

## MUSIC AS THERAPY

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### *Abstract — Résumé*

The article focuses on music as a therapeutic option in psychiatry. In the first part of the article the authors have given a review of various comprehensions and definitions of music itself, as well as the effect of music on the mind. The idea of music as a healing influence which could influence health and behaviour is at least as old as the writings of Aristotle and Plato. Today, music therapy is a well-established allied segment of the health profession, similar to occupational therapy and physical therapy. It consists of using music therapeuti-

cally to address physical, psychological, cognitive, behavioural and social functioning. The music therapy experience is related to art and everyday experiences in many different ways. In other parts of the article, the authors have tried to show the importance of rhythm through life, as well as to show the functions of music therapy, and the favourable experiences that they have had with their patients who had music therapy as a therapeutic option.

**Key Words:** music therapy; music and art; rhythm in life; functions of music therapy

### *Introduction: The Power of Music*

An old Chinese proverb says: »Music comes from the heart of the human being. When emotions are born, they are expressed by sounds and when sounds are born they give birth to music«. Actually this old proverb speaks of the essence

of music. According to the philosopher Susan Langer,<sup>1,2</sup> music expresses the forms of feelings that the individual is not able to express otherwise, experiences that are not lingual and non-discursive, such as bodily rhythms and other experiences anchored to the early childhood of the individual as well as to unconscious and traumatic experiences.

According to the Cuban composer Leo Brouwer,<sup>3</sup> music is just like telling stories, and he also says that music should be just like talking. But how could we verify these arguments? The answer could be found in the symbolic, deep structure of music. Music is symbolic, but non-discursive, and it could be used to express the structures of psychic processes rather than the contents of those processes. According to the Estonian semiotic Carl Leichter,<sup>4</sup> the origin of music and musical expression lies in inner psychic tensions, which seek out their relaxation through music. According to Leichter, the final intention of expressing, performing or comprehending music lies in psychic relaxation. The late composer and modernist John Cage once said in an interview that he had noticed during his composing work that the final intention of music activities is to gain mental peace.

Music is communication and has been compared to the »sacred text«, which contains untold stories, quiet whispers and shouts about mental pictures, memories, meanings and things that are linked to the psychic processes during the creative process of composing. Understanding that reality requires an empathetic listener who is constantly trying to understand music by »catching« the similar structures (mental pictures, memories, emotions etc.) presented in a musical composition from his/her own subjective »world of mind«. The subject who is creating, performing or receiving music can thus use meaningful musical structures to build his or her own world into a meaningful and harmonious entirety.

In this process, the forms of the highly subjective and intimate »world of sounds« meet the corresponding »forms of experiences« of the other human mind. Musical communication takes place between two highly intimate and subjective structures of understanding, reacting to and experiencing the »world«. Central factors in this process are the »internal experiences« of the composition, which mirror the individual's »internal world« and personality. When music »moves« us it means that we can find in it some of our own meaningful structures of experience. As Tarasti<sup>5</sup> put it: »Music is inside me and I am listening to myself while listening to music«. The empathetic musical communication process could be described by using the paradoxical quotation from Marcel Proust<sup>6</sup>: »The world is the

<sup>1</sup> S. LANGER (1953), *Feeling and Form*. New York: Charles Scribner's Sons.

<sup>2</sup> S. LANGER (1967), *Mind*. Baltimore: John Hopkins Press.

<sup>3</sup> L. BROWER (1984), The Cuba's Composer Virtuoso Leo Brouwer. *Guitar Player*, 19, 79-85.

<sup>4</sup> C. LEICHTER (1984), Musiikki taidemuotona. *Synteesi*, 3, 1-2, 42-43.

<sup>5</sup> E. TARASTI (1983), Tulemisen aika. *Synteesi*, 2 (3-4) 50-64.

<sup>6</sup> M. PROUST (1970), *Kadonnutta aika etsimassa*. Helsinki: Ottawa.

same but different to everybody«. Music is just like an empty mathematical formula that, for example, the receiving individual could find with his/her own subjective, non-discursive and non-verbal psychic experiences, memories and mental pictures. This process is spontaneous and works automatically without the borders of consciousness or conscious intentions.

Lehtonen<sup>7</sup> has shown that music is one of the best ways of activating psychic processes. Music engulfs us and, at the same time, spontaneously brings to our minds meaningful memories, mental pictures and experiences from our past, without pain and anxiety. The patterns of music invoke references to the past, and already forgotten experiential material, and these references intertwine with the present and lead the listener to anticipate something of the future. In the process of receiving, performing and creating music there is always a continuous movement between the past, present and future. A musical experience always also means both confining in »time and space« and individualizing. As a result of this confining, it becomes a dialectic relationship between temporal continuity and disruption.

