



Volume 8, Issue 3, 2013

## *reSearch*

*A collection of research reviews on rehabilitation topics from NARIC and other information resources.*

### **Arts as Therapy**

In this edition of reSearch we explore the topic of the arts as therapy and the use of creative and expressive arts therapies in disability and rehabilitation. Creative or expressive arts therapy is the use art, dance, music, drama, and creative writing in a therapeutic setting to address emotional, cognitive, or physical disabilities. Creative arts therapy has its roots in the arts and theories related to creativity. Expressive arts therapy utilizes the creative arts as a means of self-expression. The terms creative or expressive art therapy are used interchangeably. The different modalities of creative/expressive art therapy include: art, music, drama, dance/movement, poetry/writing, play, and other forms of creative expression.

Art Therapy – focuses on the purposeful use of visual arts materials and media in intervention, counseling, psychotherapy, and rehabilitation; and can be used with individuals of all ages, families, and/or in groups.

Music Therapy – focuses on the prescribed use of music to effect positive changes in the psychological, physical, cognitive, or social functioning of individuals with disabilities. Additionally, music therapy can also be “expressive” when individuals are writing or playing their own original creations.

Drama Therapy – focuses on the systematic use of drama/theater processes, products, and associations to achieve therapeutic goals of symptom relief, emotional and physical integration, and personal growth. This type of therapy can allow the individual to tell his or her story, solve a problem, achieve catharsis, and expand one’s personal experience.

Dance/Movement Therapy – focuses on the use of movement on the presumption that the body and mind are connected. This type of therapy is the psychotherapeutic use of movement as a process

that furthers the emotional, cognitive, and physical integration of the individual. Additionally, this type of therapy can affect changes in feelings, cognition, physical functioning, and behavior.

Poetry/Writing Therapy – focuses on the use of the written word and other forms of literature for healing and personal growth.

Play Therapy – focuses on the systematic use of play techniques by therapists to assist individuals in preventing or resolving psychological/social difficulties. This type of therapy can involve the use of sandbox and miniatures to construct “sand pictures” allowing the individual to illustrate his or her feelings/emotional state.

The above therapies can be used alone or in combination with individuals who are verbal or non-verbal to provide an integrative approach fostering awareness, encouraging emotional growth, enhancing relationships, and improving quality of life for individuals with disabilities (<https://www.psychologytoday.com/blog/arts-and-health/201406/creative-arts-therapy-and-expressive-arts-therapy>).

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This edition of reSearch provides a “snapshot” of over 20 years of research on the arts as therapy in disability and rehabilitation. This “snapshot” presents a general overview of the arts as therapy across various creative/expressive therapies (i.e. art, music, drama, etc.), disability type/condition, and use in rehabilitation. The combined search terms for this edition of reSearch included: Performing, creative arts; and art, dance, music, and drama therapy. A listing of over 200 additional descriptor terms between the NARIC, CIRRIE, ERIC, Cochrane, and PubMed databases can be found at the end of this document.

A search of the REHABDATA database resulted in 111 documents published between 1990 and 2014. The CIRRIE and ERIC database searches resulted in 101 documents between 1991 and 2013 and 32 documents between 1992 and 2014; respectively. The Cochrane database searches resulted in 7 documents between 1990 and 2015. Finally, a search of the PubMed database resulted in 145 documents between 1990 and 2015. The complete citations are included in this research brief.

Reference:

Malchiodi, C. (2014). **Creative Arts Therapy and Expressive Arts Therapy**. *Psychology Today*. (Retrieved from <https://www.psychologytoday.com/blog/arts-and-health/201406/creative-arts-therapy-and-expressive-arts-therapy>).

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*Full-text copies of these documents may be available through NARIC's document delivery service.*

*To order any of the documents listed above, note the accession number and call an information specialist at 800/346-2742.*

*There is a charge of 5 cents for copying and shipping with a \$5 minimum on all orders.*

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## **NIDILRR Funded Projects Related to Arts as Therapy**

In addition to document searches, we searched our NIDILRR Program Database to locate grantees/projects related to the arts as therapy. The search resulted in two currently funded projects, and seven projects that are no longer active. Project information and their publications are offered as additional resources for our patrons.

### **Digital Storyteller: A Cognitively Accessible Literary Compositioning Tool for Individuals with Intellectual and Other Cognitive Disabilities**

Project Number: H133S140091

Phone: 719/592-0347

Email: [dan@ablelinktech.com](mailto:dan@ablelinktech.com).

[www.ablelinktech.com](http://www.ablelinktech.com).

### **Dynamic Supported Mobility for Infants and Toddlers with Cerebral Palsy**

Project Number: H133G140166

Phone: 215/590-2495

Email: [prosserl@email.chop.edu](mailto:prosserl@email.chop.edu).

*These projects have completed their research activities and are now closed.*

### **Development and Evaluation of an Independently Usable Digital Story Telling App with Video Outputs for Individuals with Intellectual Disabilities**

Project Number: H133S130015

Phone: 719/592-0347

Email: [dan@ablelinktech.com](mailto:dan@ablelinktech.com).

### **GOODFEEL(R) Braille Music Translator**

Project Number: H133S030040

Phone: 610/783-6692

Email: [info@DancingDots.com](mailto:info@DancingDots.com).

[www.dancingdots.com](http://www.dancingdots.com).

### **Low Vision Lime: Solution for Low Vision Musicians to Read, Perform, Write, and Print Music Notation**

Project Number: H133S070089

Phone: 610/783-6692

Email: [info@dancingdots.com](mailto:info@dancingdots.com).

[www.dancingdots.com](http://www.dancingdots.com).

### **A Music-Based Rehabilitation Device for Training and Assessing Hand Function**

Project Number: H133S120037

Phone: 203/560-8832

Email: [flintrehabilitation@gmail.com](mailto:flintrehabilitation@gmail.com).

[www.flintrehabilitation.com](http://www.flintrehabilitation.com).

### **Rehabilitation Research and Training Center on Technology Promoting Integration for Stroke Survivors: Overcoming Social Barriers**

Project Number: H133B031127

Phone: 312/238-6197

Email: [llovell@ric.org](mailto:llovell@ric.org).

[www.rrtc-stroke.org](http://www.rrtc-stroke.org).

### **StoryTiles: Programmable Manipulatives to Improve Language, Sequencing, Theory of Mind, and Play Skills in Children with Autism**

Project Number: H133S040132

Phone: 301/294-5230

Email: [smayhew@i-a-i.com](mailto:smayhew@i-a-i.com).

[www.i-a-i.com](http://www.i-a-i.com).

### **Video Gaming Technology to Promote Health and Fitness Among Adolescents with Disabilities**

Project Number: H133G100278

Phone: 409/772-9498

Email: [jerowlan@utmb.edu](mailto:jerowlan@utmb.edu).



*Documents from NARIC's REHABDATA search listed are listed below:*

#### **2014**

Baker, F.A., Berlowitz, D.J., Grocke, D., & Tamplin, J. (2014). **Thematic analysis of the experience of group music therapy for people with chronic quadriplegia.** *Topics in Spinal Cord Injury Rehabilitation, 20(3)*, 236-247.

NARIC Accession Number: J69370

ABSTRACT: Study examined participants' experience of two types of group music therapy – therapeutic singing versus music appreciation and relaxation – and determined commonalities and differences be-

tween participants' experience of these two methods. Twenty people with quadriplegia were interviewed about their experience of participating in 12 weeks of therapeutic singing or music appreciation and relaxation. The interview data were subjected to an inductive thematic analysis. Six main themes were generated from the interview data. Four of these were shared themes and indicated that both types of group music therapy had a positive effect on mood/mental state and physical state, encouraged social engagement, and reconnected participants with their music identity or relationship with music. In addition, the individuals who participated in the singing groups found singing to be challenging and confronting, but experienced a general increase in motivation. Group music therapy was experienced as an enjoyable and accessible activity that reconnected participants with their own music. Participants frequently described positive shifts in mood and energy levels, and social interaction was stimulated both within and beyond the music therapy groups.

Buetow, S.A., Fogg, L., McCann, C., Purdy, S., & Talmage, A. (2014). **Conceptualizing how group singing may enhance quality of life with Parkinson's disease.** *Disability and Rehabilitation, 36(5)*, 430-433.

NARIC Accession Number: J68823

ABSTRACT: Article speculates that group singing may enable people with Parkinson's disease (PD) to synchronize their movement patterns to musical rhythm and enhance quality of life. Spanning the medical and social sciences, the article draws conceptually on literature on PD, group singing, and rhythm in music; personal experience; and reasoning. Conceptualizing PD in terms of disruptions to social and biological rhythms, the authors suggest that group singing may produce two socio-psychological states – connectedness and flow – that may entrain rhythm in people with PD. The states connect during group singing to elicit and enhance motor processes but may also reawaken after the group singing, through the recall and reactivation of the musical rhythms encoded during group singing. In people with PD, this continuity of flow is hypothesized to be conducive to rhythmic entrainment during and after group singing and in turn to reduced deficits in motor timing and emotional processing, and improvements in quality of life. Empirical studies are needed to test this hypothesis in people with movement disorders such as PD.

Heijenbrok-Kal, M.H., Ribbers, G.M., van de Sandt-Koenderman, W.M.E., van der Meulen, I., & Visch-Brink, E.G. (2014). **The efficacy and timing of melodic intonation therapy in subacute aphasia.** *Neurorehabilitation and Neural Repair*, 28(6), 536-544.

NARIC Accession Number: J69276

ABSTRACT: Study examined the efficacy of melodic intonation therapy (MIT) as language production treatment for subacute severe nonfluent aphasia. A waiting-list randomized controlled trial design was used: patients were randomly allocated to the experimental group (MIT) or the control group (control intervention followed by delayed MIT). A total of 27 participants were included: 16 in the experimental group and 11 in the control group. In both groups, therapy started at 2 to 3 months poststroke and was given intensively (5 hours per week for 6 weeks). In a second therapy period, the control group received 6 weeks of intensive MIT while the experimental group resumed their regular treatment. Assessment was done at baseline (T1), after the first intervention period (T2), and after the second intervention period (T3). Efficacy was evaluated at T2. The impact of delaying MIT on therapy outcome was also examined. A significant effect in favor of MIT on language repetition was observed for trained items, with mixed results for untrained items. After MIT, there was a significant improvement in verbal communication but not after the control intervention. Delaying MIT was related to less improvement in the repetition of trained material. Earlier treatment may lead to greater improvement.

Inal, S. (2014). **Competitive dance for individuals with disabilities.** *PALAESTRA: Forum of Sport, Physical Education, and Recreation for Those with Disabilities*, 28(1), 32-35.

NARIC Accession Number: J68383

ABSTRACT: Article discusses the benefits of dance for individuals with disabilities and then highlights wheelchair dance as a competitive activity. Dance can play an important part in improving the physical, emotional, and cognitive functioning of people with disabilities. With the guidance of music, rhythmic dance activities have a positive effect on the mobility of the body, hence increasing strength, coordination, flexibility and cardiorespiratory fitness. Furthermore, dance stimulates the development of a connection between mind and body improving body image and

spatial awareness as well as social skills. Wheelchair dance as an inclusive activity for individuals with disabilities dates as far back as 1968, and in 1998 wheelchair dance became an International Paralympic Committee Championship Sport.

## 2013

Baker, F.A., Berlowitz, D.J., Brazzale, D.J., Brown, D.J., Buttifant, M., Grocke, D., Pretto, J.J., Ruehland, W.R., & Tamplin, J. (2013). **Effect of singing on respiratory function, voice, and mood after quadriplegia: A randomized controlled trial.** *Archives of Physical Medicine and Rehabilitation*, 94(3), 426-434.

NARIC Accession Number: J65847

ABSTRACT: Study explored the effects of singing training on respiratory function, voice, mood, and quality of life for 24 people with quadriplegia. Thirteen participants randomly assigned to the experimental group received group singing training 3 times weekly for 12 weeks. The 11 participants in the control group received music appreciation and relaxation for 12 weeks. Assessments were conducted pre, mid, immediately after, and 6 months after intervention. Outcomes measures included: standard respiratory function testing, surface electromyographic activity from accessory respiratory muscles, sound pressure levels during vocal tasks, assessments of voice quality (Perceptual Voice Profile, Multidimensional Voice Profile), and the Voice Handicap Index, Profile of Mood States, and Assessment of Quality of Life instruments. Results indicated that the singing group increased projected speech intensity and maximum phonation length significantly more than the control group. Trends for improvements in respiratory function, muscle strength, and recruitment were also evident for the singing group. These effects were limited by small sample sizes with large intersubject variability. Both groups demonstrated an improvement in mood, which was maintained in the music appreciation and relaxation group after six months. Findings suggest that group music therapy can have a positive effect on not only physical outcomes, but also can improve mood, energy, social participation, and quality of life for an at-risk population, such as those with quadriplegia. Specific singing therapy can augment these general improvements by improving vocal intensity.

Baker, F.A., Jones, B., Lee, S., Tamplin, J., Way, A. (2013). **'Stroke a Chord': The effect of singing in a community choir on mood and social engagement for people living with aphasia following a stroke.** *NeuroRehabilitation*, 32(4), 929-941.

NARIC Accession Number: J67563

ABSTRACT: Study examined the effects of group singing on social participation, communication, and mood for people with aphasia following stroke. The "Stroke a Cord" community choir for people living with aphasia was established and facilitated by a neurologic music therapist in Melbourne, Australia. Outcomes were measured before, and at 12-weeks and 20-weeks after joining the choir. Mood was assessed using the General Health Questionnaire-12 (GHQ-12) and the Visual Analogue Mood Scale. Communication, cognition, and global functioning were evaluated with the Stroke Impact Scale-3. The Sense of Belonging Instrument was used to assess social participation. Baselines measures were collected for 13 participants with aphasia. Three choir members and 5 caregivers also completed semi-structured interviews about their experience of the choir. Prior to joining the choir, participants had higher levels of negative mood symptoms and poorer subjective sense of belonging compared to Australian general population samples. Results from the GHQ-12 suggested a trend towards reduction of psychological distress after participating in the choir. Thematic analysis of the interviews revealed five common themes: increased confidence, peer support, enhanced mood, increased motivation, and changes to communication. Preliminary findings are encouraging and warrant further rigorous investigation.

Biddiss, E., Blain-Moraes, S., Chesser, S., Kingsnorth, S., & McKeever, P. (2013). **Biomusic: A novel technology for revealing personhood of people with profound multiple disabilities.** *Augmentative and Alternative Communication*, 29(2), 159-173.

