

**Hush Little Baby: How Singing Lullabies Benefits Parent and Child**

Emily A. Doles

Graduate Music, Holy Family College

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Sr. Lorna Zemke

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### **Abstract**

Lullaby singing is a world-wide practice that may seem inherent to some. In today's technology rich society there are many alternative ways to lull an infant to sleep. While many of the alternatives provide a parent with additional free time, research shows that there are benefits for both infants and parents when lullaby singing is utilized. This paper explores the developmental, social-emotional, and musical benefits to the infant that are gleaned when a caretaker sings lullabies to them. The positive effects of lullaby singing on the parent/caregiver will also be highlighted. It is time for parents to take a step away from the technology and bond with baby through song.

*Keywords:* lullaby, musical development, social-emotional development, bonding

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## **Hush Little Baby: How Singing Lullabies Benefits Parent and Child**

It's the year 2020. As a new mother you sit in the rocking chair holding your crying infant wishing, hoping, praying, that he will fall asleep before you join in on the tears. You do all you can to rock your inconsolable baby to sleep, but nothing seems to comfort him. The sound machine, recorded melodies of the mobile, and YouTube playlists have all failed you this evening. In a last ditch effort you start singing, with a quavering voice, a lullaby that your mother sang to you as a child. Your little one's attention turns to the sound of your voice as the crying quiets down and he finally gives in to sleep. A sense of calm washes over you as you finish the sweet song that saved both you and your baby from continued distress.

Singing a lullaby should be a primary option for caregivers as they soothe and assist in unwinding an infant for bedtime. According to Baker and Mackinlay (2006), "Singing lullabies has been a part of many mothers' coping and survival tools particularly used when soothing a distressed baby" (p. 147). This paper expands upon how a song is classified as a lullaby, and explores the importance of singing lullabies to baby. It highlights the numerous benefits for both the singer and the infant, as well as making a clear distinction between the sung lullaby and the recorded version. Although there are endless technological substitutes for singing lullabies, it is of utmost importance that people continue to sing to children.

### **What is a Lullaby?**

Merriam-Webster defines a lullaby as, "A song to quiet children or lull them to sleep". Countless recorded lullabies can be found on the internet and online music services, and most people can name and/or sing at least one. From generation to generation mothers and caregivers have been singing to their babies as, what may seem like, an instinctual habit. Although many people know a lullaby when they hear one, what makes a song a lullaby? How does one choose

which songs are meant to be sung for putting baby to sleep? Historically, lullabies have been classified as such for different reasons. Some classify songs based on the “lexical content” while others classify them based on “social usage” (Hawes, 1974, p. 141). Simply put, some think lullabies are any songs that have lyrics about sleep, while others believe any song used for putting the baby to sleep is a lullaby. For the purpose of this paper, the functional definition of a lullaby will be adhered to. Therefore, any song culturally used to calm a baby to sleep will be considered a lullaby regardless of whether or not it mentions sleep in the lyrics.

While exact classification of songs is debated, there are certainly characteristics that set lullabies apart from other genres. According to Hawes (1974), “American parents seem to rely heavily on a straightforward, non-complex, swaying meter, normally 4/4, to produce a suitably quieting effect” (p. 142). In addition to the American lullaby’s use of simple meter, lullabies typically match the “communicative style of the society” (p. 143). Researchers have found that “there is a strong correlation between the American infant’s happy vocalizing and the American mother’s chatting...” (p. 144). This correlation explains why some songs that do not have bedtime themes or subjects are used as lullabies. The American mother may more readily choose a song in a chatting style than one that may be more soothing in nature.

Higher pitch levels, slower tempi, and a loving tone of voice are also common traits of lullaby performances. Doja (2014) explains that “a more elevated pitch should result in a clearer than usual voice quality to convey affective meaning to preverbal infants...” (p. 120). The use of a slower tempo also helps to facilitate listening for infants who do not yet process language as quickly as adults do (p. 120). These seemingly instinctual decisions by the lullaby performer are backed by what will most likely achieve the desired outcome of lulling the baby to sleep. In addition, a loving tone of voice often accompanies a lullaby performance due to the singer

smiling (p. 125). Although there are differing opinions about how to classify a lullaby, the function and performance practices help to illuminate similar traits among folk lullabies.

