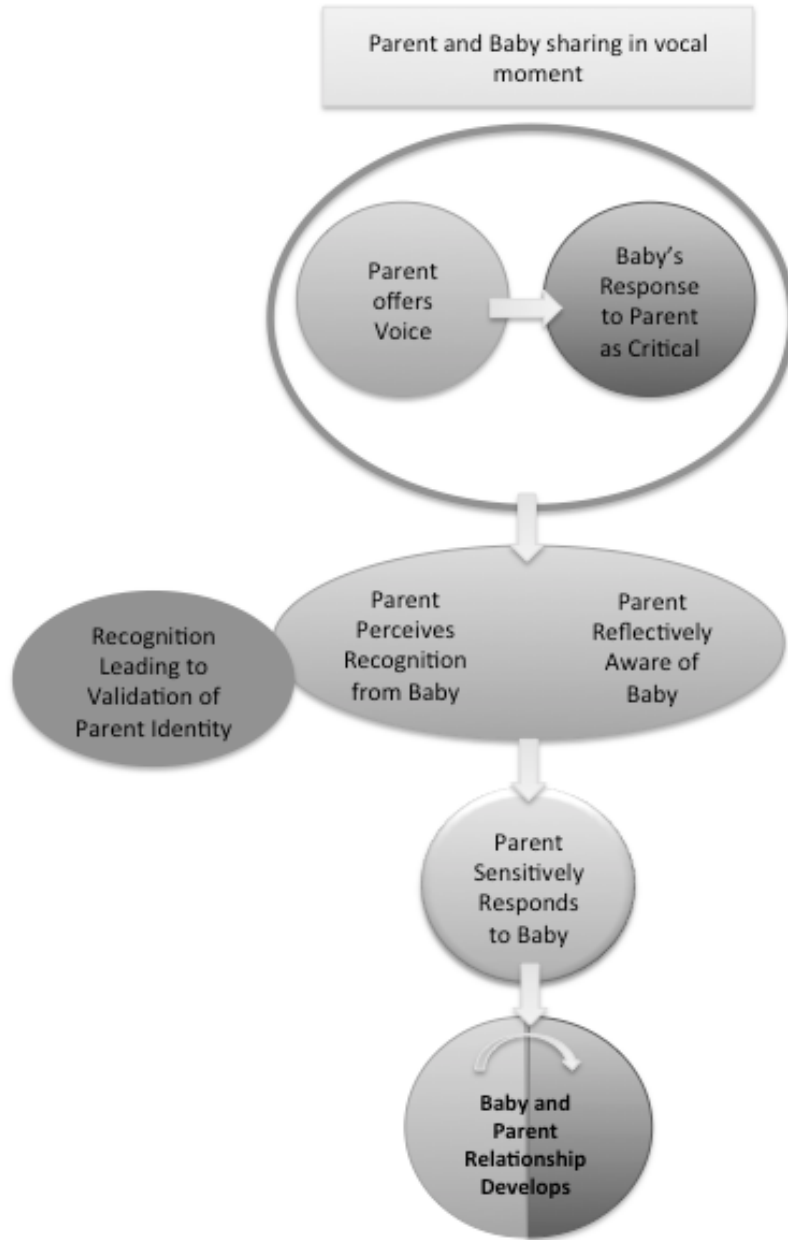


Figure 4. Singing and Voice Interactions and the developing relationship between parent and baby in the NU.

Fourth Wave of Analysis: Perception of music therapist's role for parent and infant dyad

The fourth and final wave of analysis was driven by the secondary research question about parents' perceptions of my role as a music therapist in the NU. This particular focus was of interest to me from the beginning, as I decided only to recruit parents from my current music therapy caseload. As a family-centered music therapist, I was interested in parents' thoughts and feelings about my role for them and their baby. In

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the fourth wave, I interpreted three Therapist Role Themes across cases with this explicit focus, displayed in Table 14 below.