NARIC Accession Number: J66407

ABSTRACT: Study investigated the effects of music generated in real time from physiological signals on caregiver perceptions of their interactions with people with profound multiple disabilities (PMD). Caregivers often have difficulty interacting with people with PMD because of the severely compromised communicative repertoire of this population, possibly resulting

in a limited ability of others to perceive personhood in individuals with PMD. This musical approach, called biomusic, is created from the dynamic patterns of four autonomic nervous system (ANS) signals: electrodermal activity, fingertip skin temperature, blood volume pulse, and respiration. With the exception of respiration, these ANS signals reflect involuntary responses to physical, emotional, and mental changes within an individual. These signals were monitored via non-invasive sensors. A custom computer program transformed the four ANS signals into four musical elements: melody, musical key, tempo, and phrasing. Study participants were two male and one female patient with PMD and 10 caregivers, including parents and clinical staff. Caregivers engaged in four 10-minute interactions with the participant with PMD, whose biomusic was projected throughout. Caregivers then participated in two open ended, semi-structured interviews to explore the effect of biomusic on these interactions. Most caregiver responses to biomusic were very positive, and many reported that biomusic caused an improvement in their interaction with and perceptions of the person with PMD. By providing audible evidence of the changing physiological state of individuals with PMD, biomusic may enhance the perceived personhood of these individuals and enrich interactions with their family members and caregivers.

Bockbrader, M., Bruce, M.K., Haserodt, S., Mysiw, W.J., Smith, R., Swendal, C., Whalen, C.N., & Worthen-Chaudhari, L. (2013). **A feasibility study using interactive graphic art feedback to augment acute neurorehabilitation therapy.** *Neurorehabilitation*, 33(3), 481-490.

NARIC Accession Number: J67962

ABSTRACT: Study evaluated the feasibility of an interactive arts application prototype developed to augment movement therapy while digitally documenting the movement performed within acute neurorehabilitation. Interactive arts, also called participatory arts, are crafted such that the spectator must participate in order to create an outcome. This genre of art involves a responsive dialogue between the participant and the environment and is generally mediated through technology such as biophysical sensors. Twenty-one inpatients between the ages of 19 and 86 receiving treatment for motor deficits associated with neuropa-

thology used the application during 1 to 7 sessions of occupational, recreational, or physical therapy. Movement of the body, measured by a motion sensor, caused a trace of graphic art to be drawn on a computer screen as participants used their movement to control the path of the drawing. Patient demographics, Functional Independent Measure (FIM) scores, exercises performed with the technology, longest exercise duration performed, user feedback, and therapist responses to a validated technology assessment questionnaire were analyzed. Results indicated that patients classified on the FIM as requiring at least 75 percent assistance for cognitive and motor function were able to use the interactive application. Interactive arts technology was used successfully during performance of recreational, occupational, and physical therapy for neurorehabilitation, providing feedback that is different than traditional biofeedback in that it is presented as graphic art. In addition to providing interactivity to individuals with low motor function, interactive arts applications might serve to augment activity-based medicine among inpatients with low problem-solving and memory function.

Chen, M.C., Huang, Y.T., Lin, K.C., & Tsai, P.L. (2013). **Pleasant music improves visual attention in patients with unilateral neglect after stroke.** *Brain Injury*, 27(1), 75-82.

NARIC Accession Number: J65514

ABSTRACT: Study investigated whether listening to pleasant music improves visual attention to and awareness of contralesional stimuli in patients with unilateral neglect after stroke. A within-subject design was used with 19 participants with unilateral neglect following a right hemisphere stroke. Participants were tested in three conditions (pleasant music, unpleasant music, and white noise) within 1 week. All musical pieces were chosen by the participants. In each condition, participants were asked to complete three sub-tests of the Behavioral Inattention Test (the Star Cancellation Test, the Line Bisection Test, and the Picture Scanning test) and a visual exploration task with everyday scenes. Eye movements in the visual exploration task were recorded simultaneously. Mood and arousal induced by different auditory stimuli were assessed using visual analogue scales, heart rate and galvanic skin response. Compared with unpleasant

music and white noise, participants rated their moods as more positive and arousal as higher with pleasant music, but also showed significant improvement on all tasks and eye movement data, except the Line Bisection Test. The findings suggest that pleasant music can improve visual attention in patients with unilateral neglect after stroke.

Chen, Y.L., Liao, H.F., Lu, T.W., Peng, Y.C., Shieh, J.Y., Tang, P.F., & Wang, T.H. (2013). **A home-based program using patterned sensory enhancement improves resistance exercise effects for children with cerebral palsy: A randomized controlled trial.** *Neurorehabilitation and Neural Repair*, 27(8), 684-694.

NARIC Accession Number: J67692

ABSTRACT: Study investigated the effects of additional patterned sensory enhancement (PSE) music combined with exercise on motor capacity and daily functions for children with cerebral palsy (CP). Thirty-six children with spastic diplegia, aged 5 to 13 years, were randomly assigned to a PSE group or a no-music group. Both groups received the same 6-week, home-based, loaded sit-to-stand exercise, but only the PSE group exercised with prerecorded PSE music. The primary outcome assessed at baseline and at 6 and 12 weeks was gross motor capacity measured by the Gross Motor Function Measure (GMFM). Secondary outcomes included Pediatric Evaluation of Disability Inventory (PEDI) mobility and self-care domains, functional strength of the lower extremities measured with 1-repetition maximum of sit-to-stand, and walking speeds. Three children did not complete the program. Intention-to-treat analysis showed both groups improved in GMFM D, E, and Goal dimensions; the Functional Skills Scales of PEDI mobility domain; and 1-repetition maximum of sit-to-stand at posttest and follow-ups. The PSE group improved significantly greater than the no-music group in the GMFM D and Goal dimensions after training, and the improvement persisted for at least 6 or 12 weeks. No significant improvements in the other PEDI scales and walking speeds were found. Results suggest that adding neurologic music therapy to functional resistance exercise could induce greater improvements in gross motor capacity for children with CP.

DeGrace, B.W., Mouradian, L.E., & Thompson, D.M. (2013). **Art-based occupation group reduces parent anxiety in the neonatal intensive care unit: A mixed-methods study.** *American Journal of Occupational Therapy (AJOT)*, 67(6), 692-700.

NARIC Accession Number: J67893

**ABSTRACT:** Study examined whether an art-based occupation group using scrapbooking in the neonatal intensive care unit (NICU) would reduce parent stress and anxiety. Forty parents from a Level 3 NICU in a large metropolitan hospital completed the State-Trait Anxiety Inventory preactivity and postactivity, along with a brief postactivity interview. The decline in parents' mean state anxiety (12.7 points) was clinically significant. The decline in mean trait anxiety (2.6 points) was statistically significant but not clinically meaningful. Parents said that participation offered distraction and engagement, pleasure, relaxation, a sense of hope, and an opportunity to share. Findings suggest that an art-based occupation group using scrapbooking was an effective brief intervention to reduce parent anxiety in the neonatal intensive care unit; parent interviews suggest that participation has broad clinical implications for parent well-being.

Dieringer, S.T., Gumm, E., & Porretta, D. (2013). **Using music therapy principles to enhance physical activity participation in children and adolescents with disabilities.** *PALAESTRA: Forum of Sport, Physical Education, and Recreation for Those with Disabilities*, 27(3), 42-46.

NARIC Accession Number: J67419

**ABSTRACT:** Article describes the four principles of music therapy (improvisation, creative, re-creative, and receptive) and provides suggestions of how practitioners can use them to enhance physical activity of children and youth with disabilities.

Duncan, R.P., Earhart, G.M., Foster, E.R., & Golden, L. (2013). **Community-based Argentine tango dance program is associated with increased activity participation among individuals with Parkinson's disease.** *Archives of Physical Medicine and Rehabilitation*, 94(2), 240-249.

NARIC Accession Number: J65489

**ABSTRACT:** Study examined the effects of a community-based tango dance program on activity participation among individuals with Parkinson's

disease (PD). Fifty-two individuals with PD were randomly assigned to the tango group, which involved 12 months of twice-weekly Argentine tango dance classes, or to the no intervention control group. Current, new, and retained participation in instrumental, leisure, and social activities was measured by the Activity Card Sort (with the dance activity removed). All participants were evaluated at baseline, 3, 6, and 12 months. Total current participation in the tango group was higher at 3, 6, and 12 months compared with baseline, while the control group did not change. Total activity retention (since onset of PD) in the tango group increased from 77 percent to 90 percent over the course of the study, whereas the control group remained around 80 percent. These patterns were similar in the separate activity domains. The tango group gained a significant number of new social activities, but the control group did not. Individuals with PD who participated in a community-based Argentine tango class reported increased participation in complex daily activities, recovery of activities lost since the onset of PD, and engagement in new activities. Incorporating dance into the clinical management of PD may benefit participation and subsequently quality of life for this population.

Fenner, P., Schofield, M.J., & Van Lith, T. (2013). **Identifying the evidence-base for art-based practices and their potential benefit for mental health recovery: A critical review.** *Disability and Rehabilitation*, 35(16), 1309-1323.

NARIC Accession Number: J67206

**ABSTRACT:** Article reviews current research on the benefits of art-based practices in mental health rehabilitation settings. A critical review of previous research was conducted identifying all quantitative, qualitative, and mixed-method studies that addressed art making and adult mental illness. Then a deductive/theoretical thematic analysis was conducted using Lal's framework for conceptualizing mental health recovery. A total of twenty-three studies were identified that met the review criteria, including thirteen qualitative, four quantitative and six mixed-methods studies. The identified areas where art-based practices were of key benefit included psychological and social recovery, particularly in the areas of self-discovery, self-expression, relationships and social identity. These findings, in conjunction with the identified ben-

efits to clinical, occupational, and contextual recovery indicate that art-based practices play a substantial role in mental health recovery. Recommendations are made to improve the quality of future research, including the need for well-designed mixed-method studies that integrate qualitative and quantitative research, while keeping in mind the values of mental health recovery.

## 2012

Augusta, C., Burd, C., Pica, M., & Schroeder, T. (2012). **“Sing a song of six paints”:** A collaborative approach to art and music in the classroom. *Closing the Gap Magazine*, 30(6), 24-28.

NARIC Accession Number: J63060

ABSTRACT: Article presents a collaborative model of teaching art and music to students with disabilities. The authors share their knowledge and experience on how collaboration with therapists can enhance lessons, as well as to help other professionals use this method to empower their students to be as independent as possible. Discussion includes examples of lessons, descriptions of therapist intervention, the benefits and challenges of collaboration, as well as the vast array of assistive technology used.

Duncan, R.P., & Earheart, G.M. (2012). **Randomized controlled trial of community-based dancing to modify disease progression in Parkinson disease.** *Neurorehabilitation and Neural Repair*, 26(2), 132-143.

NARIC Accession Number: J62974

ABSTRACT: Study examined the effects of a 12-month community-based tango program for individuals with Parkinson disease (PD) on disease severity and physical function. Sixty-two participants were randomly assigned to a twice weekly, community-based Argentine tango program or a control group (no intervention). Participants were assessed off anti-Parkinson medication at baseline, 3, 6, and 12 months. The primary outcome measure was the Movement Disorders Society–Unified Parkinson Disease Rating Scale 3 (MDS-UPDRS-3). Secondary outcome measures were the MDS-UPDRS-1, MDS-UPDRS-2, MiniBESTest balance test; Freezing of Gait Questionnaire (FOGQ); 6-Minute Walk Test (6MWT); gait velocity for comfortable forward, fast

as possible forward, dual task, and backward walking; and Nine-Hole Peg Test (9HPT). Groups were not different at baseline. Overall, the tango group improved whereas the control group showed little change on most measures. For the MDS-UPDRS-3, there was no significant change in the control group from baseline to 12 months, whereas the tango group had a reduction of 28.7 percent (12.8 points). There were significant group-by-time interactions for MDS-UPDRS-3, MiniBESTest, FOGQ, 6MWT, forward and dual task walking velocities, and 9HPT in favor of the dance group. Improvements in the tango group were apparent off medication, suggesting that long-term participation in tango may modify progression of disability in PD.

Ribbers, G.M., van de Sandt-Koenderman, M.E., & van der Meulen, I. (2012). **Melodic intonation therapy: Present controversies and future opportunities.** *Archives of Physical Medicine and Rehabilitation*, Volume 93(1, Supplement 1), S46-S52.

NARIC Accession Number: J63327

ABSTRACT: This article reviews the literature on the effectiveness of Melodic Intonation Therapy (MIT), a structured aphasia therapy program using the melodic aspects of language (intonation, rhythm, and stress) to improve language production. MIT was developed in the 1970s and is still used worldwide. Nevertheless, many questions crucial for the clinical application of MIT are still unanswered. A review of MIT effect studies shows that evidence from well-designed group studies is still lacking. It is also unclear which aspects of MIT contribute most to its therapeutic effect and which underlying neural mechanisms are involved. Two cases are presented illustrating unsolved questions concerning MIT in clinical practice, such as candidacy and the best timing of this therapy.

## 2011

Alon, Uri., & Moran, G.S. (2011). **Playback theatre and recovery in mental health: Preliminary evidence.** *The Arts in Psychotherapy*, 38(5), 318-324.

NARIC Accession Number: J63948

Project Number(s): H133B090014; H133P070001.

ABSTRACT: Study explored the potential of playback theatre to promote recovery in the field of mental health. Playback theatre is a community-building

improvisational theatre in which a personal story told by a group member is transformed into a theatre piece on the spot by other group members. Playback theatre combines artistic expression and social connection based on story-telling and empathic listening, thus bringing together modes thought to promote healing. The authors conducted two playback courses for a total of 19 adults in a university-based program for recovery, and collected qualitative before-and-after self-report measures for self-esteem, personal growth, and recovery. They also developed a self-report measure called the Playback Impact Scale that includes items related to creativity, confidence in performing, social connectedness, and seeing one's life as full of stories. Results showed significant improvement in the Playback Impact Scale following a 10-week playback course. The qualitative reports indicate recurring themes of enhanced self-esteem, self-knowledge, as well as fun and relaxation, and enhanced sense of connection and empathy for others. These preliminary results suggest that playback theatre can serve as an effective practice for enhancing recovery processes from serious mental illness.

Alston, M.K., Beesley, K., Pollack, M., Sweetapple, A.L., & White, J.H. (2011). **Art after stroke: The qualitative experience of community dwelling stroke survivors in a group art program.** *Disability and Rehabilitation*, 33(23-24), 2346-2355.

NARIC Accession Number: J62346

ABSTRACT: Study explored the experience of community dwelling stroke survivors' participation in an arts health group program and possible health benefits to quality of life (QOL) and wellbeing. Sixteen participants, aged 43 to 81 years, participated in two group art programs, both held weekly over a period of 8 weeks. The aim of the groups was to provide an opportunity for stroke survivors to explore art in a supportive environment. Data were collected through two focus groups and individual interviews. Qualitative analysis of the data was undertaken, using a grounded theory approach incorporating constant comparison. Four themes emerged including: experience of stroke, benefit of art, benefit for self and benefit of group experience. Participants experienced improved confidence, self-efficacy, QOL and community participation through involvement in an arts health program. The findings suggest that the

implementation of an arts health program after stroke made a substantial impact on well-being and QOL. Results from this study are promising and this is a model that warrants rigorous investigation regarding the impact of art on QOL and wellbeing. This study also highlighted the need for community resources to address community re-integration and service provision in the form of age appropriate, activity-based groups for stroke survivors.

