

### Vocal Connections: How Voicework in Music Therapy Helped a Young Girl with Severe Learning Disabilities and Autism to Engage in her Learning

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#### Abstract

This article examines the use of the non-verbal voice in music therapy with children with severe learning disabilities, complex needs and autism. Recent literature on the use of the voice in music therapy is summarised and links are made between the aims of music therapy and those of special educational establishments. Theories regarding the voice and the self, and the important connection between body awareness and emotion as precursors to learning are referred to, particularly in relation to learning disability. Through a case study, I demonstrate how a young girl used voicework to build connections with herself and the music therapist, whereby consequently she became more motivated to interact with her surroundings. I argue hence that the use of the non-verbal voice in music therapy, through its intrinsic connection to identity and internal emotional states can contribute significantly towards the healthy developments necessary for a person to be able to learn. Therefore, by increasing our knowledge about the actual process of learning, and the significance of our work within that process, we can move towards demonstrating clearer outcomes of music therapy in

#### Introduction

Having entered the music therapy profession as a vocalist and songwriter twelve years ago, I found that voicework quickly became integral to my clinical approach; I noticed stark differences in the way clients used their voices and found that changes in their vocal patterns often came alongside other perceived shifts in their self-awareness. The process of learning how much and when to use my voice, and noticing the range of responses that this elicited from clients has been endlessly interesting and I have noticed that the vocal sounds produced by both the therapist and the

the educational context and have a stronger 'voice' within the multi-disciplinary teams that serve this population.

**Keywords:** voicework, non-verbal voice, autism, severe learning disability, connections, self-awareness, body, learning, education

**Tina Warnock** qualified as a music therapist in 2000 from Anglia Ruskin University, following a degree in social psychology from Sussex University in 1992. She has since worked primarily with children and young people in special school settings, and for the NHS in Child and Adolescent Mental Health Services. In 2008 she set up the Belltree Music Therapy Centre in Brighton where she is currently Head of Service, developing music therapy provision in Sussex. Tina is also a visiting lecturer on the MA Music Therapy Course at Roehampton University.

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client frequently serve to enhance the therapeutic relationship. Recent publications focusing on voicework have filled a significant gap in the music therapy literature, enhancing knowledge and awareness within the profession of how it can impact on the quality of treatment. However, few studies to date have focused specifically on use of the non-verbal voice, particularly in the field of learning disability and autism. After twelve years of working primarily with children and young people<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> Forthwith, children and young people will be referred to as 'children'.

on the autistic spectrum and/or with a learning disability, I have felt compelled to look more closely at what happens during these vocal exchanges, which have brought so much meaning and relevance to this work. My focus for the purposes of this article is on how connections made through the voice in music therapy translate into the children's learning environment in special schools and how this fits in with the educational establishment's aims. Having noticed improvements in the overall functioning and general integration into school life of several children I have worked with, I am pursuing ways of identifying and sharing these outcomes more clearly with the multidisciplinary team.

# Review of recent literature on voicework in music therapy

The following provides a brief overview of recent literature specifically concerning voicework in music therapy. A more comprehensive review of theories relating to the voice can be found in a previous essay *Voice and the Self in Improvised Music Therapy* (Warnock 2011)

The recent publication Voicework in Music Therapy (Baker & Uhlig 2011) investigates the use of the voice in a wide range of health care settings around the world. This book includes both and improvisational structured models and acknowledges the connection between voicework and self-awareness in the foreword: "Singing can bring us into the present moment where everything is new and many things are possible [...] something authentic. Finding one's voice is finding one's self" (Baker & Uhlig 2011: 17). The book covers a wide range of approaches and techniques, such as vocalled relaxation for children on the autistic spectrum, the use of breath and toning in the treatment of painful medical conditions, and the use of non-verbal singing to build connections with new-born infants. However, despite providing interesting insights into clinical applications of voicework in music therapy, this book primarily focuses on the application of techniques which require verbal processing and the use of words by the client, with little attention being given to nonverbal learning disabled clients.

Diane Austin's book *The Theory and Practice of Vocal Psychotherapy* (2011) goes into great depth and detail about the profound affect that voice work, both verbal and non-verbal, can have with verbal clients suffering from trauma and mental health issues - an advanced method that she has developed over many years of practice. Austin states that "music and words are both integral to vocal psychotherapy" (Austin 2011: 118); her writing about toning and the non-verbal vocal work within the case studies, however, acknowledges the importance of non-verbal vocalising in forming authentic connections with the self.