According to Igor Stravinsky,<sup>8</sup> music is nothing more than a series of tensions that try to find their relaxation. Maybe this quotation expresses the arrogance of the angry genius in relation to intellectual studies of music. On the other hand, this quotation contains a very general and simple »theory« about music. The tensions that Stravinsky mentioned become very interesting when they are compared with the knowledge we have about the »inner world« of the newborn baby. The archaic world of the infant is composed of cyclical variations of different states of tension and relaxation.<sup>9,10</sup>

Music has its effect directly on our autonomic nervous system, causing different kinds of autonomous bodily reactions. At this level, we don't need intelligence to comprehend or understand music. Music »touches« a severely mentally retarded patient or a highly educated professor of philosophy in the same way.

Musical experience in its most general sense seems clearly to have very much in common with the archaic ways of thinking or coping with the world. Music is a branch of body language, a certain kind of bodily process that gives meanings to things in which unconscious bodily experiences of meaning and their symbolic derivatives gain their own abstract forms. According to Recharadt,<sup>11</sup> the »structures

<sup>7</sup> K. LEHTONEN (1987), Creativity, the Symbolic Process and Object Relationships. *Creative Child and Adult Quarterly*, 12, 259-270.

<sup>8</sup> I. STRAVINSKI (1973), *Musiikin poetiikka*. Helsinki: Ottawa.

<sup>9</sup> D. STERN (1985), *The Interpersonal World of the Infant. A View from Psychoanalysis and Developmental Psychology*. New York: Basic Books.

<sup>10</sup> K. LEHTONEN (1991), Music as a Language of Possible Worlds: Music as Psychotherapy. *Creative Child and Adult Quarterly*. XVI/3, 133-163.

<sup>11</sup> E. RECHARDT (1987), Experiencing Music. *Psychoanal. Study Child*, 42, 11-30.

without content« in music actually represent the similar structures of archaic bodily comprehension.

The relationship between music and the unconscious is extremely interesting, since it seems to show up clearly during clinical music therapy processes.<sup>12</sup> The psychical state during performing or listening to music seems to be in close contact with the symbolic process of the individual. Music seems to promote or speed up the psychic work and symbolic process of the individual. Music therapy processes activate the unconscious mind of the therapist and his/her patient and brings »into the light« such unconscious material (e.g. in the form of music, fantasy or mental pictures), which could not be raised to consciousness otherwise. Especially the temporal creative, but, at the same time, well-controlled regressive state during the intensive music therapy process seems to reach back to even the earliest phases of development. The symbolic material presented during the sessions of intensive music therapy is in close relationship with dream work and dream pictures, because they have similar unconscious structures; condensation of thoughts, mirror images, crab movements, pictures instead of thought, and so on.<sup>13,14</sup> Analogous to the remark made by the founder of psychoanalysis, Sigmund Freud,<sup>15</sup> that »dreams are the royal road to the unconscious« may justifiably be completed by adding music to the definition, because the forms of both dream work and »musical thinking« are largely similar ways of approaching and understanding the human unconscious, which is largely dominated by symbolic processes.

#### *The History of Music Therapy*

The idea of music as a healing influence, which could have an effect on health and behaviour, is at least as old as the writings of Aristotle and Plato.<sup>16</sup> The 20th century discipline began after World War I and World War II, when community musicians of all types, both amateur and professional, travelled around to hospitals in different countries to play for the thousands of veterans suffering both physical and emotional trauma from the wars. The patients' noticeable physical and emotional responses to music led the doctors and nurses to request the hiring of musicians by the hospitals. It was soon evident that the hospital musicians needed

<sup>12</sup> K. LEHTONEN (1989), *Relationship between Music and Psychotherapy*. Publication Series of Turku University, Dpt. of Education A:138. Cf. also footnote No. 7.

<sup>13</sup> S. FREUD (1925), *Some Additional Notes on Dream Interpretation as a Whole*, SE:19. Cf. also footnote No. 10.

<sup>14</sup> R. FRIDMAN (1980), *Proto-rhythms: Non-verbal to Language and Musical Acquisition*. In: M. R. Key (ed.), *The Relationship of Verbal and Non-Verbal Communication*. The Hague: Mouton, 77-91.

<sup>15</sup> S. FREUD (1900), *The Interpretation of Dreams*, SE: 4-5. Cf. also footnote No. 13.

