This is the published version:


Available from Deakin Research Online:

http://hdl.handle.net/10536/DRO/DU:30073430

Reproduced with the kind permission of the copyright owner

Copyright: 2014, Canadian Association for Music Therapy
The Role of the Music Therapist in Promoting Parent-Infant Attachment

Favoriser l'attachement parent-enfant : rôle du musicothérapeute

Jane Edwards, PhD, RMT
Professor, University of Limerick, Limerick, IRELAND

Abstract
This paper provides a brief overview of recent literature relating to infant musicality and its basis for effective parent-infant work in music therapy. Two strong trends are revealed: the international breadth of the developing work by music therapists within family-centred contexts of practice, especially work with infants and their parents in the early years; and the use of theoretical principles of communicative musicality (Malloch & Trevarthen, 2008) combined with knowledge of early musical skills. This focus on musical perception and musical development (Briggs, 1991; Trehub, 2003) provides a rationale as to why musical interaction supported by a qualified music therapist can offer a potential pathway for improved attachment between the parent and infant when therapeutic support is indicated.

Keywords: music therapy, attachment, bonding, music in infancy, parenting support, communicative musicality

Résumé
Cet article offre un survol de la littérature récente qui se rapporte au fondement de la musicalité infantile pour un travail efficace en musicothérapie au sein de la relation parent-enfant. Deux tendances majeures se dégagent : la perspective internationale sur l’élaboration du travail de musicothérapeutes dans des contextes cliniques centrés sur la famille, plus particulièrement le travail auprès d’enfants et de leurs parents, dans les premières années; et l’utilisation de principes théoriques de la musicalité communicative (Malloch & Trevarthen, 2008) combinée à la connaissance des habiletés musicales infantiles. L’importance accordée à la perception et au développement musical (Briggs, 1991; Trehub, 2003) offre un rationnel qui cherche à savoir en quoi l’interaction musicale, effectuée par un musicothérapeute qualifié, peut conduire à l’amélioration de l’attachement parent-enfant lorsqu’un soutien thérapeutique est indiqué.

Canadian Journal of Music Therapy • Revue canadienne de musicothérapie, 20(1), 38
Infancy: Music and Music Therapy

In all cultures, music in the earliest years of life appears in the form of songs, chants, lullabies, and improvised vocal play that does not reference high-art cultural symbols; instead, music-making in these early years is a social relational resource available to all regardless of musical skill, knowledge, or training. When infants hear music they turn toward it, smile, and move. At the same time, they produce rich, music-like vocal utterances that delight their parents, who respond by singing, cooing, and speaking in a special singsongy way with infinite rhythmic and melodic attunement. This way of using the voice has been increasingly referred to as infant directed and has been shown to be preferred by infants as young as one month of age (Cooper & Aislin, 1990). Originally called motherese, this special way of interacting with infants also has been noted to influence the way adults sing to babies and very young children (Shoemark, 2011). Regarding music therapy in the context of parent-infant work, Edwards (2011) stated that music therapy can be described as... a process of developing a relationship with a caregiver/ dyad in order to support, develop and extend their skills in using musical and music-like interactions including vocal improvisation, chants, lullabies, songs, and rhymes, to promote and enhance the sensitivity and mutual co-regulation between infant and caregiver, in order to create the optimal environment for secure attachment to be fostered. (p. 6)

Music therapists have provided dyadic programs (Oldfield, 2011) and have developed group work methods (Abad & Williams, 2007) to address the needs of vulnerable parent-infant cohorts. Music therapy in this context is based on the premise that caregiver and infant music-making can have useful functions for developing attachment skills through promoting the development of synchronized, attuned, and sensitive inter-relating between the parent and infant.

Parent-Infant Attachment

Attachment theory was developed in a lifelong collaboration between the American-Canadian developmental psychologist Mary Ainsworth and the British psychoanalyst John Bowlby. The theory uses a range of sources of evidence to explain the need for a child to have a secure base, in which...
consistent care is provided, for the first years of life. Writing in 1991, Ainsworth and Bowlby described how they understood this theoretical contribution:

Focusing on intimate interpersonal relations, attachment theory does not aspire to address all aspects of personality development. However, it is an open-ended theory and, we hope, open enough to be able to comprehend new findings that result from other approaches. From its outset it has been eclectic, drawing on a number of scientific disciplines, including developmental, cognitive, social and personality psychology, systems theory, and various branches of biological science, including genetics. (p. 10)

In a healthy relationship the caregiver “affords emotional access to the child and responds appropriately and promptly to his or her positive and negative states” (Schore, 2001, p. 205). This supports the adaptation of the infant toward internal regulation functions that relate to “the regulation of arousal, the maintenance of alertness, the capacity to dampen arousal in the face of overstimulation, the capacity to inhibit behavioral expression, and the capacity to develop predictable behavioral cycles” (Beebe & Lachmann, 1998, p. 485). This interpersonal and intrapsychic regulation of the parent-infant dyad is considered interactive in that “interactive regulation flows in both directions, on a moment-to-moment basis, so that each experiences influencing, as well as being influenced by, the other’s behavior” (Beebe & Lachmann, p. 500).