The recent publication Music Therapy in Schools includes references to voicework in several chapters, embracing a range of music therapy approaches in this setting (Tomlinson et al. 2011). For example Strange shares his psychodynamically informed work with teenagers with severe special needs describing in detail some of the non-verbal vocalisations which take place in the group and how they contribute to the therapeutic process; he also emphasises the importance of the therapist singing the clients' names. Harrison describes how singing is often present in her work, in the form of structured songs, or as a commentary on the member's participation, and Tomlinson describes how her own use of vocal imitation encourages her client to "develop and extend her vocalisations" (Tomlinson et al. 2012: 108). She uses the twelve-bar blues to provide a secure rhythmical framework over which they can vocally explore imitative exchanges. She also describes how vocal imitation in group work can enhance communication and develop basic social skills. However, while some welcome attention is given here to voicework with verbal and non-verbal children in special school settings, there is little mention of what is happening internally for an individual when they discover and explore their non-verbal voice with the therapist.

In a previous article on voicework I explored in some theoretical depth the impact that the voice has on every individual's identity from birth, and used case studies with children in special schools to illustrate how this functions in the music therapy context (Warnock 2011). In this article, however, I would like to focus on how developments in the voice for children with severe disabilities and autism can have an impact upon their capacity to learn. My approach to this work draws on theories from developmental and humanistic psychology, but also incorporates psychodynamic theory as a way of understanding the inner processes taking place for the child.

# Links between music therapy, education and the learning process

In the introduction to *Music Therapy in Schools* Amelia Oldfield provides an interesting overview into how music therapy has evolved to its current position within the education system in the UK, acknowledging the expertise that now exists. Both she and Tony Wigram have made a prolific and highly significant contribution to the position of music therapy in the educational sector by demonstrating how music therapy positively impacts on communication skills and general developmental milestones in children. Wigram emphasises the need for the music therapist's aims to be linked with the each child's individual education program, and how the objectives of a child's music therapy are "connected to his/her specific social or pathological problems" (Wigram et al. 2002: 34).

Robertson (2000), in his paper comparing music therapy and music teaching, highlights the need for both teachers and therapists to understand the actual process of learning, and touches on the importance of empathy, relationship building and creativity in the learning process. He explains that a clinical need implies the pupil requires assistance in learning to cope with the environment, whereas a special educational need implies the pupil needs help to enable him or her to contribute to the environment. Robertson presents a continuum model to illustrate this and highlights the increasing overlap in the skills of music teachers and music therapists. While I agree that this overlap exists, in terms of teachers now using music more interactively with students, I feel it is more present group work, and work focusing in on communication skills. In the following case study I advocate that the specialist skills of the music their understanding therapist with of psychodynamic processes plays a vital role in the progress of the child concerned.

It is also relevant here to refer to recent developments in neuroscience, which demonstrate how learning takes place. In her book *Smart Moves*, Carla Hannaford describes how body, thought and emotion are intimately bound together through and that "emotions neural networks are fundamental to thought" (Hannaford 2005: 56). From birth, emotions are felt and responses expressed through the body which then lead to healthy neural pathways in the brain and effective learning. Therefore, if a person cannot connect with their emotions they are unable to learn or think rationally. She explains that, when a person is under stress, nerve development tends to focus in the survival areas of the brain, meaning that neural connections between the emotional and learning centres are limited (Hannaford 2005). This has implications for the learning potential of any child whose early life involves high levels of stress for any reason.

In the forthcoming case study, I will refer specifically to the autistic child who typically experiences greater stress levels than average because they face difficulties in integrating their senses, making the sensory nature of the world over stimulating and overwhelming from birth. Their tendency to use one sense at a time makes it harder for autistic people to form the necessary neural pathways which allow them to share attention with another person and to recognise and understand emotions (Lawson 2011). It follows therefore, that music therapy should be used to facilitate the formation of these pathways by capitalising on the emotional properties of music within a therapeutic relationship. Lawson who is autistic herself, explains that sharing attention with another person is very difficult until something triggers an interest which will then enable links to be made; it is necessary to "join the dominant interest of the (autistic) person and move out from there" (Lawson 2011: 37).