<sup>16</sup> D. BROOKS, *A History of Music Therapy Journal Articles Published in the English Language*, *Journal of Music Therapy*. 40(2): 151-168, 2003 Sum.

some prior training before entering the facility and so the demand grew for a college curriculum. The first music therapy degree program in the world was founded at Michigan State University in 1944. The American Music Therapy Association was founded in 1998.<sup>17,18</sup> In Norway, music therapy grew as a more or less politically correct anti-elitist counter-culture.<sup>17</sup> An attempt to summarise the values emphasised in this counter-culture follows:

- Music is a social thing; it is interaction, communication and community.
- Music is heteronymous; it is closely related to our everyday experiences.
- Spontaneous elements are given a high value, although they are simple and have only a rudimentary musical form.
- Personal expression is more important than technical proficiency. Expectations on levels of competency should be adjusted to the resources and qualifications of each participant.
- Music is for everybody. The split between high and low art is artificial.

### *Definition*

Music therapy is a well-established allied health profession similar to occupational therapy and physical therapy. It consists of using music therapeutically to address physical, psychological, cognitive, behavioural and social functioning.<sup>19</sup> Because music therapy is a powerful and non-threatening medium, unique outcomes are possible. In addition to its applications in mental health, music therapy is used with individuals with AIDS, physical disabilities, Alzheimer's disease, brain injuries, chronic pain, cancer, substance abuse problems and learning disabilities.<sup>20-29</sup> In

<sup>17</sup> S. K. GILBERTSON — D. ALDRIDGE, Searching PubMed/Medline, Ingenta, and the Music Therapy World Journal Index for Articles Published in the Journal of Music Therapy, *Journal of Music Therapy*, 40(4): 324-344, 2003. Win.

<sup>18</sup> W. B. DAVIS, Ira Maximilian Altshuler: Psychiatrist and Pioneer Music Therapist, *Journal of Music Therapy* 2003, 40(3): 247-263.

<sup>19</sup> E. RUUD, A Comprehensive Guide to Music Therapy. Theory, Clinical Practice, Research and Training, *Musicae Scientiae* 2003, 7(2):304-306.

<sup>20</sup> K. M. CHASE, Music Therapy Assessment for Children with Developmental Disabilities: A Survey Study, *Journal of Music Therapy* 2004, 41(1):28-54.

<sup>21</sup> D. J. RICKSON — W. G. WATKINS, Music Therapy to Promote Prosocial Behaviours in Aggressive Adolescent Boys — A Pilot Study, *Journal of Music Therapy* 2003, 40(4): 283-301.

<sup>22</sup> N. A. JACKSON, A Survey of Music Therapy Methods and Their Role in the Treatment of Early Elementary School Children with ADHD, *Journal of Music Therapy* 2003, 40(4): 302-323.

<sup>23</sup> H. KACHELE — U. OERTER, N. SCHEYTT-HOLZER — H. U. SCHMIDT, Music Therapy in Psychosomatic Medicine. State of Implementation, Training and Research in Germany, *Psychotherapeut* 2003, 48(3):155-165.

<sup>24</sup> E. M. TROICE — J. J. S. SOSA, The Musical Experience as a Curative Factor in Music Therapy with Patients with Chronic Schizophrenia, *Salud Mental* 2003, 26(4):47-58.

other words, music therapy is the structured use of music to assist people of all ages in times of need.<sup>30</sup> Music in music therapy is not used mechanically, as some kind of medicine, it is more a medium for contact, communication and experience.

### *Music Therapy and Art*

It seems to me that one should neither neglect the relationship between music therapy and art, nor promote music therapy as a new art form. The music therapy experience is related to art and everyday experiences in many different ways.<sup>31,32</sup>

The concept of 'aesthetic practice' thus probably does not help us to answer many questions related to aesthetics in music therapy. It could rather help us in developing better questions, and in avoiding unhelpful answers. For instance, we are not guided to look for universal aesthetic qualities, but for communicative processes on values and value related to specific contexts and forms of life. Aesthetic practices in music therapy include negotiations on values and value.<sup>33,34</sup> It will not always be helpful to the client if this serves to promote the values of the therapist on behalf of his/her values. Therefore, an important aspect of a therapist's competency is to be able to reflect upon his/her own aesthetic values, judgements and choices. Thus, he/she should be focusing upon i) the preparation of the music therapy room, ii) the negotiation on values and value through the musical dialogues in the therapy sessions and, iii) the process of framing and interpreting the music. When preparing the physical environment, the music therapist is already

<sup>25</sup> M. BROTONS — P. MARTI, Music Therapy with Alzheimer's Patients and Their Family Caregivers: A Pilot Project, *Journal of Music Therapy* 2003, 40(2):138-150.