Performance practices of the lullaby tradition often include movement to accompany the song. Feierabend (2000) recommended cradling baby in your arms, rocking baby, and patting on baby's back while singing (p. 4). This element of the multimodal performance often occurs naturally whether in a rocking chair or while standing and cradling baby. During *Music and the Brain* Santa Fe (2014), Trainor explained the primitive nature of rhythmic movement and how "the way that they're [infants] moving is affecting how they're hearing things" (video file). Initially the infant movement will be driven by the caregiver. Within the first year of life the infant will be able to control his or her own movement to the lullaby. According to McDonald and Simons, "between five and eight months of age, they [infants] initiate rhythmic-movement responses to music..." (1989, p. 42). Trainor stated that "synchronizing rhythmically with others is important for social development" according to preliminary research on the topic (*Music and the Brain* Santa Fe, 2014, video file). Moving with baby and encouraging baby to move to the sung lullaby are both integral components of the lullaby tradition.

### **Why Are Parents Not Singing Lullabies?**

There are a number of reasons why people choose not to participate in the sung lullaby tradition. One reason parents do not sing to baby is because they are convinced that they cannot sing. Street, Young, Tafuri, and Ilari (2003) found that of 91 mothers of infants surveyed, 50% of them "agreed or strongly agreed with the statement, 'I haven't got a singing voice'" (p. 630). With proper guidance and encouragement this belief could be dispelled and more caregivers would be confidently singing to infants. Another reason that parents do not sing lullabies is a busy schedule. Singing to baby takes time that some parents in today's society simply do not

have. Whether the parents are both working outside of the home or are prioritizing other activities, a busy schedule keeps some from singing lullabies. According to Baker and Mackinlay (2006), pre-recorded music “may be simpler to apply by a busy modern-day parent” (p.148). Turning on a device or recording takes much less time than sitting down to sing to baby.

In addition to time constraints, a lack of musical experience also causes some not to sing. Musical experiences strongly influence whether or not a new mother will sing to her baby. Custodero and Johnson-Green (2003) state, “Parents who recalled their mothers singing to them were significantly more likely to sing lullabies... than were parents who didn’t recall this experience.” (p. 108). The study also concluded that singing to infants was more likely by “parents with specific music educational experiences” (Custodero & Johnson-Green, 2003, p. 109). If the parents have a background of musical training they are more apt to use those skills with their child. Baker and Mackinlay concluded:

The fact that mothers were likely to choose songs they felt they knew and were familiar with, on average between five and six lullabies, suggests that there has been a loss in lullaby repertoire over generations resulting in a limited selections of lullabies known by mothers from which to choose. (p. 156)

Parents do not have a high level of musical experience with lullabies, so they don’t sing them. Although a certain level of parent comfort with singing is helpful to boost their own confidence, it should be known that “infants and toddlers who hear out-of-tune singing still benefit from the expressiveness of their mothers’ multimodal performances” (Trehub & Gudmundsdottir, 2015, Implications section, para. 1). By understanding the benefits of making time to sing lullabies, learning the repertoire, and gaining confidence in one’s singing voice, the act of singing lullabies to baby may once again become the top choice for parents who wish to lull their infant to sleep.

### **Sung Versus Recorded Lullabies**

With the ease and convenience of 21<sup>st</sup> century technology, it is important to understand why real-time, sung lullabies are a better choice than pre-recorded lullabies. The act of lullaby singing is an experience for both the singer and the infant audience. According to Doja (2014):

To achieve their emotional regulatory goals, mothers often deviate from conventional renditions of songs, imbuing their performances with situationally appropriate affect, while infants, through their ongoing behavioral responses, make an important contribution to singing, thus setting in motion a cyclical meaningful interaction and communication. (p. 121)

Infants do not have the opportunity to interact with and alter the performance of a pre-recorded lullaby which makes the live performance more valuable. The interactive benefits of lullaby singing will be discussed in further depth in the following sections.