To end this section I would like to link the above theories with the main principles of the Foundation Stage curriculum in the UK, which were so helpfully alluded to in Bruce and High's chapter in Music Therapy in Schools (Tomlinson et al. 2011). Here a teacher shares her perspective of music therapy as being "about the self-agency of the children [...] enabling them to become aware that they can influence their environment and take positive control of things themselves" (Tomlinson et al. 2011: 71). She also explains how music therapy has helped to inform her of a child's true capabilities and motivations, and reflects on how these contributions link to the four Foundation Stage principles as set by the Department for Children, Schools and Families (UK) in 2008:

- *A unique child*: enabling each child to be resilient, capable, confident and self-assured
- *Positive relationships*: building stronger relationships which enable a child to develop strength and independence
- *Enabling environments*: creating positive environments for learning
- *Development*: acknowledging that children learn in different ways and responding to each child's learning style.

(taken from Tomlinson et al. 2011: 72)

Based on my ten years' experience as a music therapist in special schools involving a significant body of casework with children who have little or no language, I suggest that music therapy can bring out improvements in all areas of the Foundation Stage, but particularly those involving personal, social emotional development, and and communication skills. It is also important to note that several of the Foundation Stage assessment scale criteria emphasise that children will first engage in their learning by joining in with rhymes and songs (Department of Education 2008); it is no coincidence that singing is the focus of musical activities at this level as it is such a natural part of early communication.

#### Why focus on the voice?

It is evident from the music therapy literature that sometimes the voice features little or not at all in music therapy sessions; the lack of it can be a welcome relief from a world so full of talking and recorded voices on the radio and TV. Directing attention to the instruments allows an open exploration of sound which is new and different to the usual domination of human voices. Hence, the instruments alone can provide a freedom of expression which is an entirely appropriate way of working with some clients. For the therapist too, a focus on the instrumental sounds can be highly satisfying and connects with their own reasons for entering the music therapy profession; perhaps they have found their most meaningful connections through playing their instrument rather than using words, and in Western cultures, singing is generally in the form of songs with words.

However, the lack of vocalisations in a music therapy session can also be indicative of an active avoidance of sounds, which may evoke or trigger feelings which the client finds difficult to accept; their voice might reveal unwanted feelings or personality traits which they would rather not confront or share. As stated above the human body is intimately connected with the emotional experience (Hannaford 2005) so this would suggest that the voice, which is produced by and within our bodies, has the potential to connect more directly with our internal feeling states than playing an external instrument. The absence of a client's voice can also be a symptom of low self-worth and lack of inner motivation; low expectations, which lock them into a position of silence and passivity. Most notably perhaps, in the context of this article, the lack of a voice may be none of these things, which all suggest a functional 'hiding' away of some sort. It can instead be indicative of a very early stage in the individuation process<sup>2</sup>; a stage in which the emergence into self-awareness has become 'stuck' or not yet enabled enough for the person to sense their separateness and ability to control their environment. This is particularly relevant to people who have a severe learning disability and / or autism. Again, the fact that the voice is produced within our bodies is significant here. If a client does not vocalise, it can be tempting for a highly responsive therapist to also keep their own voice inside them; after all, music therapists are encouraged to reflect back what is offered by the client. However, there are ways that a therapist can introduce the voice as an instrument in the room in a way which creates possibility and induces the client to produce their own vocal sound when they are ready. When and how this is done is entirely down to the individual situation, but when well placed it can facilitate the beginning of a journey which brings new experiences of both positive and painful emotions to the client, impacting on their whole sense of self (Warnock 2011).

It seems from the literature that, while much work takes place with children and young people with learning disabilities and autism around the country, and voicework is frequently referred to as part of this work, the area of non-verbal vocalisations with this client group has not yet been explored in enough depth.

#### A case study: Carly

The following case study explores how the act of vocalising has contributed to significant developments in the emotional awareness of a young girl with severe learning disabilities, autism and complex needs, and her consequent ability to receive and digest information about the world. I suggest that, by allowing her voice to become part of our therapeutic relationship, she became able to connect with as yet undiscovered aspects of her identity and unprocessed life experiences: through vocalising she found meaning which consequently enhanced the quality of her everyday interactions. This included interactions with other people, allowing her to experience closer relationships, and interactions with her surroundings, enabling her to engage in her learning. My approach draws on theories from humanistic and developmental psychology but has a strong psychodynamic emphasis.