<sup>26</sup> M. J. SILVERMAN, Music Therapy and Clients Who are Chemically Dependent: A Review of Literature and Pilot Study, *Arts in Psychotherapy* 2003, 30(5):273-281.

<sup>27</sup> A. TURRY — D. MARCUS, Using the Nordoff-Robbins Approach to Music Therapy with Adults Diagnosed with Autism. In: Wiener DJ — Oxford LK, *Action Therapy with Families and Groups: Using Creative Arts Improvisation in Clinical Practice* 2003, 197-228.

<sup>28</sup> D. ALDRIDGE (1996), *Music Therapy Research and Practice in Medicine. From Out of Silence*. Jessica Kingsley, London.

<sup>29</sup> P. NORDOFF — C. ROBBINS (1971/1992), *Therapy in Music for Handicapped Children*. Victor Gollancz Ltd., London.

<sup>30</sup> B.E. HOGAN, Soul Music in the Twilight Years — Music Therapy and the Dying Process, *Topics in Geriatric Rehabilitation* 2003, 19(4):275-281.

<sup>31</sup> K. AIGEN (1995), An Aesthetic Foundation of Clinical Theory: An Underlying Basis of Creative Music Therapy. In: C. Kenny (ed.), *Listening, Playing, Creating. Essays on the Power of Sound*. State University of New York Press, Albany. Cf. Also footnote No. 30.

<sup>32</sup> J. DEWEY (1934), *Art as Experience*. G. Putnam's Sons, New York.

<sup>33</sup> S. FELD (1994), Aesthetics as Iconicity of Style (uptown title); or, (downtown title) «Lift-up-over Sounding»: Getting into the Kaluli Groove. In: Ch. Keil — S. Feld: *Music Grooves*. The University of Chicago Press, Chicago/London.

<sup>34</sup> G. L. HAGBERG (1995), *Art as Language. Wittgenstein, Meaning and Aesthetic Theory*. Cornell University Press, Ithaca/London.

making many choices: on acoustics, lighting, pictures and room decor, arrangement of instruments and equipment, etc. The physical environment is an important context for the moods and communications developed in therapy, and provides conditions for the activities, roles and relationships of the music therapy process. Is the therapist preparing the room for contemplation by providing chairs as the focal point in the room, or is he preparing it for movement by having a lot of free space and few things to disturb movement? What kind of musical genres and activities does the choice and arrangement of instruments suggest? Does the room provide the client with both the space and the boundaries he/she needs? How well suited is the room for making (easy) changes in activities and roles? These choices are of course clinical, but they are integrated with values and aesthetic choices. The questions to ask are: to what degree do I make these choices according to my own aesthetic preferences and to what degree do I (and should I) rearrange the room according to the client's preferences? To what degree do I (and should I) discuss these aesthetic choices with the client?

To express yourself you need competence and knowledge, as clarified in Wittgenstein's<sup>35</sup> discussion of language and meaning (to learn a language is to learn a technique). To detach music from genres known by the client therefore might be to reduce his/her possibilities to express him/herself. Of course genres could also be used by the client as a defence in the therapy process, just as, for instance, intellectualisation might be used in verbal therapy. However, this does not change my argument. Defence is an essential element in the therapy process, and should be dealt with according to our understanding of the client and the therapy process. Music made in therapy is always framed in some way or another; through use of body language (smiles, grimaces, posture, etc.), verbal discussions and also other media. We might remind ourselves that framing is a major part of any aesthetic practice.<sup>34</sup> By framing an object or a phenomenon in a specific way, we give value to it. Famous examples are John Cage's *4:33* and Duchamp's *Fontaine*. Silence and a urinal; a phenomenon and an object that people usually do not define as art were framed as such by these artists. What happens is that you might discover new aspects and values in the object or phenomenon. Provided you are open to it, a process of reflection upon and redefinition of your own values might start. I therefore think that framing is a very important aesthetic practice in music therapy.

It seems to me more helpful to adapt some of Bakhtin's ideas about polyphonic dialogues.<sup>36,37</sup> It is no disaster if the client and the therapist have different values and

<sup>35</sup> L. WITTGENSTEIN (1953/1967), *Philosophical Investigations*. Blackwell, Oxford.

<sup>36</sup> M. BAKHTIN (1929/1963/1984), *Problems of Dostoevsky's Poetics*. University of Minnesota Press, Minneapolis/ London.

<sup>37</sup> S. BRYNJULF, Aesthetic Practices in Music Therapy, *Nordic Journal of Music Therapy* 1998, 7(2), 121-134.

aesthetic perspectives. In many ways this can make the interpersonal communication richer and more colourful. To be able to stimulate such polyphonic dialogues, by sharing one's own values and showing respect and interest for those of the client, must therefore be an important element of the therapist's competence.