Pre-recorded lullabies are also trumped by live performances because infants prefer them. Researchers have studied the musical preferences of infants in terms of what is called infant-directed versus infant-absent singing (Trainor, 1996). Infant-directed singing occurs when a song is sung to an infant. In a 1996 study, Trainor used infant attention to measure preferences between the two types of singing. The researchers concluded that “infants preferred the infant-directed version of two of the three lullaby pairs” (p. 88). Trainor also suggests that the “association between infant preference and loving tone of voice suggests that the loving tone of voice may be highly salient to infants” (p. 89).

Infant-directed singing presents recognizable differences from infant-absent singing. In a study by Trehub, Hill, and Kamenetsky (1997) adult listeners rated infant-directed and infant-absent performances for playful versus soothing quality and later the amount of “baby talk” (p.

390) in each performance. According to the researchers, “Regardless of whether parents sang in a soothing or playful manner, their performances were rated as more soothing or more playful when they sang directly to their infant rather than to a hypothetical or imagined listener” (p. 392). When singing to a child, adults change performance practices and add more emotion into what they are singing.

The implications of infant preferences for infant-directed singing are profound when examining lullaby practices. Parents singing to their children produces a higher level of emotional performance and holds infant attention longer than a recording that was not originally performed to an infant. A lullaby sung directly to a baby has heightened soothing qualities and therefore can be considered more effective at calming baby than a recording or electronic sound source. The emotional connection and bonding experienced through singing rituals are important reasons why parents should be singing lullabies to their children. Even if they feel like inadequate musicians, or are untrained, both parent and child can benefit from the singing. The importance of the human connection at this early age cannot be achieved through the use of technology substitutes.

### **Benefits for Mother/Caregiver**

Lullaby singing benefits not only the infant, but the mother as well. For the purpose of this explanation, “mother” represents any caregiver that sings lullabies to the infant, be that the mother, father, older sibling, nanny, etc. Due to the primary caregiving role of the mother, research often centers around the benefits that lullaby singing has on the mother specifically, but the research findings can often be extended to any person who assumes the caregiving role.

One benefit to the mother is reduced stress. Baker and Mackinlay (2006) discuss how singing lullabies helps to relax the emotional mother while soothing the child (p. 148).

According to the researchers, “By engaging in the singing of these songs, mothers are in effect singing about their own feelings, and the very act of doing so allows them to release and let go of pent-up emotions” (p. 149). The stresses of being a new mother can be overwhelming and lullaby singing serves as a coping mechanism for the stress and anxiety one might feel.

While benefits including a lifted mood can occur from the practice of singing to infants, a greater bond between a mother and child is also realized through song. When mothers sing lullabies it strengthens the relationship between mother and child. Bonding and attachment will be discussed in more depth in the following section, but it is important to note the importance of bonding for the mother as well as the child. In Byrn and Hourigan (2010) musical interactions between mothers and infants are examined to determine how mothers relate to their children through song and the mothers’ perceived importance of the musical interactions (p. 68). Interviews, observations, and journals led Byrn and Hourigan to conclude that “musical interactions were an integral part of the mother/infant relationship” (p. 71) and that “the mothers recognized a stronger bond and connection with their infants when music was used” (p. 75). Furthermore, “...singing can lead to significant increases in perceived mother-infant closeness, over and above a comparison activity involving talking and playing with baby” (Fancourt & Perkins, 2018, p. 5-6). The time spent singing to baby helps to create stronger bonds and strengthen the connection that the mother feels for the child.

### **Benefits for Infant**

Stress relief and a strengthened sense of connection with one’s child are both important benefits of lullaby singing to the mother; there are more benefits of lullaby singing to the child. Enhanced bonding and attachment, affect-regulation, and a variety of developmental benefits result when infants are sung to.