Cherney, L.R., Oehring, A.K., Rubenstein, T., & Whipple, K. (2011). **"Waiting on the words": Procedures and outcomes of a drama class for individuals with aphasia.** *Seminars in Speech and Language*, 32(3), 229-242.

NARIC Accession Number: J62417

Project Number(s): H133G060055, H133G070074  
 ABSTRACT: Article describes a drama class in which individuals with chronic aphasia conceptualized, wrote, and produced a play addressing their experiences of having, living with, and coping with the effects of aphasia. Class sessions were co-facilitated by a speech-language pathologist and a drama therapist and the curriculum incorporated principles and methodology from the fields of both speech-language pathology and drama therapy. The authors describe the drama activities and techniques in each of four distinct stages of a drama therapy process through which the group transitioned. They also summarize patient-reported outcomes of a representational group of seven participants. Subscales of the Burden of Stroke Scale and the Communication Confidence Rating Scale for Aphasia were administered before and after participation in the 18-week class. Means, standard deviations, and effect sizes were computed. Results indicated perceived improvements in both communication and mood.

Fenner, P., Schofield, M., & Van Lith, T. (2011). **The lived experience of art making as a companion to the mental health recovery process.** *Disability and Rehabilitation*, 33(8), 652-660.

NARIC Accession Number: J61036

ABSTRACT: Study explored mental health consumers' lived experiences of art making within psychosocial rehabilitation services and their views on how art making supports mental health recovery. Qualitative in-depth interviews were conducted with 18 consumer

participants who attended art-based programs in two psychosocial rehabilitation services in Victoria, Australia to explore the role of art making in the mental health recovery journey. The 60- to 90-minute interviews were analyzed using interpretative phenomenological analysis. A total of 11 major themes were identified and organized into three areas: qualities conducive to the art making context, how the art making process benefits mental health recovery, and how the image or art product benefits mental health recovery. The 11 themes are described and illustrated from participant interviews. Consumers described art making as a transformative activity which enabled them to take greater control of their lives, resulting in feeling stronger, more confident, and more capable of driving their journey of recovery. The art product also served valuable roles in supporting their recovery.

Knight, A.J., & Wiese, N. (2011). **Therapeutic music and nursing in poststroke rehabilitation.** *Rehabilitation Nursing, 36*(5), 200-204, 215.

NARIC Accession Number: J61988

ABSTRACT: This article aims to educate nurses about music therapy and provide evidence for the therapeutic use of music in the rehabilitation setting for victims of stroke. There is a need for nursing professionals in this area to better understand the role a music therapist may play and how they can assist clients in using music in a therapeutically beneficial way.

Lamet, A.R., Lindgren, C.L., Little, D.J., Rafalko, S.Y., Rillstone, P., Sonshine, R., Steffey, C.M., & Walsh, S.M. (2011). **Art in Alzheimer's care: Promoting well-being in people with late-stage Alzheimer's disease.** *Rehabilitation Nursing, 36*(2), 66-72.

NARIC Accession Number: J60692

ABSTRACT: This qualitative study examined the responses of people with late-stage Alzheimer's disease (AD) to a creative bonding intervention (CBI) The CBI consisted of simple art activities designed to promote self-transcendence and well-being. Guided by Reed's self-transcendence theory, research questions were "Will persons with late-stage AD show evidence of self-transcendence during the CBI?" and "Will persons with late-stage AD show evidence of well-being during the CBI?" Twelve CBI sessions, docu-

mented by videotape and field notes, were conducted with four participants. Themes emerged within two clusters: trusting/thirsting/following and choosing/connecting/reminiscing. An overarching category of "cocooning" described participants' world during the CBI as they displayed evidence of self-transcendence and well-being. The CBI is a strategy that can be implemented by staff families, and volunteers. Nurses are positioned to provide transformation leadership for implementation of creative approaches during care of people with late-stage AD, but administrative and financial supports are needed.

Sapp, W. (2011). **Somebody's jumping on the floor: Incorporating music into orientation and mobility for preschoolers with visual impairments.** *Journal of Visual Impairment & Blindness, 105*(10), 715-719.

NARIC Accession Number: J62380

ABSTRACT: Article focuses on using music as a structured activity for learning concepts and skills related to orientation and mobility (O&M). Somebody's Jumping on the Floor is a program that uses rhythms and music to develop O&M skills and concepts in children with a developmental level of 2 to 7 years. The following are six guidelines that can be used by professionals to create music that they can incorporate into O&M instruction; (1) identify the objective; (2) find the natural rhythm; (3) use repetition and word patterns; (4) choose a song that fits the rhythm; (5) instead of a song, use a beat; and (6) collaborate with students, parents, and professionals. Examples demonstrate how these guidelines were applied to develop four songs for teaching O&M to young children with visual impairments.

## 2010

Bethoux, F., Chemali, K., Conklyn, D., Novak, E., Paczak, S., & Stough, D. (2010). **A home-based walking program using rhythmic auditory stimulation improves gait performance in patients with multiple sclerosis: A pilot study.** *Neurorehabilitation and Neural Repair, 24*(9), 835-842.

NARIC Accession Number: J60097

ABSTRACT: Study measured the effects of rhythmic auditory stimulation (RAS) on quantitative walking parameters in ambulatory patients with multiple

sclerosis (MS). Ten MS patients with gait disturbance were randomly assigned to receive RAS versus no intervention for two weeks. All participants received RAS for another two weeks. Between weekly clinic visits, they were provided with MP3 players containing songs whose tempo was 10 percent above the participant's spontaneous cadence and were instructed to walk to the music 20 minutes daily. Quantitative gait parameters were measured using the GAITRite analysis system. A statistically significant decrease between groups was found for change in double-support time, whereas trends with medium to high effect sizes were found for other gait parameters, including walking speed. A pooled within-group analysis showed significant improvement of cadence, stride length, step length, velocity, and normalized velocity after one week of treatment. Satisfaction level with RAS was high. These results demonstrate the feasibility and safety of RAS when used at home in a convenience sample of MS patients and suggest a potential benefit on gait parameters.

Blunsden, S., Boger, J., Hoey, J., Mihailidis, A., Richards, B., Young, L., & Zutis, K. (2010). **Towards the development of a technology for art therapy and dementia: Definition of needs and design constraints.** *The Arts in Psychotherapy, 37*(4), 293-300. NARIC Accession Number: J62866

Project Number: H133E090003

ABSTRACT: Article describes a study that had arts therapists participate in the identification of desirable features and functionalities of a computer-based tool for use in art therapy with older adults who have dementia. The first two phases of the study are described: a multi-national survey and the development of prototype devices based on the survey's results. First, results from the survey of creative arts therapists are presented along with an analysis of needs, practices, and ideas about technology. The authors then present the three prototypes of potential art therapy technologies that were developed based on the findings from the survey. This research shows both a need for technological solutions in the domain of art therapy for people with dementia, as well as a general acceptance and enthusiasm for technology as a clinical tool for practicing creative arts therapies.

Earhart, G.M., & Hackney, M.E. (2010). **Effects of dance on gait and balance in Parkinson's disease: A**

**comparison of partnered and nonpartnered dance movement.** *Neurorehabilitation and Neural Repair, 24*(4), 384-392.

NARIC Accession Number: J60091

ABSTRACT: Study compared the effects of partnered and nonpartnered dance on balance and mobility in 39 people (11 women) with mild-moderate Parkinson's disease (PD). Partnered dance may allow these individuals to challenge balance more than nonpartnered dance. Alternatively, partnered practice could reduce balance gains because the participant may rely on the partner as a balance aid when challenged. Participants were randomly assigned to partnered or nonpartnered tango and attended 1-hour classes twice per week, completing 20 lessons within 10 weeks. Balance and gait were evaluated in the weeks immediately before, immediately after, and 1 month after the intervention. Both groups significantly improved on the Berg Balance Scale, comfortable and fast-as-possible walking velocity, and cadence. Improvements were maintained at the 1-month follow-up. The nonpartnered class improved as much as the partnered class; however, partnered participants expressed more enjoyment and interest in continuing.

Fenner, P., Schofield, M., & Van Lith, T. (2010). **Art therapy in rehabilitation.** In: J.H. Stone, M. Blouin (editors), *International Encyclopedia of Rehabilitation Research Information and Exchange (CIRRIE)*. Buffalo, NY: Center for International Rehabilitation Research Information and Exchange (CIRRIE). NARIC Accession Number: O17777

Project Number: H133A050008

Available in full-text at: [search.naric.com/research/rehab/download.cfm?ID=112283](http://search.naric.com/research/rehab/download.cfm?ID=112283)

ABSTRACT: Article discusses the many ways that art therapy is used in rehabilitation and how art therapists practice in rehabilitation settings. The art-based practice continuum is described to demonstrate the various styles and practices used in rehabilitation settings. Some key contributions that art therapy can make to rehabilitation include: sensory experiences, symbolic expression, emotional expression, life enhancement, cognitive development and social connectedness. Finally, there is a discussion on the unique qualities of fostering creativity in rehabilitation and on the importance of the context where art therapy takes place.

Frankel, R., Knott, D., & Wikstrom, B. (2010). *Art and music therapy in rehab and beyond*.

NARIC Accession Number: O18419

Project Number: H133N060033

Video is available at: [sci.washington.edu/info/forums/reports/art\\_music\\_tx-2011.asp](http://sci.washington.edu/info/forums/reports/art_music_tx-2011.asp)

ABSTRACT: In this presentation, two therapists explain the many benefits that can be gained through the creative arts therapies. They provide examples of different equipment and supplies that can be used by individuals with mobility disabilities and discuss ways art can be used to support rehabilitation, and for personal growth, expression, and enjoyment. A guest artist, who is a mouth painter, talks about his evolution as a professional artist since sustaining a spinal cord injury more than 30 years ago. Run time 59 minutes 13 seconds.

Fratianne, R.B., Super, D.M., Tan, X., & Yowler, C.J. (2010). **The efficacy of music therapy protocols for decreasing pain, anxiety, and muscle tension levels during burn dressing changes: A prospective randomized crossover trial.** *Journal of Burn Care and Research (formerly Journal of Burn Care & Rehabilitation)*, 31(4), 590-597.

NARIC Accession Number: J59079

ABSTRACT: Study examined the efficacy of two music therapy protocols on pain, anxiety, and muscle tension levels during dressing changes in burn patients. Twenty-nine inpatients participated in this prospective, crossover randomized controlled trial. On two consecutive days, patients were randomized to receive music therapy services either on the first or second day of the study. On control days, they received no music. On music days, patients practiced music-based imagery, a form of music-assisted relaxation with patient-specific mental imagery before and after dressing changes. Also, on music days during dressing changes, the patients engaged in music alternate engagement, which consisted of active participation in music making. The dependent variables were the patients' subjective ratings of their pain and anxiety levels and the research nurse's objective ratings of their muscle tension levels. Two sets of data were collected before, three sets during, and another two sets after dressing changes. The results showed significant decrease in pain levels before, during, and after dressing changes on days the patients

received music therapy in contrast to control days. Music therapy was also associated with a decrease in anxiety and muscle tension levels during the dressing changes followed by a reduction in muscle tension levels after dressing changes.

Smith, B.B. (2010). **Treatment of dementia through cultural arts.** *Care Management Journals*, 11(1), 42-47.

NARIC Accession Number: J58727

ABSTRACT: Article describes the development of an adult day care program for people with dementia that focuses on cultural and performing arts. Discussion includes staff selection, client performances, the search for the right stimulus, and the benefits of music therapy.

## 2009

Bartindale, T., Blundsdon, S., Boger, J., Hoey, J., Jackson, D., Mihailidis, A., Olivier, P., Richards, B. (2009). **Design and prototype of a device to engage cognitively disabled older adults in visual artwork.** *In Proceedings of the 2nd International Conference on Pervasive Technologies Related to Assistive Environments (PETRA 2009), June 9-13, 2009, Corfu, Greece.*

NARIC Accession Number: O18809

Project Number: H133E090003

Available in full-text at: [homepages.cs.ncl.ac.uk/patrick.olivier/Publications\\_files/HoeyABRA09.pdf](http://homepages.cs.ncl.ac.uk/patrick.olivier/Publications_files/HoeyABRA09.pdf)

ABSTRACT: Article describes a novel device designed to increase the capacity of art therapists to engage older adults with cognitive disabilities in artistic activities. The touch-screen interface device presents a user with simple creative arts tasks such as painting and uses a camera and artificial intelligence software to monitor and interact with a user. Using a probabilistic model, the device monitors the behaviors of a user as well as aspects of their affective or internal state, including their responsiveness and engagement with the device. The device then uses decision theoretic reasoning to take situated actions that promote engagement from the user. For example, the device might issue an audible prompt, or might modify the interface (e.g., by adding a new color). The authors discuss next steps with this device, including end user testing.

Eisin, A., Langner, D., Nainis, N., Paice, J., Rao, D., & Williams, L. (2009). **Art therapy for relief of symptoms associated with HIV/AIDS.** *AIDS Care*, 21(1), 64-69.

NARIC Accession Number: J60376

Project Number: H133P030002

ABSTRACT: Study tested the feasibility and effectiveness of art therapy for relief of physical and psychological symptoms experienced by people living with HIV/AIDS. Seventy-nine people with a diagnosis of HIV infection provided sociodemographic information, participated in either a one-hour art therapy session or viewed a videotape about art therapy, and completed pre- and post-test measures of psychological and physical symptoms. Two separate analysis of covariance models were used to identify if the treatment condition influenced psychological and physical symptoms, after adjusting for pretest score, age, gender, and race/ethnicity. The analyses showed that physical symptom mean scores were better for those who participated in the art therapy compared to those who viewed the videotape, and this difference between conditions was statistically significant. Thus, the study demonstrated the potential benefits of one session of art therapy in relation to symptoms associated with HIV/AIDS.

Summa-Chadwick, M. (2009). **The power of music.** *Exceptional Parent*, 39(6/7), 70-74.

NARIC Accession Number: J58663

ABSTRACT: Article discusses the use of music protocols to enhance neurological function. A case example illustrates how neurological music protocols have been utilized to improve motor and cognitive skills in a child diagnosed with pervasive developmental disorder.

## 2008

Herndon, D.N., Neugebauer, C.T., Serghiou, M., & Suman, O.E. (2008). **Effects of a 12-week rehabilitation program with music & exercise groups on range of motion in young children with severe burns.** *Journal of Burn Care and Research (formerly Journal of Burn Care & Rehabilitation)*, 29(6), 39-948.