#### The setting and initial referral

The setting was a fully equipped music therapy room within a small music therapy centre situated adjacent to the special school where the author has been the music therapist since 2003. Carly was initially referred privately at the age of six by her grandmother who was her main carer and had been recently diagnosed with terminal cancer; later on, the work continued be funded through the school, with support from social services.

Carly had been born three months premature, had severely delayed development, a hearing impairment and was severely autistic. In addition, she had limited contact with her mother who was unable to care for her, and there was much uncertainty about her future. Her grandmother was looking for a place where Carly could communicate her feelings non-verbally and experience a sense of emotional support: a space where she could digest

<sup>&</sup>lt;sup>2</sup> Individuation is identified by Jung (1964) and Mahler (1975) as the process of self-discovery which continues throughout life.

and share her unique experiences in preparation for the unsettled period to come.

#### Early sessions

Carly showed little awareness of danger and wanted to climb or step on objects in her path. Several instruments needed to be removed from the room to make it safe for her to explore. She seemed to be able to hear some sounds better than others but this was not necessarily related to volume; it may have been due to certain sounds attracting her attention more than others, as part of her autism. My voice was just one of many sounds for her and she showed little interest in it at this stage. Carly was constantly on the move, pacing around the room with an energy and drive which felt like a challenge for me to meet.

I spent several weeks pacing up and down with Carly, matching my steps to hers and accentuating one in every four steps (and sometimes every three) in an attempt to synchronise our rhythm. She grew to enjoy this, continuing on her path but sometimes glancing sideways at me in an interested fashion. As we paced I began to vocalise, making a sound as our feet hit the ground. This was undefined at first and could be described as a gentle but punctuated 'er' sound, which included the sound of breath to reflect the physical effort we were putting into the pacing. I sometimes alternated the non-verbal sound with the phrase: with 'walk.ing, walk.ing up and down, Carly and Tina walking round' in a spoken voice. At this stage, Carly only vocalised to show when she was upset, crying long high notes which also had a quality of fear about them. At other times she was silent but liked to carry a small plastic object with her to tap at regular intervals against her teeth - perhaps she enjoyed the vibration that this created inside her head. Interestingly, the tempo of her tapping was very similar to that of her pacing; steady at about 90bpm. By adding my voice in this way, using the sound 'er' that I knew Carly was capable of reproducing, if she chose to, I was offering her a possible way for her to connect with me.

As the weeks past, I felt she began to anticipate this activity, taking my hand and looking at me as we began, and sometimes smiling as we walked. She was forming an attachment to me, something that was very difficult for her in the context of her everyday life. She could be with me but stay within her own 'comfort zone', outside a verbal context. This communication between us could be likened to Stern's concept of *affect attunement* which is when the mother responds to her baby's actions and affect in a way that matches them, but using a different modality. The baby notices that the mother has responded directly to aspects of himself and internalises the experience as shared, deepening the bond between them (Stern 1984).

The time came when I felt I could step away from Carly and match her rhythm on the piano instead while still remaining within her awareness. I used more melody in my voice and played with different styles, always synchronised with her pace. I also commented in more detail on her actions and movements, using her name frequently. I could see that she noticed the changes in my voice and that it had become something of interest to her through her glances, smiles and occasional laughter. The trust that we had developed allowed her to approach me and sit on my lap for a few moments before setting off again on her walk. Then the time came for her to stop; she made herself comfortable on my lap, held my gaze for the first time and vocalised very softly with an 'er' sound; she turned and used a single finger to play notes on the piano, listening and vocalising in between the notes. The quietness of her singing and playing, which matched in pitch, confirmed to me that she could hear certain sounds very well; this was useful information at a time when she was being assessed by the multidisciplinary team in many areas, including her hearing.

#### The impact of the non-verbal voice on awareness

So Carly's voice was in the room; a gentle, vulnerable sounding voice which was beautiful and pitch perfect; my countertransference was a strong maternal feeling and I became highly aware of the level of trauma and deprivation that she had suffered as a young baby, alongside the impending loss that she was soon to experience due to her grandmother's illness. While I had been aware of her history before this point, it was her voice that enabled me to feel the impact of her emotional experience. Furthermore, the vibration in her body seemed to bring her awareness into the here and now, allowing her to absorb my emotional presence for the first time and consciously experience our shared attention; an important milestone in development. I had met her 'dominant interest' through our pacing together, and had attuned to her physical energy and pace through the modality of my voice, allowing her the opportunity to notice and experiment with her own (as also discussed by Lawson (2011) and Stern (1984)).