Table 14
Therapist Role Themes

<i>Therapist Role Theme 1: Music therapist supported parents in finding their voice in the challenging context of NU</i>
<i>Harry: So I suppose part of your function or relationship with the parents, is as much about taking that anxiety away and encouraging them to sort of find their voice or use their voice... and that sort of thing, and so it is important for me as a parent to have someone that sort of makes me feel comfortable doing that because I wouldn't you know — I wouldn't normally feel comfortable — I wouldn't sit at a train station or at the airport or you know, in a coffee shop and sing to myself you know...(laughs)</i>
<i>Annie: ...like enable Mum's to feel comfortable to do that and educate them on the importance of voice and the impact that it has on the baby</i>
<i>Therapist Role Theme 2. Music therapist perceived as educating and empowering parents to consider their voice for connecting with their baby in the NU</i>
<i>Josephine: It really helped us that—when you told us that it could be really good just to start with humming or just a—or just use our voice...because it also like, gave us a chance to be—to develop our connection with him you know... rather than depending on using music, you know other music...yeah so it is a good start!</i>
<i>Shelly: So you are supporting us so that we can work with our children, yeah in the interaction and the expression of the love we have for them and also the feelings—just the feelings</i>
<i>Therapist Role Theme 3. Music therapist partnered with parents to facilitate opportunities for family inclusive musical moments in the NU</i>
<i>Simone: It was really great to have you step in and be able to facilitate that because he (Dad) has really gotten a lot out of playing guitar to (baby) and being able to, yeah, to use the music...</i>
<i>Zander: Your role facilitating that (guitar playing)—that start and how to do it right was very important... Without that I don't think I would have been able to do it... you know, I would be constantly wondering, am I doing the right thing?... um and having the confidence in your own judgment is something that I think all new parents struggle with... so thanks for setting that up for me, really it is huge!</i>

Each therapist role theme resonates with the complex environment of the NU for parents and how this context affects engaging in musical processes with their baby. My role as a music therapist was described as reducing parents' anxiety and supporting comfort to access their voice in this difficult context. Parents also discussed how they felt empowered through the information I shared that emphasized singing and voice as a vehicle to connect with their baby. I was also perceived as a “facilitator” of family-inclusive musical moments for parents and their babies in the NU. Figure 5 represents the three themes from this fourth wave of analysis, embedded in the findings from wave three, to contextualize the parent's perceptions of my role as a music therapist in working to support the parent and infant dyad.

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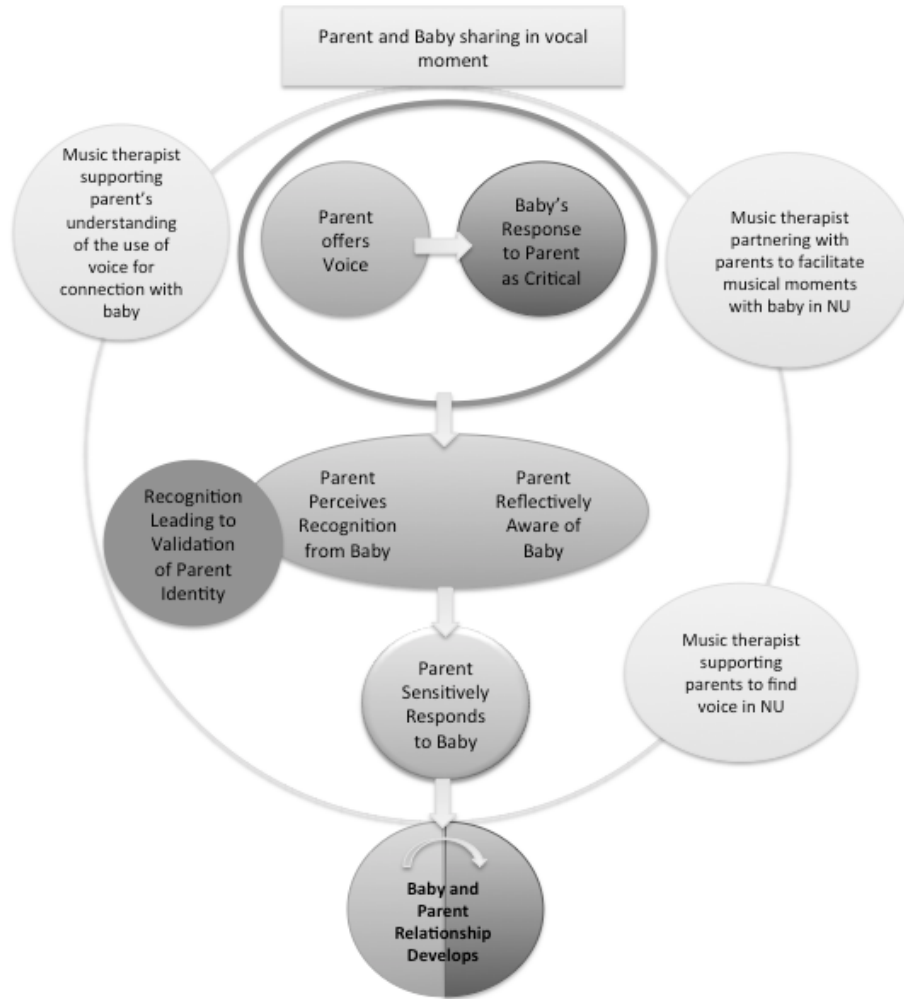