NARIC Accession Number: J62423

Project Number: H133A70019

ABSTRACT: Study examined whether a 12-week rehabilitation program supplemented with music and

exercise was more effective in improving functional outcomes for severely burned children than the standard of care (SOC) alone. Elbow and knee range of motion (ROM) were measured in 24 severely burned children between ages 2 and 6 years. Groups were compared for demographics as well as active and passive ROM to bilateral elbows and knees. A total of 15 patients completed the rehabilitation with supplemental music and exercise, and data was compared with 9 patients who received SOC. Patients receiving the 12-week program significantly improved ROM in all joints assessed except for one. Patients receiving SOC showed a significant improvement in only one of the joints assessed. Providing a structured supplemental music and exercise program in conjunction with occupational and physical therapy seems to improve both passive and active ROM to a greater extent than the SOC alone.

Kim, M., & Tomaino, C.M. (2008). **Protocol evaluation for effective music therapy for persons with nonfluent aphasia.** *Topics in Stroke Rehabilitation*, 15(6), 555-569.

NARIC Accession Number: J55919

ABSTRACT: Article presents a music therapy treatment protocol designed specifically for patients with aphasia, defined as "an acquired impairment of language processes underlying receptive and expressive modalities and caused by damage to areas of the brain which are primarily responsible for the language function." Specifically, a person suffering from nonfluent (expressive) aphasia has difficulty producing meaningful words, phrases, and sentences. A study with seven nonfluent aphasic patients using a collectively established treatment protocol is presented with clinical findings. Each patient was paired up with a music therapist and received 8 to 12 individual music therapy sessions approximately three times a week for 4 weeks. In each session, the music therapist, sitting face to face with the patient, guided the patient through seven structured musically assisted speech exercises. The study was conducted in clinical settings in an attempt to provide music therapists involved in this area with working guidelines on using the protocol for various features of nonfluent aphasia. The data and findings are discussed with regard to some of the recent focuses and issues addressed in the experimental studies using cognitive-behavioral, electrophysiological, and brain-imaging techniques.

Westheimer, O. (2008). **Why dance for Parkinson's disease.** *Topics in Geriatric Rehabilitation, 24*(2), 127-140.

NARIC Accession Number: J54774

ABSTRACT: Article describes a dance class developed for people with Parkinson's disease (PD) and their friends and family. Discussion includes the rationale of dance for PD, the teaching methods, and participants' observations.

## 2007

Borders, B., Decanini, A., Hart, K., Lee, J., Levin, T., Scott, B.M. (2007). **Aphasia talks: Photography as a means of communication, self-expression, and empowerment in persons with aphasia.** *Topics in Stroke Rehabilitation, 14*(1), 72-84.

NARIC Accession Number: J52082

Project Number: H133B031127

ABSTRACT: Article describes Aphasia Talks, a photography class developed to facilitate self-expression in people with aphasia. A model based on the goals of reintegration, recreation, education, socialization, and strengthening was used to design the class and corresponding website (AphasiaTalks.org) with, rather than for, people with stroke. Through the use of the class as a research tool, the redesign of a digital camera that could be used by people with limited mobility was begun. Exit interviews conducted with each participant following the 5-week course revealed that all participants would take the class again.

Drake, M., & Tubbs, C. (2007). **Crafts and creative media in therapy, third edition.**

NARIC Accession Number: R08804

ABSTRACT: Book emphasizes the importance of the use of crafts in therapy and rehabilitation and summarizes the current research regarding their benefits. It provide basic instructions for a wide array of crafts and additional project ideas, information on populations for whom the activities might be appropriate, adaptation and grading of the activities, methods of documentation to better assure reimbursement, and examples of how these activities are relevant to common models of practice. The concept of 'media' has been added to this third edition to include creative endeavors such as expressive and technological media that are not traditionally considered crafts. The selection of activities has been updated to reflect current

community trends regarding individuals' engagement in crafts and other creative media. Each craft category includes: key terms, tools and supplies, general instructions, special considerations, related activities and ideas, main therapeutic applications for various populations, ways to use the activity for assessment, ways to grade, a case study, discussion questions, and references.

Magee, W.L. (2007). **Music as a diagnostic tool in low awareness states: Considering limbic responses.** *Brain Injury, 21*(6), 593-599.

NARIC Accession Number: J53043

ABSTRACT: Article discusses music therapy as a tool for diagnosing people who are in low awareness states following profound brain injury. Low awareness states include vegetative state and minimally conscious state. Evidence from research in neuroimaging and the behavioral health sciences indicates that auditory stimulation can reveal residual functioning and elicit optimal behaviors in such patients. However, diagnosis may be complicated by limbic responses, which are reflexive behaviors that can be misinterpreted as purposeful emotional responses. An example illustrates the use of music therapy in a case complicated by limbic responses.

## 2006

Larsen, B. (2006). **Movement with meaning: A multisensory program for individuals with early-stage Alzheimer's disease.**

NARIC Accession Number: R09052

ABSTRACT: Book provides information for implementing the Movement with Meaning program, a strength-based program designed for older adults with early-stage Alzheimer's disease. This interactive, multisensory program combines gentle dance movements, yoga-inspired poses, and breathing exercises with music, poetry, and specific sensory activities. Step-by-step instructions for each activity are supported by more than 100 photographs and four 30-minute sessions are described in detail. The curriculum is ideal for physical therapists, recreational instructors, and activity directors in adult day care centers and assisted living centers, as well as health care professionals who are senior trainers and music or dance therapists.

Magee, W.L. (2006). **Electronic technologies in clinical music therapy: A survey of practice and attitudes.** *Technology and Disability, 18*(3), 139-146. NARIC Accession Number: J52047

ABSTRACT: Article presents the results of a survey regarding British music therapists' experiences and attitudes regarding electronic music technologies in their clinical work. Traditionally, music therapy has involved the use of conventional acoustic instruments such as the piano, guitar, and percussion instruments. However, it is suggested that conventional instruments may not be able to meet the complex needs of some clients with profound or multiple disabilities. Much like the computer mouse and keyboard, most acoustic instruments are inaccessible to people with little or no active movement. Musical Instrument Digital Interfaces, however, can be accessed via computers with alternative access interfaces, such as head switches. Survey results revealed that the main barrier to using electronic music lies in a lack of training at an introductory level on how to incorporate the technology into a therapeutic setting. The authors contend that further exploration into the topic is warranted, in particular the use of alternative access interfaces with electronic music applications.

Stephenson, J. (2006). **Music therapy and the education of students with severe disabilities.** *Education and Training in Developmental Disabilities (formerly Education and Training in Mental Retardation and Developmental Disabilities), 41*(3), 290-299. NARIC Accession Number: J51179

ABSTRACT: Article examines the use of music therapy in the education of students with moderate to severe intellectual disabilities or multiple disabilities. Discussion includes the prevalence of the use of music therapy in special education settings, the goals of music therapy with students with severe disabilities, and a review of recent research on music therapy.

Storm, S.A. (Ed.). (2006). **Performing arts medicine.** *Physical Medicine and Rehabilitation Clinics of North America, 17*(4), 747-910. NARIC Accession Number: R08786

ABSTRACT: Articles in this journal issue focus on the management of musculoskeletal injuries in performing artists such as musicians, dancers, vocalists, and actors. Topics include: special issues in the

medical assessment of musicians; voice disorders associated with professional vocalists; focal peripheral neuropathies in instrumental musicians; focal dystonia in musicians; common musculoskeletal problems in the performing artist; current concepts in dance medicine; foot and ankle injuries in dance, repetitive stress and strain injuries; upper extremity orthotics; an osteopathic approach to performing arts medicine; Feldenkrais method, Alexander technique, and yoga; the alliance between music education and performing arts medicine; and assessing the instrumentalist. Individual articles may be available for document delivery.

## 2004

Ferguson, S.L., & Voll, K.V. (2004). **Burn pain and anxiety: The use of music relaxation during rehabilitation.** *Journal of Burn Care & Rehabilitation, 25*(1), 8-14.

NARIC Accession Number: J47774

ABSTRACT: Study examined the effect of music on anxiety and pain for patients with burns during range of motion exercises. Eleven subjects were randomly assigned to therapy groups with or without the music relaxation intervention. Vital signs, pain, and anxiety were recorded before and after treatments. Results showed no significant reduction in anxiety and pain during therapy with music relaxation. Limitations of the study are discussed and further research is recommended.

Goodwin, D.L., Krohn, J., & Kuhnle, A. (2004). **Beyond the wheelchair: The experience of dance.** *Adapted Physical Activity Quarterly, 21*(3), 229-247. NARIC Accession Number: J48078

ABSTRACT: Case study describes the wheelchair dance experiences of 5 children with spina bifida using information from semi-structured interviews, journals, visual artifacts, and field notes. The dancers spoke about their bodies, their experiences as dancers, and their wheelchairs as implements of dance. The perspectives of their parents were also gathered and analyzed. Although parent data and dancer data were analyzed separately, 4 common themes emerged: (1) unconditional acceptance, (2) a dream come true, (3) beyond the wheelchair, and (4) a stronger self.

2003

Barksdale, A.L. (2003). *Music therapy and leisure for persons with disabilities.*

NARIC Accession Number: R08445

ABSTRACT: Book examines the use of music therapy in schools and community settings to enhance the development of independent leisure skills in people with disabilities. Chapters discuss the history of music therapy and the training of music therapists. The types of interventions that are commonly used with specific populations are described, including children and adults with mental health needs, developmental and learning disabilities, Alzheimer's disease and other aging-related condition, substance abuse problems, brain injuries, and physical disabilities. Final chapter presents resources including web sites, vendors and suppliers of equipment, recommended readings and songbooks, and organizations for support.

Mauritz, K.H., & Schauer, M. (2003). **Musical motor feedback (MMF) in walking hemiparetic stroke patients: Randomized trials of gait improvement.** *Clinical Rehabilitation, 17*(7), 713-722.

NARIC Accession Number: J46338

ABSTRACT: Article describes the use of musical motor feedback (MMF) to enhance the gait training of patients with stroke. The MMF device provides by auditory feedback of the patients' own strides in a musical context. The control group received 15 sessions of conventional gait therapy and the test group received 15 sessions with MMF. The test group showed more mean improvement than the control group: stride length increased by 18 percent versus 0 percent, symmetry deviation decreased by 58 percent versus 20 percent, walking speed increased by 27 percent versus 4 percent, and rollover path length increased by 28 percent versus 11 percent.

Milne, H., Reis, S.M., Schader, R., & Stephens, R. (2003). **Music and minds: Using a talent development approach for young adults with Williams syndrome.** *Exceptional Children, 69*(3), 293-313.

NARIC Accession Number: J45189

ABSTRACT: Article describes the use of a talent development approach for people with Williams syndrome. The Music and Minds program focused on the musical strengths, interests, and learning style

preferences of the participants to provide learning experiences, address deficits, and develop musical talents. Case studies illustrate the program experiences of two young adults with Williams syndrome.

Reynolds, F. (2003). **Reclaiming a positive identity in chronic illness through artistic occupation.** *Occupation, Participation and Health (OTJR) (formerly The Occupational Therapy Journal of Research), 23*(3), 118-127.

NARIC Accession Number: J45883

ABSTRACT: Article presents narrative accounts of women who used artistic occupation as a means of reconstructing a positive self and identity during chronic illness. In-depth interviews were conducted with the participants who engaged in textile arts (embroidery, appliqué, quilting, and mixed-media art). Analysis of the interviews revealed that the participants' engagement in creating art gradually contributed to a positive identity as a textile artist. Four main process of identity reconfiguration through artistic occupation were identified: (1) reconnection with the previous, pre-illness self; (2) positive personal identity growth and development; (3) a restored sense of expertise, status, and self-esteem; and (4) a socially validated identity.

2002

Murrock, C.J. (2002). **The effects of music on the rate of perceived exertion and general mood among coronary artery bypass graft patients enrolled in cardiac rehabilitation phase II.** *Rehabilitation Nursing, 27*(6), 227-231.

NARIC Accession Number: J44696

ABSTRACT: Study examines the effectiveness of music therapy on the perceived level of exertion and general mood of coronary artery bypass graft patients participating in a cardiac rehabilitation Phase II program. Patients were randomly assigned to either exercise with music or exercise without music as they rated their perceived exertion and mood. The results indicated no significant difference in rate of perceived exertion for the two groups. However, patients exercising to music reported significantly enhanced mood and patients exercising without music reported a significantly decreased mood.

## 2001

Fratianne, R.B., Huston, M.J., Prensner, J.D., Standley, J.M., Super, D.M., & Yowler, C.J. (2001). **The effect of music-based imagery and musical alternate engagement on the burn debridement process.** *Journal of Burn Care & Rehabilitation*, 22(1), 47-53. NARIC Accession Number: J41644

ABSTRACT: Study examining the efficacy of music-based imagery and musical alternate engagement in assisting burn patients in managing their pain and anxiety during dressing changes and wound debridement. Participants were 25 patients age 7 and older. The study used a repeated-measures design with participants serving as their own controls. Data were collected at four points before, during, and after the procedure, including pulse, self-report of pain, self-report of anxiety, and nurse's observation of patient tension. Results show that there was a significant reduction in self-reported pain associated with music therapy.

Fratianne, R.B., Prensner, J.D., Smith, L.F., Steele, A.L., & Yowler, C.J. (2001). **Music therapy for assistance with pain and anxiety management in burn treatment.** *Journal of Burn Care & Rehabilitation*, 22(1), 83-88.

NARIC Accession Number: J41645

ABSTRACT: Article on music therapy for burn patients. The article examines the rationale for using music therapy with burn patients, describes several protocols that have been adapted to meet the specific needs of burn patients, and summarizes preliminary findings that demonstrate significant response to music therapy protocols employed by the authors with their own patients.

## 2000

Agostinelli, S., Nayak, S., Shiflett, S.C., & Wheeler, B.L. (2000). **Effect of music therapy on mood and social interaction among individuals with acute traumatic brain injury and stroke.** *Rehabilitation Psychology*, 45(3), 274-283.

NARIC Accession Number: J40155

ABSTRACT: Study investigating the efficacy of music therapy techniques as an aid in improving mood and social interaction after traumatic brain injury

(TBI) or stroke. Eighteen individuals with TBI or stroke were assigned either standard rehabilitation alone or standard rehabilitation along with music therapy (3 treatments per week for up to 10 treatments). Outcomes were evaluated using pre- and post-treatment self-assessments of mood, family ratings of mood and social interaction, and therapists' ratings of mood and participation in therapy. Improvements were noted in the music therapy group relative to the non-music-therapy group in family members' assessment of social interaction and staff ratings of participation in therapy.

Gut, D.M. (2000). **We are social beings: Learning how to learn cooperatively.** *Teaching Exceptional Children*, 32(5), 46-53.