If you think there is too much beauty in this conclusion, I think I agree. Polyphonic dialogues are hard to establish because power relations tend to make them monological, and therapy is certainly not automatically a context free from power relations.

#### *Importance of Rhythm in Life*

Ability to recognise temporally organised patterns of behaviour in another person, and subsequently to synchronise one's own behaviour with their rhythmic measures has been described in many studies.<sup>38,39</sup> The infant studies referred to show that we are born with a natural orientation towards rhythmically coordinated interpersonal interaction, through which we communicate with those around us and gain access to the social world. This 'non-verbal' mode of communication is the infant's primary means of interaction. The communicative nature of such engagements emanates from a complex interplay of sequences of expressive movements around a shared intrinsic pulse.

We conceive ourselves scientifically as living in a universe where time moves linearly from one moment to the next in its dogged pursuit of infinity. But this physical sense of time is inseparable psychologically from the motives that generate consciousness. If you wish to move with purpose then you must structure and co-ordinate your actions in a time you create. Furthermore, by structuring our behaviour around a common pulse we are able to share the fabrication of time, and body related space, with other individuals in a mutually beneficial, constructive manner.

A particular rhythm is a recognisable sequence in time. By sharing and co-ordinating rhythms we show that we appreciate the life impulses of other individuals. The simple act of co-ordinating or structuring behaviour with reference to the activity of a separate system manifests an appreciation of that other system and its behaviour. In this sense the infant is able to influence, as well as appreciate, the behaviour of the mother, as he or she forms, with her, dynamic interactive narratives coloured by infectious emotions.<sup>40</sup>

<sup>38</sup> E. PÖPPEL (1994), Temporal Mechanisms in Perception. *International Review of Neurobiology* 37, 185-202.

<sup>39</sup> J. A. SLOBODA (1995), *The Cognitive Psychology of Music*. Oxford: Oxford science publications.

<sup>40</sup> D. STERN (1985), *The Interpersonal World of the Infant. A View from Psychoanalysis and Developmental Psychology*. New York: Basic Books.



The production of dynamic interactive narratives needs the participating individuals to have an understanding of the past, moving through the present, to the future — a sense of narrative in time. This is an acceptable view of the accomplished improvising musician. Remarkably, even a 2-month-old infant possesses the necessary sensory and cognitive abilities. In studying rhythmic patterning in infants' expressions, Fridman<sup>41</sup> has shown that there are a few common rhythms displayed by infants. The important factor is the predominance of these rhythmical patterns in attention-seeking behaviour. The infants use rhythm to gain the attention of caregiving companions, and so access meaning in the social world. Kempton<sup>41</sup> has made microanalysis of both film and audio footage of infants with their principal caregivers. The results showed the general use of rhythmical patterning in communicative interactions between infants and caregivers. Rhythmical patterns of behaviour convey a sense of pulse that the caregiver or infant can use to structure behaviour and co-ordinate it with the partner.<sup>41</sup>

Infants are born with a vast range of stimulus-seeking behaviour, and they use this to seek out interaction and to regulate it. Again, microanalysis of film and sound footage has been used to measure co-ordinated interpersonal timing. Several significant observations are made in a study made by Beebe,<sup>42</sup> which supports the hypothesis of meaningful interaction between mother and infant. Rhythmical patterns of movement are directed by the mother to engage the child in a dynamic interaction of vocal patterns, visible expressions and physical stimulation of the infant's body. In this interaction, the mother's rhythm co-varies with her level of emotional engagement. The baby responds through rhythm matching. Studies investigating a lack of contingent response have shown that irregularity in this interaction leads to disinterest in the child and a decrease in positive expression.<sup>43</sup> The absence of appropriate contingent responses and feedback from the mother causes the infant to become distressed, proving the infant's sensitivity to such factors in its interaction with others.<sup>44,45</sup>

<sup>41</sup> W. KEMPTON (1980), *The Rhythmic Basis of Interactional Micro-Synchrony*. In Key, M. R. (ed.), *The Relationship of Verbal and Non-Verbal Communication*. The Hague: Mouton, 67-76.

<sup>42</sup> B. BEEBE (1982), *Micro-Timing in Mother-Infant Communication*. In: M.R. Key (ed.), *Non-Verbal Communication Today*. The Hague: Mouton Publishers.

<sup>43</sup> L. MURRAY — C. TREVARTHEN (1985), *Emotional Regulation of Interactions between Two-Month-Olds and Their Mothers*. In: T. Field and N. Fox (eds.), *Social Perception in Infants*. Norwood, N.J., Ablex. Cf. also footnote No. 38.