I was aware of the potential for me to project my own sadness and fears for Carly into our exchanges and was careful to consider this in supervision. I was also careful not to interpret her sounds verbally due to the complex nature of her difficulties and level of understanding, but focused on supporting her expressions through instrumental and nonverbal vocal responses. I had to judge whether to reflect and support the pain in her voice by using chords which would allow her a journey through the feelings, or whether to provide some balance so that she did not enter a place of such despair that she would not be able to digest the experience usefully. This reminds me of Austin's writings on re-traumatisation when she highlights the important difference between "a therapeutic regression which results in an insight [...] and a regression that creates an unproductive emotional flood in which the client (becomes) caught in the undertow" (Austin 2011: 49). Carly seemed full of fear and sadness and was emotionally immature so I responded with a vocal holding technique using two chords within a regular, rocking rhythm, which provided a feeling of safety and containment (Austin 2008). Carly sang phrases, which oscillated between several notes, often chromatic, and I played slow, steady intervals on the piano with no defining thirds, while matching and mirroring her vocal phrases in response. There was plenty of time to feel and listen but without seeking an explanation or resolution.

This experience seemed to have real value for Carly; a girl who constantly moved from one distraction to the next, absorbed by her sensory needs and filtered interests, was able to stop and be *with* another person, allowing them to share a moment of self-realisation. She gave me permission to nurture her and experience the meaning that had developed in our relationship.

Over the following weeks and months Carly became louder, making an impact on her environment; she sang open vowels regularly with more clarity and volume and later progressed to holding on to beaters and playing the drum. The feeling of fragility and disorientation decreased as her voice grew stronger and smoother and her pacing stopped, allowing her to settle for longer at different instruments and experience a greater sense of control.

Bunt (1994) has written of the benefits of being loud and how this allows a child to explore ways of integrating and balancing aspects of the personality. Carly's increased interest in singing and playing was leading to a discernible increase in her concentration levels, a calmer disposition and a clearer understanding of how she could use the instruments as a means of communicating.

#### Progress in her engagement at school

Alongside these changes, Carly progressed in school, becoming more able to communicate choices through symbols and integrating better into the class. She seemed more settled and less prone to long periods of crying. Interestingly, after our interactions had reached this more sophisticated level, she began to reject our sessions, resisting the walk over and wanting to leave as soon as she had arrived. While I felt saddened by this and did not understand her reasons, I felt that she had progressed significantly and had a right to choose, so after several weeks of this resistance we decided to have a break from the sessions.

The following year after her grandmother had passed away, it was felt that Carly might benefit from another period of music therapy to allow her the opportunity to process her loss and the consequent transition into foster care. She approached the sessions positively and used her voice again from the outset, vocalising freely and readily engaging with our relationship again. I felt the intimacy was still there and was pleased to be able to support her through this period of adjustment.

Carly continues to come for regular blocks of supported by members of sessions, the multidisciplinary team who have recognised the significance of the sessions to her emotional wellbeing. Carly continues to choose singing as her main form of communication, but she also leads me to other instruments in the room and guides my hand to play. Although she can arrive at the session in a wide range of emotional states, she is flexible enough now to allow me to reflect her mood musically and calm her down into a state in which she can concentrate and interact. Her voice and her playing now express a wider range of feelings through deliberate variations in volume, tempo and tone and she enjoys the overall sense of control that the sessions provide. Carly's teacher has explained that she now sings spontaneously during the day when she is in a good mood and enjoys holding her ear close to others while they sing to her; this has improved her relationships with school staff and she is now able to initiate contact and join in with group activities. She is also able to communicate active choices by leading with her hand, and generally participates positively and actively in school life.

