

Paper:**VARIOUS ACOUSTIC STIMULI FOR COMPREHENSIVE REHABILITATION OF CHILDREN WITH NEUROSES AND AUTISTIC SPECTRUM DISORDERS IN THE PSYCHO-NEUROLOGICAL HOSPITAL****Galina Samsonova, Ph. D.**

gsam8@yandex.ru

Department of Medical Psychology, Russian Research Center of Medical Rehabilitation and Balneology Russian Federation

About

Graduate of the Russian Gnessin Academy of Music and the Modern Humanitarian Academy in "Psychology". Doctor of Psychology. Lead researcher at the Russian Scientific Center for Medical Rehabilitation. A member of the Russian National Association of Music Therapists. Author of 97 scientific publications, including 1 book and 3 book chapters.

Abstract

Anxiety in children can reduce the effectiveness of any treatment. Anxiety manifests in communication disorders, elevated levels of emotional stress, active and passive protest reactions, increased need for close relationships. Musical stimuli may be applied to rehabilitate children with aforementioned disorders. The rehabilitation programs include active and receptive types of musical impact incorporating acoustic stimuli of different modalities. Above mentioned programs were applied in rehabilitation of children with neuroses and autistic spectrum disorders (ASD) in a pediatric neuropsychiatric hospital. Children with neuroses responded effectively to therapeutic singing with elements of vocal therapy. They demonstrated decreased levels of emotional stress, satisfactory communicative needs, reduced active and passive protest reactions. Disordered internal time perception in such children also indicates a decrease of functional reserves, and may be corrected by therapeutic singing or binaural frequency stimulation. While creating the procedures of therapeutic singing and clinical improvisation, a research was performed to determine individual musical preferences of children with ASD. Musical tempo, vocal and instrumental timbres, volume and musical archetypes were analyzed. This research allowed to assign appropriate corrective procedures. The greatest comfort was achieved with following parameters: tempo from Larghetto to Allegretto (50-105 beats per minute), female voices, piano and plucked strings instruments, volume level near 70 dB. Boys preferred music of game archetype, and girls – of meditational archetype. As a result of collective singing and listening to music with those parameters, improved emotional condition, reduced anxiety levels, optimization of excitation and inhibition processes were achieved.

References

1. Accordino R., Comer R., Heller W.B. Searching for music's potential: A critical examination of research on music therapy with individuals with autism. *Research in Autism Spectrum Disorders*. 2007; 1 (1): 101-15.
2. Berger D.S. *Music Therapy, Sensory Integration and the Autistic Child*. London: Jessica Kingsley Publishers; 2002.
3. Weber W., Newmark S. *Complementary and Alternative Medical Therapies for Attention-Deficit/Hyperactivity Disorder and Autism*. *Pediatric Clinics of North America*. 2007; 54 (6): 983-1006.
4. Woodward A. Music therapy for autistic children and their families: a creative spectrum. *British Journal of Music Therapy*. 2004; 18 (1): 8-14.

Paper:**DEVELOPMENT OF MUSIC THERAPY PROTOCOL FOR STRESS TRAUMA TREATMENT****Gene Ann Behrens, PhD, MT-BC**

behrenga@etown.edu, Elizabethtown College, USA

About

Never before has it been more important to become trauma-informed as a therapist—that is, interpreting client responses and developing individualized treatment based on an understanding of the neurobiology of trauma. The pervasive influence of trauma due to crises, disasters, or life events is receiving increased attention by health care professionals across the world. With an understanding of the neurobiology of trauma research and theory (van der Kolk, 1996, 2006; Perry, 2011), this presenter has turned her attention to a review of existing stress trauma treatment models to identify key elements for developing music therapy protocol for trauma work. Outcomes from the neurobiology of trauma research suggest treatment that involves bottom-up processing and body-oriented, nonverbal approaches. After a brief overview of a few of the available models, such as Perry's (2009) Neurosequential Model of Therapeutics and Blaustein and Kinniburgh's (2010) Attachment, Self-Regulation and Competency framework, the presenter will primarily focus on the "road map" provided by Neurological Reporative Therapy (NRT) developed by Ziegler (2011a). If trauma changes the neurobiology of the brain, then approaches such as NRT, need to result in positive brain change or neuro-transformation (p. 182). Ziegler provides goals and procedural steps music therapists can apply to develop music experiences to support positive brain changes in clients dealing with trauma. As limited research on the use of music therapy in trauma treatment exists, it also is important to discuss music research and theory that support the potential effectiveness of using music therapy experiences within the NRT approach.

Abstract

Gene Ann Behrens, Ph.D., MT-BC, directs the music therapy program at Elizabethtown College, USA. Her research in the area of trauma is the focus of her national and international presentations and publications and her work as chair of the Global Crises Intervention Commission of the WFMT.

References

- Perry, B. D. (2001). The neurodevelopmental impact of violence in childhood. In D. Schetky & E. Benedek, E. (Eds.) *Textbook of child and adolescent forensic psychiatry* (pp. 221-238). Washington, D.C.: American Psychiatric press.
- Perry, B. D. (2006). *Applying principles of neurodevelopment to clinical work with maltreated and traumatized children: The Neurosequential Model of Therapeutics*. In N. B. Webb (Eds.), *Traumatized youth in child welfare*, (pp. 27-51). New York: Guilford.
- Ziegler, D. L. (2011a). *Traumatic experience and the brain: A handbook for understanding and treating those traumatized as children*, (2nd ed.). Phoenix, AZ: Acacia.
- van der Kolk, B. & McFarlane, A., & Weisaeth, L. (Eds). (1996). *Traumatic stress*. New York: Guilford Press.