## **Bonding and Attachment**

According to *Encyclopædia Britannica online*, Attachment Theory is, “The theory that humans are born with a need to form a close emotional bond with a caregiver and that such a bond will develop during the first six months of a child’s life if the caregiver is appropriately responsive” (Beckes & Simpson, 2017). The theory was originally developed in the 1950s by British psychoanalyst John Bowlby. Bowlby was working to understand infant distress caused by separation from their parents when he developed the theory (Fraley, 2018, Background section, para. 1). Contemporary and eventual colleague of Bowlby, Mary Ainsworth provided data to support the attachment theory through a set-up called the “strange situation” (Fraley, 2018, Individual Differences in Infant Attachment Patterns section, para. 1). The strange situation was a laboratory set-up where the behavior of infants was observed when they were removed from and reunited with their parents (Ainsworth, 1979, p. 932). Ainsworth devised three attachment styles to describe the behavior that infants displayed when separated from the primary caregiver. According to Fraley (2018), the three attachment styles developed are as follows:

- Secure attachment- The infant gets upset when parent leaves, but seeks comfort from the parent upon their return. The infant is easily comforted by the returning parent.
- Anxious-resistant attachment- The infant gets extremely upset when the parent leaves and is not easily comforted upon the parent’s return. The infant shows behaviors signaling that they want to be comforted, but also want to punish the parent for leaving.
- Avoidant attachment- The infant does not display much, if any level of distress when the parent leaves. Upon the return of the parent, the infant may avoid contact with the parent. (Individual Differences in Infant Attachment Patterns section, para. 1)

In addition to the three attachment styles classified by Bowlby and Ainsworth's work, a fourth attachment style has been since added, disorganized-disoriented attachment (Kennedy & Kennedy, 2004, p. 248). According to Kennedy and Kennedy, the fourth attachment style presents as "no predictable or effective pattern of eliciting caregiving behaviors by infants when stressed" (p. 248). Throughout the first months and years of life children are developing one of the aforementioned attachment styles.

Why should parents care about the attachment style that their child develops? According to Ainsworth (1979):

In comparison with anxiously attached infants, those who are securely attached as 1-year-olds are later more cooperative with and affective lay more positive as well as less aggressive and/or avoidant toward their mothers and other less familiar adults. Later on, they emerge as more competent and more sympathetic in interaction with peers. (p. 936)

The attachment that a child develops directly relates to how they will interact and build relationships with others in the future. Furthermore, "The implication is that the way in which the infant organizes his or her behavior toward the mother affects the way in which he or she organizes behavior towards other aspects of the environment, both animate and inanimate" (Ainsworth, 1979, p. 936). The attachment style developed as a child leads to a specific type of attachment as an adult that is characterized by similar behaviors and affects adult relationships (Ackerman, n.d.; Waters et al., 2000).

The primary purpose of attachment is to "maintain contact between the infant and the caregiver to ensure infant survival" (Sullivan et al., 2011, p. 8). Early attachment affects a child for years to come, so parents should take care to nurture secure attachments. Although attachment style can fluctuate with changes throughout one's lifetime (Waters et al., 2000, p.

685), it is best to start a child off well if it is within the parents' control. Researchers have found that "at birth, the full term infant is attracted to the mother's voice and smell" which serves as the infant's first signs of bonding and attachment to the mother (Sullivan et al., 2011, p. 2). While attachment begins in utero, a mother's, or caregiver's, behaviors and actions toward an infant after birth affect the style of attachment he or she develops. Ainsworth (1979) stated, "...in our sample of normal babies there is a strong case to be made for differences in attachment quality being attributable to maternal behavior" (p. 933). Mothers who are attentive and responsive to infant cues help to build secure attachment because the infant knows he or she will have needs met. Sullivan, Perry, Sloan, Kleinhaus, & Burtchen (2011) postulated, "The quality of care received from the mother also programs the infant's emotional and cognitive development by helping to sculpt the developing brain" (p. 2). Infant development will be discussed in further detail in sections to follow.

In addition to a mother's level of care given to her child, a mother's psychological state and a mother's own attachment style affects the attachment style of the child. Researchers have found that "maternal depression may lead to the occurrence of bonding failure" (Abbas et al., 2018, p. 128). Bonding failure and insecure attachment may also be caused by the mother's attachment style. Alhusen, Hayat, and Gross (2013) highlight that "compared to adults with insecure attachment styles, more securely attached parents tend to be more responsive, sensitive, and involved parents resulting in improved outcomes for their children" (p. 1). Conversely, "Women reporting increased attachment avoidance, increased attachment anxiety or post-partum depressive symptomatology were more likely to have children demonstrating early childhood development delays than women with more secure attachment styles and less depressive symptomatology" (p. 5-6). It all comes back to the mother's attentiveness and time spent caring

for her baby. Mothers who have experienced secure attachment are more likely to display that to their own children. Likewise, a mother/parent/caregiver who is not affected by a mood disorder has a much easier time caring for an infant in a way that builds secure attachment.