NARIC Accession Number: J39193

ABSTRACT: Case study of a 9-week intervention to promote cooperative behavior and improve peer acceptance, social skills, and social problem-solving in a classroom composed of 16 middle school students age 14-16 with learning disabilities (LD). The intervention included metacognitive training, and collaborative techniques based on principles of cooperative learning. A brief review of the literature on collaborative metacognitive social skills training is presented. Student activities (role playing and art therapy) and assessment techniques are described. Results indicate that social problem-solving skills were improved, cooperative behavior increased, that shy students as well as popular ones underwent positive changes, and improvement in social skills were generalized to other settings.

## 1999

Guyn, H.L., Reimer, M.A., & Wiens, M.E. (1999). **Music therapy as a treatment method for improving respiratory muscle strength in patients with advanced multiple sclerosis: A pilot study.** *Rehabilitation Nursing*, 24(2), 74-80.

NARIC Accession Number: J36334

ABSTRACT: Pilot study evaluating the effectiveness of music therapy in strengthening respiratory muscles in persons with advanced multiple sclerosis (MS). Twenty individuals with MS were randomly assigned to an experimental group, which received music therapy with an emphasis on diaphragmatic

breathing and coordination of breath and speech, or a control group, which attended music appreciation sessions. Participants' inspiratory and expiratory muscle strength was measured by testing mouth pressure before and after the intervention. It was found that the experimental group showed some improvement in expiratory muscle strength, while the control group showed deterioration, but these results were not statistically significant. The authors suggest further study with a larger sample.

McIntosh, G.C., & Thaut, M.H. (1999). **Music therapy in mobility training with the elderly: A review of current research.** *Care Management Journals*, 1(1), 71-74.

NARIC Accession Number: J37715

ABSTRACT: Article reviewing the authors' own research related to auditory rhythm as a sensory stimulus to facilitate gait and arm movement patterns in persons with a variety of neurological disorders. Reviews studies of rhythmic auditory stimulation (RAS) in persons with stroke, Parkinson disease, traumatic brain injury (TBI), Huntington disease, and cerebral palsy (CP).

Nash, S., & Wimpory, D.C. (1999). **Musical interaction therapy: Therapeutic play for children with autism.** *Child Language Teaching and Therapy*, 15(1), 17-28.

NARIC Accession Number: J36968

ABSTRACT: Article presents an overview of musical interaction therapy as a technique for motivating a child with autism and addressing the proposed fundamental deficit in social timing which inhibits the development of shared focus. The bases for this therapy is interactive play which parallels those parent-infant interactions which lead to the development of language in typical children. Through musical interaction, the child with autism can be exposed to enhanced and prolonged experiences with preverbal interaction play patterns supported by a musician. The carer and musician aim to construct an experience of give-and-take communication between the carer and the child. Three themes which run throughout this therapy at any stage of its active process are the "scaffolding" of interaction by the carer, the communicative "control" afforded to the child, and the musical "support" which sustains the contributions of the carer and the child. Formats used within, and strategies employed throughout, musical interaction

therapy are described. A case study is provided as an example of the process of the therapy. A discussion considers the underlying theories of musical interaction therapy.

## 1998

Berrol, C., Caplan, C., & Pfister, T. (1998). **Effects of music on exercise and perceived symptoms in patients with chronic obstructive pulmonary disease.** *Journal of Cardiopulmonary Rehabilitation*, 18(3), 228-232.

NARIC Accession Number: J35212

ABSTRACT: Article examining the effects of music on exercise tolerance and perceived symptoms during treadmill walking for persons with chronic obstructive pulmonary disease (COPD). Data are from 19 patients with COPD recruited from a pulmonary rehabilitation program, who participated in treadmill walking sessions on three separate days. It was found that there were no statistically significant differences in distance walked, perceived dyspnea, or perceived exertion between sessions with and without music. The authors note, however, that 60 percent of the participants volunteered that they enjoyed listening to music while exercising.

Durand, V.M., & Mapstone, E. (1998). **Influence of "mood-inducing" music on challenging behavior.** *American Journal on Mental Retardation*, 102(4), 367-378.

NARIC Accession Number: J34633

Project Number: H133C20056

ABSTRACT: Article about a study of the effects of a musical manipulation on the challenging behaviors of three persons with severe disabilities. The authors first identified stimulus conditions associated with high rates of challenging behavior for each participant. Then they repeated the high rate condition with the addition of fast and slow beat music. Data indicate that challenging behavior was more frequent when slow beat music accompanied the stimulus condition. Participants also displayed differential expressions of affect in the two conditions (fast or slow music). According to the authors, these results suggest that conditions associated with expression of affect may serve as establishing operations for challenging behavior, and this type of influence should be investigated further for possible contributions to intervention efforts.

## 1997

Caprio-Orsini, C. (1997). **Healing through art for people with mental retardation and developmental disabilities (MR/DD).** *The Habilitative Mental Healthcare Newsletter*, 16(6), 106-108.

NARIC Accession Number: J34511

ABSTRACT: Report explains basic concepts in art therapy and suggests applications in serving people with mental retardation and developmental disabilities. Stresses art as a way to increase self-esteem and self-awareness.

## 1996

Kimchi, O.L., Levinson, M., & Yaretzky, A. (1996). **Clay as a therapeutic tool in group processing with the elderly.** *American Journal of Art Therapy*, 34(3), 75-82.

NARIC Accession Number: J30542

ABSTRACT: Both an article on art therapy's role in geriatric rehabilitation and a study of the therapeutic benefits of group work with clay in regard to upper limb sensorimotor function, social interaction skills, and as an ongoing leisure activity. The role of art therapy in geriatric rehabilitation is one of increasing involvement of expression and communication that will affect daily life activities. The study of 8 group members from a geriatric rehabilitation center retrospectively made observation about their work with clay. The CVA patients were observed to use impaired limbs that provided sensorimotor therapy. Social interaction was observed to increase. Six of the eight participants expressed interest in continuing to work with clay. A variety of materials could achieve similar results. Longer closed group sessions are recommended. The questionnaire used and pictures displaying work are included in text.

## 1995

Ellis, P. (1995). **Incidental music: A case study in the development of sound therapy.** *British Journal of Music Education*, 12, 59-70.

NARIC Accession Number: J32088

ABSTRACT: Describes the use of sound therapy to promote the development of children with profound and multiple learning difficulties (PMLD). Sound therapy is an approach that combines the power of

new technology with an aesthetic response to sound. It offers the child a means of expression, of exploring with sound, and developing communication skills as well as engaging in physical activity and improving motor control. This article presents a case study illustrating the results of sound therapy, using the Soundbeam movement-to-sound device, with a 7 year old boy with PMLD. The methodology developed to monitor and analyze the child's progress also is described.

Hanes, M.J. (1995). **Utilizing road drawings as a therapeutic metaphor in art therapy.** *American Journal of Art Therapy*, 34(1), 19-23.

NARIC Accession Number: J31203

ABSTRACT: Article presents road drawings and their use in art therapy. The author attaches therapeutic metaphor to the drawings that symbolize the client's readiness to change. Case studies illustrate this interpretation in the cases of a male drug addicted patient, a suicidal patient, and a depressed patient with suicidal ideations.

Flowers, P.J., Howell, R.D., & Wheaton, J.E. (1995). **The effects of keyboard experiences on rhythmic responses of elementary school children with physical disabilities.** *Journal of Music Therapy*, 102(2), 91-112.

NARIC Accession Number: J29638

ABSTRACT: Study evaluating the effects of a prototype music system and curricular intervention on the rhythmic responses of elementary school children with physical disabilities. Keyboard instruction using a new music software program was provided over a 10 week period to 8 students with physical disabilities. The students engaged in directed musical activities in both school and home settings under the direction of music and special educators. The students used a Macintosh computer with MIDI interface to replicate beat patterns at 120 beats per minute (bpm), at 64 bpm, and to maintain a self-generated tempo. Graphic and statistical analyses revealed mixed results. In general, six of the eight students showed varying degrees of improvement on measures of tempo as a result of the music instruction. The type and severity of disability did not appear to be related to rhythm responses. Results are discussed in terms of both group and individual response patterns.

Hudson, K.A. (1995). **An exploratory study of the use of cotherapy in dance/movement therapy.**

*American Journal of Dance Therapy*, 17(1), 25-43.

NARIC Accession Number: J29581

ABSTRACT: Study exploring the use of cotherapy in dance/movement therapy. A questionnaire was completed 136 dance/movement therapists at the advanced level of practice, Academy of Dance Therapists Registry. Of these respondents, 98% had co-led dance/movement therapy groups with trainees, other dance/movement therapists, mental health professionals, and professionals in other disciplines. Thirty-two percent of the respondents reported they prefer to lead dance/movement therapy groups alone, 32% prefer to colead their groups, and 28% had no preference. Dance/movement therapists who were trained partly by coleading reported a higher perceived success rate in cotherapy relationships than those who were not. The perceived cotherapy success rates in dance/movement therapy groups were higher than those in other kinds of psychotherapy groups.

Topozada, M.R. (1995). **Multicultural training for music therapists: An examination of current issues based on a national survey of professional music therapists.** *Journal of Music Therapy*, 102(2), 65-90.

NARIC Accession Number: J29637

ABSTRACT: Study examining professional music therapists' knowledge of and attitudes toward relevant multicultural issues. The purpose was to evaluate the need for multicultural training for music therapists. The survey instrument was completed by 298 music therapists across the United States. Analysis of the results revealed strong support for the underlying dimensions of multiculturalism but weaker support for implementation of multicultural policies. Support for multiculturalism was correlated more strongly with attitude than with knowledge subscores. The data also were analyzed by age, gender, ethnicity, geographic location, and level of education. Significant differences in scores were found between respondents in the New England and South Central regions and between respondents with a Ph.D. and those with a bachelor's degree. There were no significant differences between minority and majority culture groups, males and females, or different age groups. Overall, 78.2 percent of respondents supported multicultural training for music therapy students.

## 1994

Callanan, B.O. (1994). **Art therapy with the frail elderly.** *Journal of Long Term Home Health Care, Pride Institute Journal*, 13(2), 20-23.

NARIC Accession Number: J28649

ABSTRACT: Discusses the use of art therapy with the frail elderly. The author explains the use of art as therapy and presents two case vignettes to illustrate how art therapy can help older persons access their inner experiences, communicate their perspectives, and respond to difficulties in their lives. The article includes photographs of art work that show the variety of art materials and approaches that can be used to facilitate creative expression in elderly persons.

Clements, C.B. (1994). **The arts/fitness quality of life activities program: Creative ideas for working with older adults in group settings.**

NARIC Accession Number: R06567

ABSTRACT: The book is a practical source of ideas to assist in developing interdisciplinary programming for older adults. It contains activity plans in fitness and the arts that are designed to strengthen the links between healthy bodies and healthy minds and emotions. Part I is an introduction, which discusses working with older adults and describes the four disciplines of fitness, drama, art, and dance used in the activities. Part II is organized by months, and each month contains activities in each of the four disciplines. All activities are related to a theme or themes designated for the month. The book is also designed to facilitate the inclusion of older adults with disabilities, dementia, and losses due to the process of aging.

Epping, J.E., & Willmuth, M.E. (1994). **Art therapy in the rehabilitation of adolescents with spinal cord injuries: A case study.** *American Journal of Art Therapy*, 32(2), 79-82.

NARIC Accession Number: J27281

ABSTRACT: Psychotherapists present a case study of the use of art therapy in the adjustment of a 13-year-old girl with quadriplegia during rehabilitation. Art therapy was used to help the client express feelings that she did not express verbally. The drawings were done with an assistive device over the course of several months during her stay at a rehabilitation hospital. Initial themes were isolation and somatic detach-

ment with emphasis on the head and neck. During rehabilitation the client formed an alliance with her parents against the rehabilitation team. The alliance was evident in her drawings. As she neared discharge, drawings showed figures troubled by predators, then optimism about the future. Through art therapy, the client was able to explore feelings about body image, self-concept, and relationships with others.

Gantt, L. (1994). **Evolution of the creative arts therapies for the frail elderly.** *Journal of Long Term Home Health Care, Pride Institute Journal, 13(2)*, 6-11.

NARIC Accession Number: J28647

ABSTRACT: Discusses the evolution of the creative arts therapies for elderly people. The first part provides a brief historical overview of the creative arts therapies and the formation of the National Coalition of the Arts Therapies Associations (NCATA). The second part highlights programmatic, professional, and political aspects of the evolution of the creative arts therapies. This part also discusses trends and issues in obtaining reimbursement for the creative arts therapies.

Graham, J. (1994). **The art of emotionally disturbed adolescents: Designing a drawing program to address violent imagery.** *American Journal of Art Therapy, 32(4)*, MAY 1994, 115-121.

NARIC Accession Number: J27943

ABSTRACT: Paper presents guidelines for drawing programs for high school students with emotional disturbances (ED) whose drawings include violent imagery. The paper is based on a high school art teacher's experiences working with students with ED who use violent imagery in their art. After discussing the art program in which the teacher works, the paper looks at special education and free expression, focusing on (1) violent imagery, (2) art and trauma, (3) the case study of one high school boy with ED, (4) managing violent imagery, (5) pornographic imagery, and (6) suicidal imagery. The paper then explains how to create an individualized education plan for art. The drawing program described takes into account the student with ED's emotional needs, with artistic abilities and other interest considered secondarily.

Sandel, S.L. (1994). **Dance/movement therapy with the frail elderly.** *Journal of Long Term Home Health Care: The Pride Institute Journal, 13(3)*, 38-42.

NARIC Accession Number: J28901

ABSTRACT: Discusses approaches to dance/movement therapy with the frail elderly. The first section reviews the effects of aging and inactivity on the health status of older persons and discusses the challenge to therapists to motivate older individuals to participate in a dance/movement therapy program. The second section discusses the benefits of dance/movement therapy for elderly people, including the opportunities for social interaction and reminiscing and the facilitation of emotional reactions and processing of affective responses. The third section suggests approaches to help older persons who have disabling or chronic conditions participate in dance/movement therapy.

Viscardi, N. (1994). **Art therapy as a support group for adolescents with muscular dystrophy.** *American Journal of Art Therapy, 32(2)*, 66-68.

NARIC Accession Number: J27280

ABSTRACT: An art therapist describes the use of art therapy in a group of adolescents with muscular dystrophy (MD) who attend a school for students with severe physical and orthopedic disabilities. Common behavioral aspects observed in students with MD include avoiding eye contact during conversation, speaking in a low voice, using one-word answers rather than complete sentences, difficulty breathing while talking, emotional and social isolation from peers and adults, difficulty completing tasks, and avoiding asking for assistance. In the art therapy sessions, the group decided on materials and themes for the class; staff observed student interactions and focused their questions on the artwork. When work on a theme was completed, students put their artwork in the center of table for analysis by the group. During the course of the art therapy sessions staff noted positive changes in eye contact, level of enthusiasm and discussion, and asking for help when needed.

1993

Appleton, V.E., & Cheney, W.A. (1993). **An art therapy protocol for the medical trauma setting.** *Art Therapy Journal of the American Art Therapy Association, 10*(2), 1993, 71- 77.