<sup>44</sup> H. PAPOUSEK — M. H. BORNSTEIN (1992), *Didactic Interactions: Intuitive Parental Support of Vocal and Verbal Development in Human Infants*. In: H. Papousek — U. Jurgens — M. Papousek (eds.), *Nonverbal Vocal Communication: Comparative and Developmental Aspects*. Cambridge: Cambridge University Press/Paris: Éditions de la Maison des Sciences de l'Homme, 209-229.

<sup>45</sup> M. PAPOUSEK (1992), *Early Ontogeny of Vocal Communication in Parent-Infant Interactions*. In: H. Papousek, U. Jurgens — M. Papousek (eds.), *Nonverbal Vocal Communication: Comparative and Developmental Aspects*. Cambridge: Cambridge University Press/ Paris: Éditions de la Maison des Sciences de l'Homme, 230-261.

Beebe's research<sup>42</sup> shows that mother and infant track and influence each other's rhythms, anticipating certain points of mutual synchrony, in both activity (vocalisation) and non-activity (silence). Proprioceptive cues, providing information about an individual's own body states, also contribute to auto-regulation, providing additional feedback. When bodies are touching as they often are in mother/infant interaction, the feelings of limb and body placement are part of the communication — dance with song.

Co-ordinated interpersonal timing is robust in the mother/infant relationship. A cross-site replication study by Feldstein et. al<sup>46</sup> found that significant co-ordinated interpersonal timing occurred at both sites for 90% of comparisons. Co-ordinated interpersonal timing was also predictive regarding developmental outcomes of individual infants for up to one year. Infants are able to predict patterns in rhythmically structured behaviour, and to synchronise the expression of their own behaviours with the rhythms of an adult.

The infant is indeed actively seeking out rhythms that it can use to interact with adults and generate organised sequences of joint action. In further analysis of such interactions, 'simultaneous improvisation' around a rhythmical structure, that is, synchronised behaviour in which both mother and infant are 'playing' in unison and not taking turns, is observed to make up a much greater proportion of mother/infant interaction as compared to polite adult conversation.

While studies such as the above have described important commonalities in the temporal interaction of infants with their caregivers, 'protoconversations' also represent highly stylised instances of communication, in which both the mother and the infant act as individuals, bringing their own personal characteristics out in the interaction. The detailed patterns of rhythmical behaviour in mother/infant interaction are a function of the individuals involved. Individual factors are robust, with personalisation of certain rhythmical patterns evident in the range of rhythms used by individual infants in later speech patterns. Fridman<sup>14</sup> reports that this is most marked in the personalised pronunciation of words. Acceptance of the principle that infants and mothers already show individuality of expression in 'protoconversations' indicates that the relationship that they are creating together is a personal one from the start. The studies of mother/infant interaction demonstrate that the musical qualities of such interactions are robust features, and in the case of co-ordinated timing they can prove to be predictive of a child's abilities in co-ordinating its behaviour with that of others in later development. Music psychology has suggested that the further study of musicians and the skills they employ would provide a greater insight into all forms of human communication.<sup>47</sup>

<sup>46</sup> S. FELDSTEIN — J. JAFFE — B. BEEBE — C. J. CROWN — M. JASNOW — H. FOX — N. J. GORDO (1993), Co-ordinated Interpersonal Timing in Adult-Infant Vocal Interactions: A Cross-Site Replication. *Infant Behaviour and Development*, 16, 455-470.

<sup>47</sup> I. DELIÈGE — J. A. SLOBODA (eds.) (1997), *Perception and Cognition of Music*. Philadelphia: Psychology Press.

The fundamental features of mother/infant communication do not disappear as we develop, but remain as the basis of all our communicative systems. We know a great deal about the compositional elements of communicative interactions in infancy, but the functions that such elements perform in communication are still mysterious. Different receivers usually experience rhythm in a similar way. The acceleration of rhythm is usually experienced in an increase in tension, which can lead to losing control and panicking. The accelerating rhythmic movement can also lead to a total cognitive chaos. Disorganized, irregular movement and restless rhythmic chaos can represent the most frightening experience we can have.<sup>48,49</sup>

#### *Functions of Music Therapy*

Music therapy is an efficacious and valid treatment for persons who have psychosocial, affective, cognitive and communicative needs.<sup>50</sup> Research results and clinical experiences attest to the viability of music therapy even in those who are resistive to other treatment approaches. Music is a form of sensory stimulation that provokes responses due to the familiarity, predictability and feelings of security associated with it.