Bonding and secure attachment are enhanced by lullaby singing. Understanding the importance of a child's attachment style makes a strong case for incorporating singing into one's nightly routine. As mentioned earlier in this paper, singing to baby helps to strengthen the mother-infant relationship. According to Byrn and Hourigan (2010), "Contained within the speech and song of a mother is an emotional content and message that provides the infant with positive feelings of security and comfort" (p. 66). Researchers have concluded that mother-infant closeness is increased more by singing than by speech (Fancourt & Perkins, 2018) which may be attributed to infant preference for infant-directed singing. Through the singing of lullabies to baby, one is able to improve attachment which has a lasting affect on the child's ability to relate to the world around them and to form secure relationships in the future.

### **Affect Regulation**

Infants benefit from sung lullabies with an increase in affect regulation. Affect regulation is the act of adjusting one's emotions to appropriately handle stressful situations. Trehub, Ghazban, and Corbeil (2015) stated:

Adults throughout the world sing to their infants for purposes of affect regulation. Their success in modulating infant affect, by whatever means, is considered critical not only for the immediate consequences (e.g., increasing pleasure, decreasing discomfort, promoting sleep) but also for children's subsequent development of self-regulation skills and social competence. (p. 186)

Singing to the infant not only calms him or her down (the parent regulating the infant's affect), but lullaby singing aids in teaching the infant how to self-regulate during emotional distress.

### **Development**

Brain development is at the root of how we learn and how we become a functioning member of human society. According to Winston and Chicot (2016):

The most important stage for brain development is the beginning of life, starting in the womb and then the first year of life.... The experiences a baby has with her caregivers are crucial to this early wiring and pruning and enable millions and millions of new connections in the brain to be made. (p. 12)

Experiencing the singing of lullabies is one way in which caregivers facilitate the creation of pathways in the infant brain. These early experiences with mother/caregiver are imperative to healthy development because "personality develops from a foundation, increasing in organizational complexity, differentiating from early general modes of engaging the environment" (Sroufe, 1979, p. 836). The infant brain development is enhanced through interactions involving lullaby singing due to the loving nature of the act. Winston and Chicot (2016) found that "the most valuable gift that a child can receive is free; it's simply a parent's love, time, and support" (p. 13). Researchers are finding that we need love for brain development because our genes and brain are affected by a loving environment (p. 13). A loving environment can be nurtured through singing lullabies.

A number of studies have been conducted that cite the benefits that premature infants in the Neo-natal Intensive Care Unit (NICU) glean from musical experiences and interactions. In a 2000 study, Standley concluded that "premature infants in the NICU receiving lullabies sung by a female vocalist, have been found to have gained in weight as their rate of sucking increased in

response to the singing” (as cited in Street et al., 2003, p. 629). The musical performances were able to stimulate the infant’s brain in order to increase sucking which, in turn, allowed the infant to receive the nutrients needed to grow. While many infants are not in the same dire situation as infants in the NICU, all are able to reap the benefits of early musical experiences through sung lullabies.

### ***Social-Emotional Development***

In addition to brain and physical development, an infant must undergo social-emotional development. According to the Missouri Department of Health website, social-emotional development is “a child’s ability to understand the feelings of others, control his or her own feelings and behaviors, get along with other children, and build relationships with adults” (n.d.). Secure attachment is the impetus for building strong relationships and therefore, developing solid social-emotional skills. Researchers have concluded the following about securely attached 1-year-olds:

In free-play situations they have longer bouts of exploration and display more intense exploratory interest, and in problem-solving situations they are more enthusiastic, more persistent, and better able to elicit and accept their mothers’ help. They are more curious, more self-directed, more ego-resilient... (Ainsworth, 1979, p. 936)

These observations demonstrate the use of social-emotional skills by a child who displays secure attachment. Swain (2008), posited that “the parent-infant relationship provides infants with their first social environment, forming templates for what they can expect from others and how best to interact with them” (p. 29). Infants begin to develop their social-emotional skills through early interactions with their parents. One positive interaction that assists with this development is lullaby singing.