NARIC Accession Number: J25347

ABSTRACT: Discusses art therapy as a crisis intervention therapy for severe burn patients. Clinical objectives of art therapy intervention are: (1) to establish a therapeutic framework for art therapy interventions with the patient, (2) to encourage the use of the patient's natural coping mechanisms of denial and projection through art processes, (3) to ensure the patients' understanding of their hospitalization, medical procedures, and the burn injury event, (4) to enhance creativity and mastery, promote self-esteem, and confirm the patient's appropriate age-level abilities, (5) to provide emotional, physical and social outlets to the patient for stress relief, (6) to enhance a smooth transition from hospital to home during all phases of the recovery, (7) to assess for family functional situation and for signs of abuse, neglect or family crisis, and (8) to offer art therapy follow-up groups and referral services. The documentation of art therapy intervention is discussed and is similar to documentation of other medical, surgical and psychological services. A case review is presented which illustrates the value of art therapy in the recovery process of a burn victim. Portions of the victim's art therapy sessions are described as well as psychological analyses of art pieces created by the victim. These analyses depict progression of the patient from trauma to recovery and adaptation.

Bailey, S.D. (1993). ***Wings to fly: Bringing theatre arts to students with special needs, 1993.***

NARIC Accession Number: R06493

ABSTRACT: Handbook on developing a theatre arts program for children with disabilities. The book includes information for both theatre professionals and special needs professionals to assist them in incorporating drama and the other performing arts into the lives of individuals with disabilities. For theatre professionals, the book provides general background information about physical and cognitive disabilities including definitions, origins, characteristics, and developmental and educational issues that may affect the

teaching of drama. For special needs professionals, it provides basic instruction on how to teach drama. For both groups, specific ideas for adapting basic drama class and play-directing techniques for actors with disabilities are described. The book also contains an annotated bibliography, list of national organizations with information on disability and on theatre and disability, and checklist for building accessibility.

Banks, S., Davis, P., Howard, V.F., & McLaughlin, T.F. (1993). **The effects of directed art activities on the behavior of young children with disabilities: A multi-element baseline analysis.** *Art Therapy, 10*(4), 1993, 235-240.

NARIC Accession Number: J26891

ABSTRACT: Investigators conducted a study to measure the effects of directed and nondirected art activities within a behavioral context on three high risk, preschool, and primary grade students with developmental disabilities. The goal of the directed art activity was to facilitate an emotional outlet in order to allow the children to experience successful peer encounters. The nondirected art activity used the same art materials as the directed activity but the children chose the product to make and which materials to use. The directed activity directed the child to focus on a feeling that he/she was experiencing and then create an art product to reflect that feeling. Discussions would follow involving the child describing his artwork and how he felt about it. Results indicated that the directed art activity had a larger effect than the nondirected activity on the social behavior of two of the children. The nondirected activity had little effect with any of the children. The third child was not measurably effected by either activity. Implications for use in preschool are discussed.

Bauer, D.F., Mangine, D., Maurer, P.A., & Nelson, C.E. (1993). **Effect of music on subjective reports of pain in a work hardening setting.** *Work: A Journal of Prevention, Assessment, & Rehabilitation, 3*(3), SUMMER 1993, 42-52.

NARIC Accession Number: J26243

ABSTRACT: Study investigates the effect music has on the level of pain perceived by individuals suffering from work-related injuries who are entered in a work hardening program. A brief review of categories of pain, pain theories, the physiological effect

of music, and music and pain theories is included. Subjects were required to be participating in a work hardening program and to be experiencing chronic pain. Subjects were alternately assigned to either the control (no music) or experimental (music) group each day for four days during their participation in the work hardening program. Pain perception ratings were taken at the beginning of each day and at half hour intervals during participation in work hardening activities. Results indicate that music can have effects on pain perception. Pain values were significantly less when the subjects were listening to music during work hardening activities.

Councill, T. (1993). **Art therapy with pediatric cancer patients: Helping normal children cope with abnormal circumstances.** *Art Therapy Journal of the American Art Therapy Association, 10(2)*, 1993, 78-87.

NARIC Accession Number: J25348

ABSTRACT: The article presents a literature review addressing problems met by pediatric cancer patients. The review discusses these children's development of coping mechanisms for cancer related stressors and note that these strategies are more emotion-management rather than problem-solving. An overview of an art therapy program at a cancer treatment and research center is described. Case histories of pediatric patients are presented. They illustrate the use of art therapy as these children work through feelings of separation anxiety, alienation, anger, aggression, fear, body image, self-concept, beliefs about disease and treatment, and death during three phases of the disease—diagnosis and treatment, maintenance phase of therapy, and relapse or advance stage of the disease. Through art therapy, the children are able to control their own choices of art mediums which place them as active creators instead of victims of disease. They are able to establish communication with the treatment team at times when communication is difficult. They can continue developmental processes through visual communication. And finally, these patients are able to rehearse troubling events and develop concepts of self which enhance a sense of mastery over feelings.

Floersch, J., & Longhofer, J. (1993). **African drumming and psychiatric rehabilitation.** *Psychosocial Rehabilitation Journal, 16(4)*, APR 1993, 3-10.

NARIC Accession Number: J25113

ABSTRACT: Describes an African polyrhythmic drum ensemble program established at two Kansas City mental health centers. Developed by an anthropologist, a social worker, and two professional musicians, the performing drum ensemble provided community support program clients the opportunity to become musicians and led to outcomes that complemented the community integration goals of psychiatric rehabilitation. This article describes the program, the setting, and results after 6 months. Discussion focuses on the ways in which the ensemble program articulated with the goals of the two community support programs.

Loughlin, E.E. (1993). **"Why was I born among mirrors?" Therapeutic dance for teenage girls and women with turner syndrome.** *American Journal of Dance Therapy, 15(2)*, FALL/WINTER 1993, 107-124.

NARIC Accession Number: J25997

ABSTRACT: Describes a dance therapy program for teenage girls and women with Turner syndrome. The program was conducted as a social work intervention in a hospital pediatric endocrinology department. The goals were to help participants enjoy moving their bodies expressively, overcome their lack of confidence about their short stature, and become aware of painful feelings about the body, especially feelings about infertility. In the first year, the program was 10 weeks long and included a verbal introductory session, five dance sessions, two video observation and feedback sessions, and two follow-up sessions for participants who wished to work on personal themes. Over the next three years, it was expanded to 14 weeks with 8 dance sessions. Major themes which emerged during the dance therapy included: variation in the ability to engage the body, difficulty in maintaining a physical presence, difficulty in reading the body cues of others, and reliance on the group context.

Prager, A. (1993). **The art therapist's role in working with hospitalized children.** *American Journal of Art Therapy, 32(8)*, 2-11.

NARIC Accession Number: J27278

ABSTRACT: Art therapists can help children deal with stress and negative emotions associated with hospitalization and treatment of their illness. Children's

understanding about illness falls into three progressive, age-related domains: pre-logical explanations in children ages 2-6, concrete-logical explanations in children ages 7-10, and formal logical explanations in children ages 11 and older. A mature view of illness develops during adolescence. Visual perception and negative emotions reside in the right side of the brain. The art therapist can accept primary process material and help the child to organize and externalize it through artistic statement. Four illustrated case studies describe the use of art therapy with hospitalized children of different ages.

Roe, V. (1993). **An interactive therapy group.** *Child Language Teaching and Therapy*, 9(2), June 1993, 133-140.

NARIC Accession Number: J25669

ABSTRACT: Describes an interactive therapy group developed within an inner-city preschool in Leicester, United Kingdom. The purpose of the group was to help withdrawn or selectively nonspeaking children ability to interact with peers and adults. Activities and techniques were drawn from speech, music, movement, and drama therapy. Participating children were withdrawn from their classes two or three times a week for 20-minute therapy sessions held in a separate room. The content of the sessions varied, with each activity lasting no more than five minutes to maintain the children's interest and concentration. This article describes the types of communication (verbal and nonverbal), movement, and musical activities used in the therapy group and presents two cases illustrating the success of the group with shy, quiet, socially isolated, and selectively nonspeaking children.

## 1992

Andrews, K., Cranny, S.M., & Wilson, S.L. (1992). **The efficacy of music for stimulation in prolonged coma: Four single case experiments.** *Clinical Rehabilitation*, 6(3), 181-187.

NARIC Accession Number: J23153

ABSTRACT: Study examining the efficacy of music as a form of stimulation for persons in persistent vegetative state. A single case experimental design was employed in four patients. Behaviors were examined for 10 minutes before, 10 minutes during, and 10 minutes after music stimulation. Two patients showed

behavioral changes suggesting increased arousal after the music stimulation, one showed decreased arousal, and one showed no change.

Dunn, R. (1992). **Music: A shared experience.** *British Journal of Special Education*, 19(3), SEPT 1992, 109-111.

NARIC Accession Number: J23469

ABSTRACT: Describes a project linking regular school students and special school students in a shared music experience. Since 1987, the music teacher and students from a grammar school for girls have been making music one afternoon a week with young children attending a local unit for students with severe learning difficulties. The goals of the project are to give the regular school students the experience of using their music to help others and to enhance the special students' well-being through the therapeutic effects of music. The article describes the approaches used to achieve these goals and discusses the implications of this effort regarding National Curriculum guidelines for music. Examples of work with individual students are included to illustrate the benefits of the shared music experience.

Harlan, J.E. (1992). **A guide to setting up a creative art experiences program for older adults with developmental disabilities.**

NARIC Accession Number: R06273

ABSTRACT: Guide to developing a creative art experiences program for older adults with developmental disabilities. The first part describes how to set up a program. This part describes the creative art approach, benefits of creative arts activities, developmental issues and art work, organizing the group, appropriate art materials, promoting successful art experiences, role of the group leader, responding to the art work, motivation, and working with disabilities. The second part provides 15 activity plans that have been used successfully with older adults who have developmental disabilities. They can be used to introduce art group participants to painting, drawing, clay sculpture, cardboard assemblage, collage, simple printing techniques, and other art experiences. Each plan includes a list of materials needed and instructions for preparation and for leading the activity. Appendices contain a list of suggested art materials and list of additional resources.

Harlan, J.E., & Hawkins, B.A. (1992). **Terminal illness, aging, and developmental disability: A therapeutic art intervention.** *Therapeutic Recreation Journal*, 49-52.

NARIC Accession Number: J29720

Project Number: H133B30050

ABSTRACT: Case study describing the use of creative drawing and painting activities as a therapeutic intervention for an elderly man with terminal illness and mild mental retardation. The client had spent most of his life in a large state institution and was transferred to a community placement at age 74. He was diagnosed as having terminal cancer, which was debilitating and sometimes painful. He was invited to participate in a creative art activities group which met once a week for 60 to 75 minutes. The goals of the program were to enhance his sense of control, his self-esteem, and his ability to communicate feelings related to the illness. The communication element of the art medium allowed this client to be validated for his own perceptions of his experience and to feel good about himself as a person.

Ulman, E. (1992). **Art education for the emotionally disturbed.** *American Journal of Art Therapy*, 30(3), February 1992, 101-104.

NARIC Accession Number: J22417

ABSTRACT: Discuss the use of art education to help children and adolescents with emotional disturbances. The article focuses on the aspect of art education that attempts to involve individuals in making visual objects whose primary purpose is expressive rather than utilitarian. The article notes that aspects of aesthetic education that stress art history and the critical appreciation of works of art are secondary. The article looks at the differences between art education and art therapy. It discusses the following issues: (1) art and maturation; (2) adaptation of art education; (3) useful art activities; (4) modifications of the teaching method; and (5) the history of art education for individuals with emotional disturbances.

## 1991

Addison, R. (1991). **Music with special needs children: A powerful aid.** *Child Language Teaching and Therapy*, 7(3), OCT 1991, 286-297.

NARIC Accession Number: J22062

ABSTRACT: Suggests strategies, based on the author's experience, to improve the benefits of music teaching for children with special needs. The article first outlines the benefits of music study as proposed by the National Curriculum Music Working Group (United Kingdom), and points out that music education usually falls far short of these goals. It then describes the activities employed by the author to achieve these aspirations in his work with language-impaired and other special needs children. These strategies include the use of rhymes, rhythms, musical instruments, visual cues, and songs to help children develop a sense of success and achievement, self-confidence and independence, and the ability to analyze and solve problems. Other benefits of these activities include the development of study skills, improved motor coordination, and aesthetic appreciation and discrimination.

Chang, M., & Leventhal, F. (1991). **Dance/movement therapy with battered women: A paradigm of action.** *American Journal of Dance Therapy*, 13(2), FALL/WINTER 1991, 131-145.

NARIC Accession Number: J21230

ABSTRACT: Explores the contributions dance/movement therapy can make in the treatment of battered women. Dance/movement therapy offers a paradigm of action to address the patterns of helplessness, ambivalence, immobilization, and social seclusion found in female victims of domestic violence. Dance/movement interventions address both the practical and psychological needs of this population. They can help women internalize a positive self-concept as well as gain physical and emotional control. A short-term, psychosocial plan of dance/movement therapy addresses primary concerns of immobilization and isolation while exploring intrapsychic considerations of autonomy and individuation, self-esteem, and distortions of reality. A more long-term, insight-oriented approach may be used to address personal issues evoked by the abuse experience and to achieve substantive changes in patterns of victimization.

Dannecker, K. (1991). **Body and expression: Art therapy with rheumatoid patients.** *American Journal of Art Therapy*, 29(4), MAY 1991, 110-117. NARIC Accession Number: J20290

ABSTRACT: Discusses art therapy for clients with rheumatoid arthritis, explaining that psychosomatic medicine assumes simultaneity of body and soul. Many psychosomatic clients have history of denied aggression, feelings of victimization, and unfulfilled wishes toward objects which result in anxiety, depression, and isolation. Art therapy allows them to re-experience the feelings and find new solutions. Clients can see themselves as both learners and creators. Pain may be viewed as form of punishment for hidden desires. Clients with rheumatoid arthritis share various traits (e.g. feelings of inadequacy, severely blocked emotional expression, serious dependence, and depression). Art therapy allows healing through an alternative channel. Creative artistic work positively affects the course of the illness by reducing pain and promoting expression of many feelings. The paper presents case studies of three women using art therapy for their rheumatoid arthritis. As changes in artistic imaging occurred, there was also at least partial abatement of physical pain when painting or sculpting.

Hawkins, A.M. (1991). **The intuitive process as a force in change.** *American Journal of Dance Therapy*, 13(2), FALL/WINTER 1991, 105-116. NARIC Accession Number: J21229

ABSTRACT: Discusses the use of the intuitive process in movement as a personal means of experiencing and expressing. One important goal of movement therapy is the discovery of the intuitive process that enables individuals to get in touch with their feelings and images and give external form to their inner vision. This process involves becoming aware of the feelings, bodily felt sense, and images associated with life experiences, and transforming the resulting felt thought into movement ideas that are given form through the movement event. Images are a powerful means of helping individuals tap into the intuitive mode of thought. Effective use of images will allow for spontaneous self-directed response, and provide progression from concrete images to abstract images that provide the freedom to draw on feelings associated with personal experiences.