Music therapy intervention provides opportunities to:

- explore personal feelings and therapeutic issues such as self-esteem or personal insight;
- make positive changes in mood and emotional states;
- have a sense of control over life through successful experiences;
- enhance awareness of the self and the environment;
- express oneself both verbally and non-verbally;
- develop coping and relaxation skills;
- support healthy feelings and thoughts;
- improve reality testing and problem-solving skills;
- interact socially with others;
- develop independence and decision-making skills;
- improve concentration and attention span;
- adopt positive forms of behaviour;
- resolve conflicts leading to stronger family and peer relationships.

<sup>48</sup> K. LEHTONEN (1987), Creativity, the Symbolic Process and Object Relationships. *Creative Child and Adult Quarterly*, 12, 259-270.

<sup>49</sup> E. RECHARDT (1987), Experiencing music. *Psychoanal. Study Child*, 42, 11-30.

<sup>50</sup> E. YORK, A Comprehensive Guide to Music Therapy. *Journal of Music Therapy* 2003, 40(2):171-175. Cf. also footnote No. 19.

The work of the American Music Therapy Association — New York City Music Therapy Relief Project, combined with over fifty years of practice and research in music therapy, has demonstrated the impact of music therapy as ‘second-wave’ relief in helping to cope with events surrounding a crisis and its aftermath. The directed use of music and music therapy is highly effective in developing coping strategies, including understanding and expressing feelings of anxiety and helplessness, supporting feelings of self-confidence and security, and providing a safe or neutral environment for relaxation. Research results and clinical experiences attest to the viability of music therapy even in situations outside of traditional therapeutic settings.<sup>19</sup>

Music therapists assess emotional well-being, physical health, social functioning, communication abilities and cognitive skills through musical responses; design music sessions for individuals and groups based on patient needs using music improvisation, receptive music listening, song writing, lyric discussion, music and imagery, music performance, and learning through music; and, participate in interdisciplinary treatment planning, ongoing evaluation, and follow up.<sup>51</sup>

Children, adolescents, adults and the elderly with mental health needs, developmental and learning disabilities, Alzheimer’s disease and other aging-related conditions, substance abuse problems, brain injuries, physical disabilities, and acute and chronic pain, including mothers in labour, can benefit from music therapy.<sup>52,53</sup>

Patients don’t have to have some particular music ability to benefit from music therapy. All styles of music can be useful in effecting change in a patient’s life. The individual’s preferences, circumstances and need for treatment, and the patient’s goals help to determine the types of music a music therapist may use. Music therapy sessions are designed and music selected based on the individual patient’s treatment plan.<sup>54</sup>

Our experiences with music therapy have been very good. Patients at our clinic are able to choose music repertoire in their treatment plan which gives them chance to feel they are partners in the therapeutic process. Music therapy sessions are held once a week with patients who fulfil different diagnostic categories (anxiety disorders, depressive disorders, psychotic disorders, etc.).

Healthy individuals can use music for stress reduction via active music-making, such as playing piano or drums, as well as passive listening for relaxation. Music is often a vital support in physical exercise.<sup>55</sup>

<sup>51</sup> W. SEARS (1968/1996), *Processes in Music Therapy*. *Nordic Journal of Music Therapy*, 5 (1).

<sup>52</sup> C. KORB, *Music Therapy and Group Work: Sound Company*, *Arts in Psychotherapy* 2003, 30(3):177-178.

<sup>53</sup> M. VALENCIA — M.L. RASCON — H. QUIROGA, *Research Contributions to Psychosocial and Familial Treatment of Schizophrenic Patients*, *Salud Mental* 2003, 26(5):1-18.

<sup>54</sup> S. ROBB, *An Introduction to Music Therapy Theory and Practice*, 2nd ed., *College Music Symposium* 2002, 42:155-158. Cf. also footnote No. 50.

<sup>55</sup> C. KENNY (1989), *The Field of Play. A Guide for the Theory and Practice of Music Therapy*. Ridgeview Publishing Company, Atascadero.

### Conclusion

Music is the special form of flexible abstract thinking, which enables us to use all kinds of configurations and schemes in our various developmental stages in the creative and integrative purposes. We must keep in mind that, according to this theory, the musical integration and working through processes also complement the psychic integration and working through processes. There is every reason to believe that expressive therapies may be curative. As described by Frank,<sup>56,57</sup> there are the same general therapeutic relational and ritual elements. It may therefore not be necessary to understand in detail what music is, how music influences the patient, or how the psyche develops. If it works, it works. This simple pragmatism is adopted in many forms of healing activities. On the other hand, the motivation to choose music therapy must emerge from the music therapist's professional judgement that it is more effective than mere positive social interaction with any other randomly assigned activity.<sup>58,59</sup>

The future of music therapy is promising because state-of-the-art of music therapy research in physical rehabilitation, Alzheimer's disease and psychoneuroimmunology is documenting the effectiveness of music therapy in terms that are important in the context of a biological medical model.