The development of the ability to relate and communicate has been described as a series of building blocks or developmental phases of intrapsychic and interpersonal capacity (Stern, 2000). Stern has described these as having domains that include the emergent self, from birth until 2 months; the core self, from 2 to 6 months; the subjective self, from 7 to 15 months; the verbal self, which emerges at 15 to 18 months; and later the narrative self at around 3 or 4 years (Stern, 2000, p. xxv). These stages are perceived as accumulative, with the child integrating knowledge from the previous stage into their growth through the next. The first three stages offer the opportunity for the child to understand and belong to the relational world through having a sense of self and other. Through becoming verbal, the child learns how to use and comprehend language where previously they have related through affective attunement (Stern, 2000). As the capacity for narrativity emerges, the infant learns how to use language not only to explain or describe things but to make stories of belonging and hope.

At each of these stages of development, the infant needs a communicating partner who is sensitive and can respond in a timely way while observing the
quality of their relating. Papoušek (2011) has proposed that the success of interactions for the communicating parental partner requires "the presence or absence as well as the liveliness and expression of infant-directed qualities (e.g., the qualities of infant-directed speech) and ... the sensitive attunement of this behavior to the infant's signals" (p. 35).

Using Music Therapy to Promote Parent-Infant Attachment

Parent-infant work in music therapy has continued to develop as a distinct specialization with recognized leaders (e.g., Abad & Williams, 2007; Loewy, 2011; Oldfield & Flower, 2008; Shoemark & Dearn, 2008), and there are now music therapy programs that specifically aim to support attachment behaviours between vulnerable parents and their infants, notably the Australian program Sing & Grow (Abad & Edwards, 2004; Abad & Williams, 2006, 2007).

To help when difficulties are being experienced between parents and their infants, a qualified music therapist can work in gentle, non-intrusive ways to facilitate the discovery and strengthening of their capacity to relate through musical play that supports—and is also derived from—the usual repertory of parent-infant interactions. 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 responsively with each other, and sometimes this involves singing songs or proto-songs.

In the music therapy literature, work with families and infants is seen in a range of contexts from the highly medicalized, where the bond between parents and infants can be disrupted by lack of access to each other, to home-based programs, where problems of attachment may have been identified. Music therapists providing care in medical settings have consistently employed a family orientation, as can be seen in reports about work conducted in areas such as the neonatal intensive care unit, with pediatric burn patients, and in oncology (Daveson & Kennelly, 2000; Edwards, 1998; Edwards & Kennelly, 2011; Henning, 2012; Loewy, 2011; Shoemark & Dearn, 2008; Stewart, 2009). The music therapy community of practitioners working with vulnerable parents and infants in early intervention settings has also demonstrated a developing practice base (Bargiel, 2004; Edwards, Scallih, & Phelan, 2007; Jonsdottir, 2002; Nicholson, Berthelsen, Abad, Williams, & Bradley 2008).

In music therapy programs with mothers and their infants, observations of the quality of interactions between the mothers and their children and the
mothers' self-reports of satisfaction with participation in the sessions were indicative of the benefits of these programs (Oldfield & Bunce, 2001; Oldfield, Bunce, & Adams, 2003). Observations in music therapy sessions with mothers and their infants from the asylum-seeker community revealed that interactions and interpersonal engagement improved for these vulnerable, preoccupied mothers and their children (Edwards et al., 2007). A report of a music therapy group program with well families who were self-referred showed benefits through offering social support in a group setting; these parents reported that this led to additional learning about ways to deal with parental challenges (Mackenzie & Hamlet, 2005).

The first study that used validated measures to evaluate a short-term music therapy program for marginalized parents and infants found a number of significant benefits for 358 parents and infants; these benefits impacted the parent and child in a range of areas, including education in the home and parental mental health (Nicholson, Berthelsen, Abad, Williams, & Bradley, 2008). Additionally, a series of case reports on the uses of music therapy in a range of contexts with parent-infant dyads has demonstrated the utility of music therapy in providing effective support to promote attachment (Edwards, 2011). As de l'Toile has recognised, "an early intervention program involving musical experiences combined with therapeutic instruction can enhance the quality of parent-child interactions in ways that contribute to child development" (2012, p. 364). Carpenter (2007) has observed that the goal of arts-based programs when offered to children as part of early interventions services is to provide opportunities for "shared communication" between the parent and infant (p. 665).