When social-emotional skills are lacking and gaps in attachment are present, there are music therapy programs that target closing those gaps to aid in child development. Edwards (2014) stated, “The music therapist facilitates a therapeutic process that is attentive to important and often lacking aspects of interaction, such as eye-to-eye gaze between parent and infant while they vocalise...” (p. 41). Interacting with baby while singing, looking into the infant’s eyes, creates an environment of closeness that is used in therapy programs. The use of these techniques at home will only aid in the social-emotional development of the child and work to avoid skill gaps for the child in the future.

### ***Musical Development***

It cannot be ignored that bonding and attachment, affect regulation, brain development, and social-emotional development can be achieved through means other than lullaby singing. The purpose of the argument presented is to bolster understanding about why singing lullabies to baby is a research-based way to afford infants the best opportunities for future success. One benefit that cannot be gleaned from alternative, non-musical, caregiver-infant interactions is the musical development of the infant.

Simply stated, “Early music listening experiences for infants under the age of 18 months form the basis for future music learning” (Byrn & Hourigan, 2010, p. 66). There is extensive research presented by Mehr and Krasnow (2017) about infants’ musical abilities that include, but are not limited to:

- Decoding auditory input into rhythms
- Decoding melodies into relative pitch contours
- Sensitivity to rhythms
- Melody memory and differentiation

- Motivation to move
- Attention span for listening longer than that towards infant-directed speech (p. 676)

Infants have extensive musical abilities and early musical interactions such as listening to sung lullabies work to expand upon those abilities. According to Trehub and Degé (2016), “Infants remember some of the music that they hear, especially the music heard frequently” (p. 43). An infant’s ability to discern pitch and rhythm along with a display of musical memory allows for the beginning of enculturation through early listening experiences (Trehub & Degé, 2016). Enculturation becomes a prominent outcome of singing lullabies to baby.

As infants are being exposed to the music of the culture in which they are being raised, the musical ear becomes more specialized to that specific music. In Trainor’s presentation at Music and the Brain Santa Fe (2014) she explained how infants are open to processing both simple and complex meters early on, but by twelve months of age they are already limited to what they have experienced musically (video file). Singing lullabies to baby provides a richer repertoire of music and maintains the wider range of processing abilities by introducing different melodic and rhythmic elements that may not have otherwise been heard.

### **Conclusions**

When a mother sings a lullaby to her baby everyone benefits. The mother does not have to be highly musically trained to engage in a meaningful musical experience with her child. For the mother/caregiver, singing lullabies brings a sense of bonding and closeness with the infant in addition to providing a coping mechanism for the stress and anxiety often felt by new mothers. Through listening to mother’s voice an infant reaps a variety of developmental, social-emotional, and musical benefits. What one may see as the simple act of trying to calm baby down for bed is

actually an outstanding way to care for the child and prepare him or her for a well-adjusted and meaningful life.

Folk lullabies have inherently withstood the test of time. They have been passed down through oral tradition for generations, and therefore have greater historical aesthetic value than composed lullabies. Unfortunately, folk lullabies are becoming a tradition of the past. Today's parents are choosing technology to calm and soothe their infants more often than they are singing to them. A lack of musical training and comfort with singing has led many parents to shy away from that early musical interaction with their children. With the newly acquired understanding of the importance of taking the time to sing lullabies to infants, parents should take the initiative to step out of their comfort zone and sing. Accessible resources should be provided to parents so they can learn folk lullabies for use with their children. Music educators must expand their reach to aid parents in learning lullabies to sing so that a strong sense of secure attachment, social-emotional skills, and musical foundation are cultivated in today's children. Sister Lorna Zemke (1989) made the point very clear, "We're hoping most of all to enhance the quality of life for the child, for the parents, and for anyone with whom the child will interact.... We're hoping that the child will feel accepted, will feel loved, and will feel a part of the family unit" (p.13).

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