<sup>56</sup> C. JONES — F. BAKER — T. DAY, From Healing Rituals to Music Therapy: Bridging the Cultural Divide between Therapist and Young Sudanese Refugees, *Arts in Psychotherapy* 2004, 31(2):89-100.

<sup>57</sup> J. D. FRANK (1989), Non-specific Aspects of Treatment: The View of a Psychotherapist. In: M. Shepherd — N. Sartorius (eds.), *Non-Specific Aspects of Treatment*. Hans Huber Publishers, Toronto.

<sup>58</sup> E. RUUD (1998), *Music Therapy: Improvisation, Communication and Culture*. Barcelona publishers, Gilsum, N. H.

<sup>59</sup> E. RUUD (1980), *Music Therapy and its Relationship to Current Treatment Theories*. Magnamusic-Baton, St. Louis, MO.

*Sažetak*

## GLAZBA KAO TERAPIJA

Stara kineska poslovice kaže: 'Glazba potječe iz srca ljudskih bića. Kada su emocije rođene, izražavaju se zvukovima, a zvukovi rađaju glazbu.' Prema Leichteru, konačni cilj izvođenja, izražavanja ili razumijevanja glazbe leži u psihičkoj relaksaciji. Avangardni skladatelj John Cage u jednom od svojih brojnih intervjua navodi da je konačan cilj njegova skladanja odnosno glazbenih aktivnosti postizanje mentalnog mira. Glazba djeluje izravno na naš autonomni živčani sustav, dovodeći do različitih autonomnih tjelesnih reakcija. Dakle, za razumijevanje glazbe na tjelesnoj razini nije potrebna inteligencija. Glazba na isti način dopire do teško mentalno retardiranog bolesnika kao i do visoko obrazovanog profesora filozofije.

Glazbeno iskustvo u svojoj osnovi ima mnogo sličnosti s arhaičnim načinom razmišljanja. Glazba je oblik tjelesnog izričaja, posebna vrsta tjelesnog procesa kojim se daje značenje stvarima te u kojem nesvjesna tjelesna iskustva dobivaju svoje značenje kroz simbole i apstraktnu formu. Posebno je zanimljiv odnos između glazbe i ljudskog nesvjesnog što se jasno vidi tijekom seansa muzikoterapije. Još su davno Aristotel i Platon u svojim spisima prikazali ideju da glazba ima lječidbeni učinak. Muzikoterapija je slična okupacijskoj terapiji, u njoj se koristi glazba u svrhu poboljšanja tjelesnog, psihološkog, kognitivnog, bihevioralnog i socijalnog funkcioniranja. Brojne studije pokazale su sposobnost prepoznavanja temporalno organiziranih obrazaca ponašanja te posljedično sinkroniziranje pojedinčeva ponašanja u skladu s ritmičkim mjerama. Studije radene na novorođenčadi pokazuju da se radamo sa prirodnom orijentacijom prema ritmički koordiniranim interpersonalnim interakcijama, preko kojih komuniciramo sa svojom okolinom.

Muzikoterapija je efikasan način liječenja osoba s psihosocijalnim, afektivnim, kognitivnim i komunikacijskim problemima. Rezultati kliničkih iskustava pokazuju vrijednost muzikoterapije čak i u onih bolesnika koji su bili rezistentni na ostale pristupe u liječenju. Glazba stimulacijom osjeta navodi na pozitivan odgovor zahvaljujući bliskosti, predvidljivosti i osjećaju sigurnosti. Bolesnici ne moraju imati posebne glazbene sposobnosti da bi im glazba koristila, svi glazbeni stilovi kroz muzikoterapiju mogu dovesti do pozitivnih promjena u bolesnikovom životu, premda bolesnikove preferencije, okolnosti i potreba za liječenjem kao i postavljeni cilj određuju vrstu glazbe koju će muzikoterapeut koristiti u terapijskom procesu. Seanse muzikoterapije te izabrana glazba temelje se na individualnom bolesnikovom planu liječenja.

Možemo zaključiti da je budućnost muzikoterapije obećavajuća s obzirom na istraživanja koja pokazuju njezinu učinkovitost u tjelesnoj rehabilitaciji, Alzheimerovoj bolesti i psihoneuroimunologiji u kontekstu biološkog medicinskog modela.