Figure 5. Parents' perceptions of the role of the music therapist in supporting singing and voice interactions in the NU

DISCUSSION

This inquiry into parents' experiences and perceptions of singing and using their voice with their baby in a NU yielded rich results through the use of IPA methodology. I will discuss these results in relation to the study's three research questions, drawing on relevant literature and theory to situate and interpret the findings and discuss future implications for practice and research.

Parents' Experiences of Singing and Voice Interactions with their Baby

For the parents in this study, singing and voice were intrinsic and fundamental elements of their developing identity as a parent. Themes of personal empowerment, boosted autonomy, role gratification and a desire for recognition appeared through parents' descriptions. These findings illustrate how singing and voice can facilitate opportunities for parental role attainment and gratification to support parents' developing identity. This may address the overwhelming feelings of helplessness and the lack of a sense of role or purpose (Lupton & Fenwick, 2001); additionally, singing and voice may meet the need for supportive interventions to address delayed or disrupted role attainment for parents (Fenwick, Barclay, & Schmied, 2008; Perry Black, Holditch-Davis, & Miles, 2009; Rossman, Greene, & Meier, 2015). For the parents in this study, singing and voice was one of the only ways to identify as the parent to their baby. Furthermore, parents with a stronger pre-existing relationship to music were more inclined to seek musical engagement with their baby to support their own musical identity as a parent in the NU. Parent identity formation and its potential association or connection with singing and voice is underrepresented in the literature, warranting further exploration.

Findings revealed that some of the parents' emotional needs were met through vocal moments with their baby in the NU. The physical and emotional experience of singing emotionally congruent songs led to emotional catharsis and comfort for some parents. Multiple studies document the role of maternal vocalisations and infant-directed play songs and lullabies to support emotional communication between mother and infant, enhancing maternal responsiveness and infant self-regulation (Creighton, Atherton, & Kitamura, 2013; de l'Etoile, 2012; Milligan, Atkinson, Trehub, Benoit, & Poulton, 2003; Rock, Trainor, & Addison, 1999). Furthermore, parents' engagement in singing familiar songs or melodies that are representative of their own culture or history (termed "songs of kin") may reduce parental anxiety and support expression of grief and fear in the NU (Loewy, 2015; Loewy et al., 2013). These findings complement previous research within the field by acknowledging the powerful potential of parent-preferred singing to support parents' psychosocial wellbeing. However, this is the first study to date that has examined parents' use of familiar songs and the meaning and messages inherent in such songs in a NU. The findings offer a unique perspective of both mothers' and fathers' engagement in specific familiar songs identified as emotionally congruent in the NU. The results call for further examination into how music therapists may access familiar song or "songs of kin" to support emotional catharsis and parental coping. The specific processes of song choice, lyric analysis,

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song discussion and familiar song singing in supporting parents' emotional needs is also a venue of potentially great value.