Musical Caregiving

Infants are born with the neurological and auditory maturity to discriminate pitch, and as they develop, they can increasingly recognize the emotional intention of vocal timbre (Bergeson & Trehub, 1999). The particular ways of singing and speaking when interacting with infants in order to capture their attention and promote reciprocity is currently termed infant-directed (Bergeson & Trehub, 1999; Bryant & Barrett, 2007). This way of speaking is distinct from the way adults use their voices in interaction with older children and with each other (Trehub, Trainor, & Unyk, 1993). The way that the infant responds to this playful vocalising easily promotes feelings of loving intimacy for the caregiver, which is vital to bonding and, ultimately, to attachment (Gerhardt, 2004).

Adults use distinctive pitches and exaggerated prosodic contours in producing infant-directed speech. According to Trainor (1996), infant-
directed singing similarly includes features such as "final phrase syllable lengthening," placing emphasis on certain words, and using a "loving tone of voice," which is probably a function of smiling while singing (pp. 89–90). This type of singing is used by children as young as 3 years of age when singing to younger siblings (Trehub, Unyk, & Henderson, 1994). Infants show a clear preference for their mother's singing rather than her speaking (Nakata & Trehub, 2004) and prefer this singing when it has infant-directed features (Trainor, 1996).

While watching and listening to recordings of interactions between mothers and their infants, Malloch (1999) was intrigued by the musical aspects of these co-created events, leading him to suggest that "a mother and her infant can jointly create a musical piece—both are musical partners within their communication space" (p. 47). Papoušek (1996) had also described how when she was notating the pitches of infant-directed speech, it was tempting to also record the other musical aspects of these interactions "such as crescendo/diminuendo, rallentando/accelerando, legato/staccato, dolce, or agitato" (p. 94). Malloch and Trevarthen (2009) concluded that "these 'musical' narratives allow adult and infant, and adult and adult to share a sense of sympathy and situated meaning in a shared sense of passing time" (p. 4).

Dissanayake (2008) proposed that this playful interaction is proto-musical, a foundation source for the universals of human musical behaviour. In her view, the proto-musical features of "formalization, repetition, exaggeration, dynamic variation, and manipulation of expectation" contribute to emotional bonding because they impact an infant's "visual, vocal, and kinesic signals that enable their emotional bond with their mother" (p. 176). She notes the similarities between these sounds and music:

Both music and baby talk have similar melodic, rhythmic, and dynamic expressive features, which include repetition, exaggeration, and elaboration as well as variation in volume, pitch, and speed. One can even find spontaneous vibrato and glissandi in some mothers' utterances to babies. (p. 6)

The use of these easily recognizable musical elements to co-create mutually satisfying encounters between parents and their offspring is increasingly understood to contribute to healthy and optimal growth through the early years. These positive interactions in turn create a strong foundation for future capacities for intimacy and positive relating, with these positive early relations influencing later mental health (Maselko, Kubzansky, Lipsitt, & Buka, 2011).
Conclusion

Two strong trends are revealed in this overview of contemporary literature. The first is the international breadth of the developing work by music therapists within family-centred contexts of practice, especially work with infants and their parents in the early years. While some of this work takes place in educational environments (e.g., Ledger, 2011), it is not primarily educational, but rather therapeutic and family-focused in its orientation and goals. The second trend is the use of theoretical principles of communicative musicality (Malloch & Trevarthen, 2009) combined with knowledge of early musical skills—especially musical perception and musical development (Briggs, 1991; Trehub, 2003)—to understand how and why musical interaction supported by a qualified music therapist can offer a potential pathway to support attachment. These emerging trends demonstrate increasing awareness within music therapy of the importance of successful attachment; they also demonstrate the great potential for enriching poor relationships through musical means within music therapy practice.

The specific methods and techniques music therapy practitioners use to promote successful attachment need further research attention, and because the problems that manifest from poor attachment at societal, familial, and individual levels are potentially so catastrophic, it is essential that this work continue to grow. There are great opportunities available through music-making for the promotion of parent-infant bonding in the first instance and, ultimately, for successful attachment. Practitioners and research collaborators need to disseminate these as widely as possible.

References


Canadian Journal of Music Therapy or Revue canadienne de musicothérapie, 20(1), 44.


*Canadian Journal of Music Therapy & Revue canadienne de musicothérapie, 20*(1), 47