Henley, D.R. (1991). **Facilitating the development of object relations through the use of clay in art therapy.** *The American Journal of Art Therapy*, 29(3), FEB 1991, 69-76. NARIC Accession Number: J19689

ABSTRACT: Describes the use of clay in art therapy to facilitate the development of object relations in three young adults with handicapping conditions. The article first discusses theoretical considerations, therapeutic applications of clay modeling with people who have impaired object relations, and the metaphorical and therapeutic implications of clay. It then presents case accounts of the use of clay to encourage object relations development in three young adults: a young man with mental retardation and psychotic features, a blind young man with borderline personality disorder, and a young man with a hearing loss and autistic-like behavior.

Kornreich, T.Z., & Schimmel, B.F. (1991). **The world is attacked by great big snowflakes: Art therapy with an autistic boy.** *The American Journal of Art Therapy*, 29(3), FEB 1991, 77-84. NARIC Accession Number: J19690

ABSTRACT: Describes a 2-year period of weekly art therapy with an 11-year old autistic boy. The account includes: the psychiatric evaluation, therapeutic goals, the art therapy procedure and treatment, parental involvement, and the child's progress over the 2-year period. The child's family drawing series and Charlie Brown series are examined in more detail to illustrate his emotional and intellectual growth over time. Samples of the child's artwork are included.

Marriott, B., & White, M.P. (1991). **The impact of art therapy on the life of a woman who was mentally retarded.** *The American Journal of Art Therapy*, 30(1), AUGUST 1991, 10-16. NARIC Accession Number: J21639

ABSTRACT: Presents case study of 52-year-old woman with severe mental retardation and spastic quadriplegia who became involved in long term art therapy. She had lived at home for 19 years and was treated well. The change to an institution traumatized her. At age 46, an art therapist met her and found her spending quantities of time alone, isolated, with nothing to do. She had a tendency to have tantrums when asked to deviate from her routine. Art therapy

was started to help develop social skills. She began with group sessions and progressed well so began individual sessions. The paper looks at how her artwork changed from being based on fantasy to reality. It notes the way it brought about social interaction as staff members began to realize her developmental abilities and offer her art materials and computer access. The art therapy helped the women into a more active life and through a radical mastectomy. A review of her artwork indicated she was still growing developmentally and emotionally despite 30 years in an institution.

Peacock, M.E. (1991). **A personal construct approach to art therapy in the treatment of post sexual abuse trauma.** *American Journal of Art Therapy*, 29(4), MAY 1991, 100-109.

NARIC Accession Number: J20289

ABSTRACT: Study examined changes and demonstrated effectiveness of art therapy for treating post sexual abuse trauma (PSAT). Researchers worked with 40-year-old white female admitted to private psychiatric facility for depression. Subject's childhood had been horrifying, but many of her memories were unclear. When she began to remember sexual abuse by father and brother, art therapy was prescribed to address PSAT. The Index of Self-Esteem, Self-Rating Anxiety Scale, and Self-Rating Depression Scale were administered before and after treatment. Individual art therapy sessions were conducted every day except Sunday during the last 10 days of hospitalization. Study proved hypothesis that art therapy would enable client to identify, acknowledge, and express feelings. It also indicated that art therapy would enhance client's self-esteem, decrease anxiety, and decrease depressive symptoms.

## 1990

Bernstein, B., & Clair, A.A. (1990). **A preliminary study of music therapy programming for severely regressed persons with Alzheimer's-type dementia.** *Journal of Applied Gerontology*, 9(3), SEPTEMBER 1990, 299-311.

NARIC Accession Number: J17878

ABSTRACT: A report of findings from a study undertaken to test the efficacy of a music therapy program for treating severely regressed persons with

Alzheimer's disease. Three elderly males, ranging in age from 56 to 72, participated in the program. Two were incontinent, the other was occasionally so; none could maintain self-care. The protocol had the subjects meeting with the therapist for 30 minutes per week over a 15-month course. Data were gathered for the last 11 weeks of the treatment. Videotapes were reviewed and rated for communicating, watching others, singing, interacting with an instrument, and sitting. The authors found that while the patients had deteriorated over the course of the 15-month treatment, all were able to maintain attention in a structured group setting, and were able to sit for the whole 30 minutes; this was the only time during their week when they could successfully interact with others. Further research aimed at exploring ways to structure musical experiences for this group.

Bruno, C. (1990). **Maintaining a concept of the dance in dance/movement therapy.** *American Journal of Dance Therapy*, 12(2), FALL/WINTER 1990, 101-113.

NARIC Accession Number: J18625

ABSTRACT: Examines trends in dance/movement therapy over the past two decades, describing how the role and the spirit of dance in dance therapy have diminished and dance therapists have been forced to operate within a medical model of treatment. The article first discusses the value of dance as a therapeutic modality, and the socio-economic and political forces that nurtured the growth of dance/movement therapy. It then examines socio-economic and political influences during the 1970s and 1980s and changes in the dance/movement therapy profession that have shaped current practice in this field. The article also discusses the issue of dance vs. movement, and the structuring of dance/movement therapy sessions to evoke the spirit of the dance in clients.

De Chiara, E. (1990). **Art for special needs: A learning disabled child in a special art program.** *Art Therapy*, 7(1), MARCH 1990, 22-28.

NARIC Accession Number: J16871

ABSTRACT: Presents case study of a child with learning disabilities (LD) who was in special art program designed to: improve body image through participation in visual arts; learn more about behaviors of LD children in art learning situation; and determine

what type of special teaching strategies and adaptations are needed to teach art to this group of learners. Worked with 10 children ranging in age from 8 to 11 who were in self-contained classes in public schools for children with LD. Children met twice weekly for 10 weeks for experimental pull-out art program. They were tested to determine status of their concept of body image. Program was based on three phases (body schema, body image, and spatial awareness). Case study focused on one 10-year-old boy who was hyperactive, distractible, and unable to remain on task for long periods of time. He had disruptive behavior, and his general prognosis for functioning and learning in regular classroom was unfavorable. Child was very successful in art program, learning to concentrate and remain on task once he could comprehend what was required. He became more confident and able to actualize projects imaginatively.

Dosamantes, E. (1990). **Movement and psychodynamic pattern changes in long-term dance/movement therapy groups.** *American Journal of Dance Therapy*, 12(1), SPRING/SUMMER 1990, 27-44.

NARIC Accession Number: J17247

ABSTRACT: Study examining changes over the course of two years of dance/movement therapy in the following variables: individual movement style, interpersonal movement style, object-choice of prevailing fantasy, prevailing affective theme explored, level of group trust and self-esteem, and perceptions of therapist functions. Two groups of 11 participants each were followed over a 2-year period of dance/movement therapy. The results showed that changes in these variables occurred in the predicted directions. Furthermore, unanticipated patterns emerged within as well as between some of the psychodynamic variables studied. For example, two different patterns were identified with regard to subjects' object-choices of prevailing fantasies and affective themes explored. These findings and their clinical implications are discussed.

Fried, R. (1990). **Integrating music in breathing training and relaxation I: Background, rationale, and relevant elements.** *Biofeedback and Self-Regulation*, 15(2), JUNE 1990, 161-169.

NARIC Accession Number: J17731

ABSTRACT: Describes uses and characteristics of

music in relaxation and self-regulation strategies as well as cognitive, behavioral, and psychophysiological variables affected by music. Influences occur on hemispheric dominance, autonomic nervous system activity, and arousal patterns contrary to those in cognitive function and anxiety. Some forms of music have been reported to have a beneficial effect on breathing. (See NARIC AN XJ17732 for a related article).

Fried, R. (1990). **Integrating music in breathing training and relaxation II: Applications.** *Biofeedback and Self-Regulation*, 15(2), JUNE 1990, 171-177.

NARIC Accession Number: J17732

ABSTRACT: Describes the use of music in breathing and relaxation training and the integration of the music selection into mental imagery during a self-regulation training procedure. A case report is also presented to further illustrate the use of music in breathing and relaxation training. During relaxation training with deep diaphragmatic breathing and mental imagery, PETCO<sub>2</sub> normalizes with decreased respiration rate, and EEG shows decreased average theta and increased alpha. The music may potentiate the hypometabolic counterarousal state. (See NARIC AN XJ17731 for a related article).

Harlan, J. (1990). **Beyond the patient to the person: Promoting aspects of autonomous functioning in individuals with mild to moderate dementia.** *The American Journal of Art Therapy*, 28(4), May 1990, 99-105.

NARIC Accession Number: J16956

ABSTRACT: Discusses the use of art therapy in treatment of persons with Alzheimer's disease and related disorders. The author describes experiences at the 92<sup>nd</sup> Street Y Alzheimer's Day Activity Program in which the activities of exercise, music, language games, and art provide cognitive stimulation, counteract social isolation, and provide a means of communication for that which words are no longer adequate. Presented are the topics of art therapy's role in treatment of Alzheimer's disease, development of techniques to encourage aspects of autonomous behavior, designing age appropriate art activities, intervention by the art therapist, post-art activities, and the impact of the art therapy experience.

Hanser, S.B. (1990). **A music therapy strategy for depressed older adults in the community.** *Journal of Applied Gerontology*, 9(3), SEPTEMBER 1990, 282-298.

NARIC Accession Number: J17877

ABSTRACT: A presentation and discussion of a music therapy program for treating depressed older adults, together with a review of four cases of its use. The author's program for implementing a music therapy program includes: the taking of a patient history, including previous musical experience; the establishment of the presenting problem; the setting of goals; the selection of stress-reducing music; pretesting (using the Geriatric Depression Scale, the Brief Symptom Inventory, the Self-Esteem Inventory, and the Beck Depression Inventory); the selection of music-listening techniques (eight are offered here); the implementation of techniques (which involves daily practice); and post-test evaluation. The case reviews section of this article discuss the experiences of four older persons who were helped substantially through the use of the reviewed program. The author concludes by saying that the techniques used appear to work and that the therapeutic program appears to warrant further investigation.

Leste, A., & Rust, J. (1990). **Effect of dance on anxiety.** *American Journal of Dance Therapy*, 12(1), SPRING/SUMMER 1990, 19-25.

NARIC Accession Number: J17246

ABSTRACT: Study investigating the effects of modern dance therapy on anxiety. The Spielberger State-Trait Anxiety Inventory was administered to 84 college students before and after a 3-month education program. The target group took a modern dance class (n=23). Control groups included a physical education group (n=16) to control for the effects of exercise; music group (n=7) to control for aesthetic appreciation training; and mathematics group (n=38). Concomitant variables measured included age, sex, attitude toward dance, and previous experience in dance, sports, and relaxation. Pretest scores on state and trait anxiety did not differ among groups. However, only the dance group had a significant reduction in anxiety on posttest scores. Analysis of the concomitant variables indicated that the result could not be accounted for by any obvious artifact.

Mango, C.R., & Richman, J. (1990). **Humor and art therapy.** *The American Journal Of Art Therapy*, 28(4), May 1990, 111-114.

NARIC Accession Number: J16958

ABSTRACT: A review of cases wherein visual representations of humor were used therapeutically. The cases of three severely disturbed psychiatric inpatients were reviewed in support of the authors' hypothesis that jokes and drawings are expressions of their creator's emotional and current struggles. In all three cases the subjects reported their experience with joke-art therapy favorably, possibly, say the authors, because they experienced social cohesiveness in a setting that allowed the addressing of subjects that might be considered shameful in other settings. The authors recommend the combining of art therapy and humor but caution that the short-term nature of their study precludes firm conclusions. They urge that long-term, controlled research be performed.

McIntyre, B.B. (1990). **An art therapy group for bereaved youth in hospice care.** *Caring*, 9(9), September 1990, 56-58.

NARIC Accession Number: J18241

ABSTRACT: Describes a hospice program which allows children who have lost a family member to creatively express their feelings of sadness and anger through art, music, and drama. The discussion includes specific group activities in music, movement, and art, weekly themes and activities, family sessions, and suggestions for program development.

McLaughlin, S.D. (1990). **Art therapy with homeless women and children in a bridge housing program in Scranton, Pennsylvania.** *Art Therapy*, 7(2), July 1990, 55-59.

NARIC Accession Number: J17801

ABSTRACT: Describes the art therapy program at the Catherine McAuley Center Bridge Housing Program in Scranton, Pa., whose goal is to enable homeless women of limited income achieve self sufficiency. The art therapy is a means of evaluation and is also a part of screening for admission to the program. Art therapy activities are described and include body tracing, creation of a personal mandala which allows introspection and expression of forgiveness, group mandala which encourages expression of thoughts and feelings, and drawings of short term goals. A case study is presented which illustrates the success and importance of the art therapy sessions.

Spaniol, S.E. (1990). **Exhibiting art by people with mental illness: Issues, process and principles.** *Art Therapy*, 7(2), July 1990, 70-78.

NARIC Accession Number: J17803

ABSTRACT: Discusses the organizing of an exhibit of art by people with mental illness. Topics discussed include the history of such exhibits, controversial issues confronted by the production of such an exhibit, the selection of the art for exhibition, difficulties involved in maintaining the privacy of the artists, and guiding principles for the production of such a show. The process of organizing the juried exhibition "Art and Mental Illness: New Images" at Boston University in the fall of 1989 and a detailed description of the actual show is presented.

Ticen, S. (1990). **Feed me...cleanse me...sexual trauma projected in the art of bulimics.** *Art Therapy*, 7(1), March 1990, 17-21.

NARIC Accession Number: J16870

ABSTRACT: Examines use of art therapy in bulimic patients who have been sexually abused, noting little has been published that addresses issue of eating disorder behavior as related to sexual trauma. Statistics show more than 50 percent of people with eating disorders have experienced sexual victimization. It is important to identify what patient is actually hungry for, then begin treatment with the appropriate nourishment. Art therapist must help develop different "menu," assisting patient in preparing, ingesting, digesting, and eliminating symbolic meals. Many patients want to binge and purge in order to wash and purify. Malnutrition leads to vicious cycle of depression, mood swings, and withdrawal. Art therapy can provide safe place for patient to grieve. Therapists must deal with patients who have difficulty identifying and expressing internal feelings, who have weak ego boundaries, and who have intense self-hatred and body dissatisfaction. Ultimate goal is to teach patient to love herself so she does not feel need to spit out whatever is healthy.

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*Documents from the Center for International Rehabilitation Research Information and Exchange (CIRRIE-3) search at [cirrie.buffalo.edu](http://cirrie.buffalo.edu) are listed below:*

### 2013

Karagozoglu, S., Tekyasar, F., & Yilmaz, F.A. (2013). **Effects of music therapy and guided visual imagery on chemotherapy-induced anxiety and nausea-vomiting.** *Journal of clinical nursing*, 22(1-2), 39-50.