Singing and voice was a way for these parents to build a connection with their baby in the NU. This theme was strongly represented across the findings with a sense of singing as the "only" way to connect for some. Parents perceived the familiarity of their voice as integral to experiencing this connection, and the physicality of voice interactions to support connection. Numerous music therapy researchers have drawn conclusions on the role of maternal singing in positively enhancing bonding and attachment across medical and early childhood fields (Cevasco, 2008; Creighton et al., 2013; Edwards, 2011; Loewy et al., 2013; Shoemark, 2013). Despite this, there remain many unanswered questions surrounding measuring and understanding this complex exchange between parent and infant and how it may foster connection for the dyad, particularly in the threatening setting of a NU. These findings offer two different angles from the perspective of the parent. First, they highlight these parents' perception that their baby is familiar with and recognizes their voice; second, they highlight a greater sense of connection with their baby. This warrants further exploration within a relationship-based, family-centred approach to practice and research.

Singing and voice acted as a self-soothing coping tool for six of the parents in this study. Accessing favoured songs or poetry offered a way to "switch off" in times of high stress. By observing the soothing effect of their voice on their baby, parents spoke of a soothing effect for themselves in the NU. These findings highlight the deeply relational and interpersonal act of using voice for parent and infant. While singing nourished and soothed the parent from an internal perspective, singing also nurtured their baby through the process. When parents perceived a mutual sense of soothing, they felt a heightened sense of comfort. Returning motifs of parental empowerment, affirmed identity and feelings of mutual attunement and connection emerge through the theme of self-soothing coping for the parent in a NU. (Cevasco, 2008; Nocker-Ribaupierre, 2004; Whipple, 2000)

The nature of time and related "stages" of a NU journey emerged as an explicit influence on parents' experiences and perceptions of singing and voice use with their baby. Time and stages across the journey did not seem to be a theme. Rather this sense of time provided a temporal framework for different parental experiences. This was particularly interesting, since the interview questions did not contain any direct focus on time or stages of the NU and the role of singing and voice. In particular, the contrast between ways of using the voice during the "early days" raises questions about the accessibility of voice for parents at this critical time and the association of voice with the individual coping behaviours of parents. While singing and voice may act as a beneficial coping tool during periods of crisis, singing or voice may be inaccessible and intimidating processes for some parents when their baby is in a critical state. Parents with lower confidence might particularly benefit from supportive practices such as music therapy. As highlighted in Table 1, parents in this study commenced engagement in music therapy services at an average of 7.5 weeks into their NU admission. However, several parents described active engagement in singing and using their voice with their baby in the first few days and weeks in the NU without the support of the music therapist. These findings reveal that some parents can access their own musical resources to connect with their baby, despite the dire circumstances of the NU

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setting. Further exploration is needed into the musical resources of parents in a NU and the conditions that may or may not support their musical engagement with their baby.

Interestingly, some parents consciously accessed songs that were congruent to their emotional state at specific times in the NU. This indicates the powerful role that songs play for parents across differing stages of their NU journey, as well as parents' inherent capacity for using songs for their own emotional well being. These findings call for greater acknowledgment of how time and "stages" of the NU journey influence the ways in which parents use music at differing times in their personal journey. This has implications for how and when music therapy and broader healthcare practices deliver supportive services across the NU trajectory. These findings suggest that an "ideal" time to introduce specific music therapy services may not exist. Instead, music therapists should assess and acknowledge the unique and individual needs of each infant and parent at particular times. This can ensure that parents benefit from the use of their voice with their baby in a NU.