### Summary of Carly's music therapy process

Voicework in music therapy has given Carly an opportunity to build connections with herself. Her difficult start in life, combined with her learning disabilities and autism had been holding her in a state of disorientation and distress; one in which the world felt overwhelming and frightening much like with a new-born infant. By allowing herself to hear and explore her own voice within her body, in response to my non-verbal vocal offerings and matching of mood and affect, she became motivated to listen to her own natural pitches, melodies and rhythms and noticed her authentic self emerging. The presence of her voice in the sessions also served to strengthen my empathy and compassion for her and allowed us to communicate on a new and deeper level. Thankfully Carly now has a stable home and is progressing at school, showing remarkable resilience to all the challenging events she has experienced in her life so far. While it is unlikely that she will ever use words to communicate or make concrete associations in a verbal context, her non-verbal voice has allowed her to experience a sense of identity and the opportunity to build on this through a creative process, essential to the development of any individual (Winnicott 1971).

I have attempted to describe Carly's personal journey in music therapy by linking my clinical observations to theory and experience, and listening to feedback from the multidisciplinary team, but it is important to accept that in the realm of the nonverbal there is always an element of not knowing.

#### **Concluding thoughts**

This article has looked at how voicework is used in music therapy practice and has identified a gap in the literature concerning the impact on the individual of using of the non-verbal voice. I have explored the common ground between the aims of music therapy and those of educational establishments, and have touched on current theories from neuroscience about the learning process, particularly in relation to learning disability and autism. I have proposed that voicework has a unique part to play in music therapy with this client group, due to the close relationship that it has with our identities and the connections that it forges between the body and emotions, leading to developments in selfawareness and an increased capacity to learn. It is this connection between the voice and the body, which I feel forms the essence of what I am exploring here, and there is enormous scope to examine this relationship further, with the help of new discoveries in neuroscience, and some deeper research into the subject.

A case study demonstrated how the non-verbal voices of the music therapist and the client led to significant positive changes to her engagement in the special school environment. In terms of Carly's learning within the Foundation Stage, this contributed to building stronger relationships to enable her to develop strength and independence, enabling her to be more resilient, capable, confident and self-assured, and enabling her creative development. I would like to further understanding of these links with the multidisciplinary team and families by collaborating on outcomes measures such as the Music Therapy Outcomes Star (Triangle Consulting Social Enterprise Ltd 2011), and potentially developing an evaluation tool which looks specifically at use of the non-verbal voice.

Music therapy has been established in some special schools for many years, but there are still many establishments that do not employ a music therapist, or recognise the significant impact that music therapy can have on the children and young people's ability to engage in their learning. In addition, it can be very difficult in some areas to find an educational psychologist who will include music therapy on a child's Statement of Educational Needs. Clearly more work needs to be done on communicating such positive outcomes to the parties concerned and further research undertaken to provide the much needed evidence to support the future of music therapy practice for children with learning disabilities, autism and complex needs.

#### References

- Austin, D. (2011). *The Theory and Practice of Vocal Psychotherapy*. London: Jessica Kingsley.
- Baker, F., & Uhlig, S. (Eds.), (2011). Voicework in Music Therapy: Research and Practice. London: Jessica Kingsley.
- Department of Education (2008). Statutory Framework for the Early Years Foundation Stage. Retrieved from <u>www.education.gov.uk</u>
- Hannahford, C. (2005). *Smart Moves: Why Learning Is Not All In Your Head*. Arlington, VI: Great River Books.
- Jung, C. (1964). Man and His Symbols. USA: Dell.
- Lawson, W. (2011). *The Passionate Mind: How People with Autism Learn*. London: Jessica Kingsley.
- Mahler, M., Pine, F., & Bergman, A. (1975). *The Psychological Birth of the Human Infant*. New York: Basic Books.
- Robertson, J. (2000). An educational model for music therapy: The case for a continuum. *British Journal of Music Therapy*, *14*(1), 41-46.
- Tomlinson, J., Derrington, P., & Oldfield, A. (Eds.), (2012). *Music Therapy in Schools: Working with Children of All Ages in Mainstream and Special Education*. London: Jessica Kingsley.
- Triangle Consulting Social Enterprise Ltd (2011). *Music Therapy Outcomes Star.* Available online: <u>www.outcomesstar.org.uk/music-therapy</u>

- Warnock, T. (2011). Voice and the self in improvised music therapy. *British Journal of Music Therapy*, 25(2), 35-47.
- Wigram, T., Pedersen, I.N., & Bonde, O. (2002). A Comprehensive Guide to Music Therapy: Theory, Clinical Practice, Research and Training. London: Jessica Kingsley.
- Winnicott, D. (1971). *Playing and Reality*. London: Tavistock.

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