Singing and Voice and Impact on Quality of Parent-Infant Relationship in NU

Within the field of infant mental health, significant moments of exchange between infant and parent are referred to as "now moments" (Stern, 2004). These moments are conceived as a short unit of time in which something of importance is occurring between the dyad that is the beginnings of an interpersonal process, followed by possibly moving into a "*moment of meeting*" involving a new, intersubjective understanding shared by the dyad (Stern, 1998, p. 302). The findings from the third wave of analysis are consistent with this well-documented terrain, highlighting parents' perceptions of the prominent role of vocal interactions with their baby in supporting critical encounters of perceived connection and recognition to validate the parent-infant relationship. When exploring relationship-based themes within the data, I used a lens of infant research and psychoanalytic theory to interpret the findings. Singing and voice interactions created space for "now moments" when babies responded to parents' voices. These moments stimulated intersubjective interaction between infants and parents, as parents felt recognized by their baby. They attempted to understand and consider the baby's inner world, known as the capacity for "reflective function" (Fonagy, Steele, Steele, Moran, & Higgitt, 1991; Slade, 2002). This intersubjective interaction allowed parents to respond to babies' perceived needs sensitively with their voice. I propose that this interpersonal process then led to "moments of meeting" in the parent-infant dyad and supported parents' perception of the impact of singing and voice on the quality of their relationship with their baby. Again, these topics of voice recognition and parent identity highlight the need for further exploration of this interpersonal process in future music therapy research.

Parents' Perceptions of Role of Music Therapist in NU

Parents were invited to share their experiences and perceptions of my role as a music therapist in working with them in the NU. Parents described my role as supporting them

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to access and find their voice in an intimidating environment. Earlier studies accentuated the complex, multi-faceted setting of the NU for parents and its impact on engaging in singing and voice interactions (Blumenfeld, 2006; Shoemark, 2013). The current study offers insight into how parents perceive the music therapist's role in supporting them to overcome and confront their own challenges in accessing their voice. As Figure 5 illuminates, parents perceived my role as a supportive facilitator who made possible musical moments between their baby and themselves.

Parents perceived my role as that of partner, supporting their own understanding of the role of the voice to support attuned interaction and connection with their baby in the NU. This represents a shift in the acute health professional's role, aligned with models of family-centered practice, in which health professionals facilitate empowerment and positive change for families (Staniszewska et al., 2012; Thompson, 2012). This shift challenges the existing predominance of the "expert-driven" role of music therapists working directly with the infant to implement interventions, particularly when researchers call for more family-inclusive and empowering models of care and practice. Since these findings strongly illuminate the powerful association of a parent's musical engagement with their baby and their developing sense of parental role and identity, it seems integral that the music therapist deliver an individualised and inclusive service that acknowledges the importance of the parent's own active engagement in the musical process.

It is unclear how music therapists may best go about supporting the parent-infant relationship within family systems and much larger and overpowering medical systems. Particularly considering the significance of differing stages of the NU journey on parents' use of their own voice with their preterm baby. Future investigation is warranted into how and when music therapists can best support attuned connection and interaction. Furthermore, future studies exploring the experience of parents who have not received music therapy services across their NU journey would shed greater light on the role of the music therapist in meeting parents and infants needs in the NU.

Conclusion

This exploratory study provides a novel perspective to the neonatal music therapy field, contributing a deeper level of meaning and understanding of the potentials of singing and voice interactions to support parents of premature infants and their developing relationship with their baby. Specifically, themes of validated parental identity, emotional catharsis, feelings of connection and self-coping practices shed light on the therapeutic capacity and potential of singing and voice for this population. Moreover, this study illuminated the way in which music therapists may target and foster parentally inclusive practice for the benefit of both infant and parent. The theoretical framework presented highlights the potential of this process for supporting the developing parent-infant relationship. This may support further discourse on the theoretical frameworks that shape and guide music therapy practice in this field. Furthermore, this study generates discussion on the role of the music therapist in partnering with parents of premature babies to support healthy interaction and

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connection.

In order to do justice to the parent's voice, I will conclude with a quote from "Shelly" in the study:

I used to sing a lot — I used to sing a lot... because it was so hard to see her in that state, so as I sang I felt better... I use to finish and pick on another one and pick on another one, "Ok I am getting some little energy, the pain in my heart is getting less, I am less weary" like...it was a very hard time when she was intubated... yeah, I know she needed it but (pause) it was just painful so with that singing, singing and singing, it pushed her — it pushed me on and on and on—Yes, because that is the only way we could also interact — she was inside the incubator and she was this tiny little baby like my palm... and what more could I do? My wish was for her to stay in me but she was out and ok fine God, you let her come. I would just sing. That is the only thing I would do. Sing, sit on the side, sing and express milk, sing and go home... that was all we shared then.

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