ABSTRACT: AIMS AND OBJECTIVES: To reveal the effects of music therapy and visual imagery on chemotherapy-induced anxiety and nausea-vomiting. BACKGROUND: Behavioral techniques such as music therapy and visual imagery are becoming increasingly important in dealing with chemotherapy-induced anxiety, nausea and vomiting. DESIGN: The study is an experimental and cross-sectional one and performed on a single sample group with the pre-post-test design consisting of 40 individuals. The individuals in the sample group comprised both the control and the case group of the study. METHODS: To obtain the study data, the following forms were used: the Personal Information Form, Spielberger State-Trait Anxiety Inventory, The Visual Analogue Scale and Individual Evaluation Form for Nausea and Vomiting adapted from The Morrow Assessment of Nausea and Vomiting. RESULTS: In the study, the participants' state and trait anxiety levels decreased significantly ( $p < 0.05$ ). Music therapy and visual imagery reduced the severity and duration of chemotherapy-induced nausea and vomiting significantly ( $p < 0.05$ ). In our research, 40 percent of the patients did not have anticipatory nausea and 55 percent of the patients did not have anticipatory vomiting during the third chemotherapy cycle during which music therapy and guided visual imagery were implemented. CONCLUSIONS: It was determined that complementary approaches comprising music therapy and visual imagery had positive effects on chemotherapy-induced anxiety, nausea and vomiting, which are suffered too often and affect the patients' whole lives adversely. RELEVANCE TO CLINICAL PRACTICE: This study is worthy of interest as it

has revealed that music therapy and visual imagery which have been proven to be effective in many health problems in different areas are also important, and practical complementary approaches that are effective in getting chemotherapy-induced anxiety, nausea and vomiting under control.

## 2012

Armand, S., Golay, A., Muller-Pinget, S., & Pataky, Z. et al. (2012). [**The dilemma between the functional deficits of obese people and recommended physical activity: What part can dance therapy play?**]. *Revue Medicale Suisse*, 8(334), 687-91. [Article in French].

ABSTRACT: Obese people may have trouble with walking and may present reduced postural control. Medical doctors or therapists should guide the patient to restart doing physical activities that are gentle and progressive. Exercise should take into account walking difficulties. Thus, the first challenge is to help obese individuals start exercising without risk, or excessive strain on the joints. The second stage should encourage individuals to persevere in the chosen activity. Enjoyment is a key factor for attaining these objectives. Dance therapy, with its psychological and physiological impact, could help individuals take on the challenge.

Berthelsen, D., Nicholson, J.M., Walker, S., & Williams, K.E., et al. (2012). **The effectiveness of a short-term group music therapy intervention for parents who have a child with a disability.** *Journal of Music Therapy*, 49(1), 23-44.

ABSTRACT: BACKGROUND: The positive relationship between parent-child interactions and optimal child development is well established. Families of children with disabilities may face unique challenges in establishing positive parent-child relationships; yet, there are few studies examining the effectiveness of music therapy interventions to address these issues. In particular, these studies have been limited by small sample size and the use of measures of limited reliability and validity. OBJECTIVE: This study examined the effectiveness of a short-term group music therapy intervention for parents of children with disabilities and explored factors associated with better outcomes for participating families. METHODS:

Participants were 201 mother-child dyads, where the child had a disability. Pre- and post-intervention parental questionnaires and clinician observation measures were completed to examine outcomes of parental wellbeing, parenting behaviors, and child development. Descriptive data, t-tests for repeated measures and a predictive model tested via logistic regression are presented. RESULTS: Significant improvements pre to post intervention were found for parent mental health, child communication and social skills, parenting sensitivity, parental engagement with child and acceptance of child, child responsiveness to parent, and child interest and participation in program activities. There was also evidence for high parental satisfaction and that the program brought social benefits to families. Reliable change on six or more indicators of parent or child functioning was predicted by attendance and parent education. CONCLUSIONS: This study provides positive evidence for the effectiveness of group music therapy in promoting improved parental mental health, positive parenting and key child developmental areas.

Campioni, G., Chessa, M., Farè, C., Palmero, E., & Quadri, E., et al. (2012). [**Art therapy for hospitalised congenital heart disease patients: a method of psychological intervention at the IRCCS Policlinico San Donato Milanese Hospital**]. *La Pediatria Medica e Chirurgica: Medical and Surgical Pediatrics*, 34(6), 292-6. [Article in Italian].

ABSTRACT: The current work is the presentation of a new project at the IRCCS San Donato Milanese University hospital, in the sphere of Psychocardiology. Hospitalized children and adolescents often face psychosocial difficulties and the psychological condition of their parents frequently has an impact on their wellbeing. A strong need to take care, beyond the mere cure, is necessary in the hospital settings - that is a need to pay attention also to psychological aspects apart from the medical ones. Art therapy could be an answer for this need: the literature has outlined its efficacy in hospital, also due to the higher inclination of children and adolescents toward creativity. By providing and analyzing the drawings of 10 young patients with congenital heart disease (CHD), this study outlines how the art therapy program gives these patients the opportunity to freely and directly express fears and anxieties about medical procedures

and their disease. Moreover, through the creation of a tangible product, psychologists can better evaluate the psychological troubles of young patients and provide them and their parents with more focused and personalized support. This study also focuses on the perception of the utility that parents have of this new therapeutic intervention, offered at the Department of Paediatric Cardiac Surgery, confirming that art therapy is perceived as being effective and is definitely a good instrument in helping to “take care” of children and adolescents suffering from CHD.

Incze, A., & Vermes, K. (2012). **Psychodynamic Movement and Dance Therapy (PMDT) in Hungary.** *Body, Movement, and Dance in Psychotherapy*, 7(2), 101-113.

**ABSTRACT:** The emergence of dance therapy in Hungary has been a long and organic process from the 1980s onwards. In those years, psychiatrist and psychotherapist Márta Merényi developed Psychodynamic Movement and Dance Therapy (PMDT), a psychoanalytically oriented psychotherapeutic method, based on the body-mind work, the movement improvisation and the psychodynamic working through of movement experiences and relations in the group. This article offers insight into the Hungarian PMDT: its history, theoretical roots, therapeutic practice, applications, training and organization, with an outline of the special characteristics of body-mind work, the interpersonal dynamics, leader instructions, and the creative movement and verbalism in PMDT.

Reynolds, F. (2012). **Art therapy after stroke: Evidence and a need for further research.** *Arts in Psychotherapy*, 39(4), 239-244.

**ABSTRACT:** This review presents available evidence regarding the benefits of art therapy and therapeutic arts interventions for stroke survivors. Whilst available evidence is very limited, it suggests that art therapy may address many of the diverse cognitive, emotional and functional needs of people disabled by stroke. Attention, spatial processing, sequencing and planning seem to improve among those who persist with art therapy. Use of the stroke-affected limb may increase. Several studies report improvements in social interaction, and emotional expression. Most published reports offer single case examples, which are idiographic and illuminating. Nonetheless, the

brevity of these reports, the reliance on therapist’s own accounts, and uncertainties surrounding case selection make generalization of the findings uncertain. There is a pressing need for multi-method research studies. These could use quantitative standardized scales to explore changes in stroke survivors’ physical and emotional functioning, and qualitative enquiry to gain the insights of stroke survivors concerning the art therapy process. Such research designs might help to establish a better recognized role for art therapy within multidisciplinary stroke rehabilitation programs.

Sudres, J-L. (2012). **[Anorexia and art therapy: Elements for a practice].** *Psychotherapies*, 32(2), 73-83. [Article in French].

*No abstract is available.*

## 2011

Chen, X., Gold, C., Heldal, T.O., & Mossler, K. (2011). **Music therapy for people with schizophrenia and schizophrenia-like disorders.** *Cochrane Database of Systematic Reviews*, 12, CD004025.

**ABSTRACT:** **BACKGROUND:** Music therapy is a therapeutic method that uses musical interaction as a means of communication and expression. The aim of the therapy is to help people with serious mental disorders to develop relationships and to address issues they may not be able to using words alone. **OBJECTIVES:** To review the effects of music therapy, or music therapy added to standard care, compared with ‘placebo’ therapy, standard care or no treatment for people with serious mental disorders such as schizophrenia. **SEARCH METHODS:** We searched the Cochrane Schizophrenia Group Trials Register (December 2010) and supplemented this by contacting relevant study authors, hand searching of music therapy journals and manual searches of reference lists. **SELECTION CRITERIA:** All randomized controlled trials (RCTs) that compared music therapy with standard care, placebo therapy, or no treatment. **DATA COLLECTION AND ANALYSIS:** Studies were reliably selected, quality assessed and data extracted. We excluded data where more than 30 percent of participants in any group were lost to follow-up. We synthesized non-skewed continuous

endpoint data from valid scales using a standardized mean difference (SMD). If statistical heterogeneity was found, we examined treatment 'dosage' and treatment approach as possible sources of heterogeneity. **MAIN RESULTS:** We included eight studies (total 483 participants). These examined effects of music therapy over the short- to medium-term (one to four months), with treatment 'dosage' varying from seven to 78 sessions. Music therapy added to standard care was superior to standard care for global state (medium-term, 1 RCT, n = 72, RR 0.10 95 percent CI 0.03 to 0.31, NNT 2 95 percent CI 1.2 to 2.2). Continuous data identified good effects on negative symptoms (4 RCTs, n = 240, SMD average endpoint Scale for the Assessment of Negative Symptoms (SANS) -0.74 95 percent CI -1.00 to -0.47); general mental state (1 RCT, n = 69, SMD average endpoint Positive and Negative Symptoms Scale (PANSS) -0.36 95 percent CI -0.85 to 0.12; 2 RCTs, n=100, SMD average endpoint Brief Psychiatric Rating Scale (BPRS) -0.73 95 percent CI -1.16 to -0.31); depression (2 RCTs, n = 90, SMD average endpoint Self-Rating Depression Scale (SDS) -0.63 95 percent CI -1.06 to -0.21; 1 RCT, n = 30, SMD average endpoint Hamilton Depression Scale (Ham-D) -0.52 95 percent CI -1.25 to -0.21 ); and anxiety (1 RCT, n = 60, SMD average endpoint SAS -0.61 95 percent CI -1.13 to -0.09). Positive effects were also found for social functioning (1 RCT, n = 70, SMD average endpoint Social Disability Schedule for Inpatients (SDSI) score -0.78 95 percent CI -1.27 to -0.28). Furthermore, some aspects of cognitive functioning and behavior seem to develop positively through music therapy. Effects, however, were inconsistent across studies and depended on the number of music therapy sessions as well as the quality of the music therapy provided. **AUTHORS' CONCLUSIONS:** Music therapy as an addition to standard care helps people with schizophrenia to improve their global state, mental state (including negative symptoms) and social functioning if a sufficient number of music therapy sessions are provided by qualified music therapists. Further research should especially address the long-term effects of music therapy, dose-response relationships, as well as the relevance of outcomes measures in relation to music therapy.

Cherkin, D.C., Sherman, K.J., Steuten, L., & Strassel, J.K., et al. (2011). **A systematic review of the evidence for the effectiveness of dance therapy.** *Alternative Therapies in Health and Medicine, 17*(3), 50-9.

**ABSTRACT: BACKGROUND:** Dance therapy uses psychotherapeutic movement to support the cognitive, emotional, physical, and social integration of a person. Dance therapy may be of value for people with developmental, medical, social, physical, or psychological impairments. **OBJECTIVES:** To evaluate the hypothesis that dance therapy has therapeutic benefits by systematically analyzing and summarizing the evidence. **METHODS:** Thirteen databases were searched for systematic reviews and randomized controlled trials (RCTs) on the effectiveness of dance therapy. The Overall Quality Assessment Questionnaire (OQAQ) was used to assess review quality, and RCT quality was assessed using the Jadad Scale. **RESULTS:** Eight reviews and 18 RCTs about the effectiveness of dance therapy met our inclusion criteria. According to the OQAQ seven of the eight reviews were of poor methodological quality. The quality of the RCTs ranged from poor to good. In most cases, the reviews and trials reported positive benefits related to improvements in quality of life, self-esteem, or coping with a disease. **CONCLUSION:** Most studies have found therapeutic benefits of dance therapy, although these results are based on generally poor-quality evidence. Dance therapy should be considered as a potentially relevant addition therapy for a variety of conditions that do not respond well to conventional medical treatments. Well-performed RCTs and observational studies are highly recommended to determine the real value of dance therapy.

Choi, J.H., Im, S.H., Kim, D.S., & Park, Y.G., et al. (2011). **Effects of music therapy on mood in stroke patients.** *Yonsei Medical Journal, 52*(6), 977-81.

**ABSTRACT: PURPOSE:** To investigate the effects of music therapy on depressive mood and anxiety in post-stroke patients and evaluate satisfaction levels of patients and caregivers. **MATERIALS AND METHODS:** Eighteen post-stroke patients, within six months of onset and mini mental status examination score of over 20, participated in this study. Patients were divided into music and control groups. The

experimental group participated in the music therapy program for four weeks. Psychological status was evaluated with the Beck Anxiety Inventory (BAI) and Beck Depression Inventory (BDI) before and after music therapy. Satisfaction with music therapy was evaluated by a questionnaire. **RESULTS:** BAI and BDI scores showed a greater decrease in the music group than the control group after music therapy, but only the decrease of BDI scores were statistically significant ( $p=0.048$ ). Music therapy satisfaction in patients and caregivers was affirmative. **CONCLUSION:** Music therapy has a positive effect on mood in post-stroke patients and may be beneficial for mood improvement with stroke. These results are encouraging, but further studies are needed in this field.

## 2010

Boucher, R., Francis, J.L., Lande, R.G., & Tarpley, V. (2010). **Combat Trauma Art Therapy Scale.** *Arts in Psychotherapy, 37*(1), 42-45.

**ABSTRACT:** This study correlated an art therapy descriptive technique originally applied to adolescent burn victims with adult combat-related victims in an effort to identify art themes and graphic elements associated with post-traumatic stress disorder. The designed rating instrument, referred to as the Combat Trauma Art Therapy Scale (CTATS), consisted of 62 items aimed to detect common themes associated with war time experiences. Using the CTAS, raters examined 158 pictures, with depictions of women, violence, and combat interwoven, suggesting an ongoing struggle to cope with the emotional aftermath of recent traumatic experiences.

Celec, P., & Mrazova, M. (2010). **A systematic review of randomized controlled trials using music therapy for children.** *Journal of Alternative and Complementary Medicine, 16*(10), 1089-95.

**ABSTRACT:** **BACKGROUND:** Music therapy is a promising approach widening the potential applications of psychotherapy. Music influences both, psychologic and physiologic parameters, and children are especially responsive to this form of therapy. Many aspects of its action mechanisms remain to be elucidated, underscoring the need for evidence-based medicine (EBM) for clinical use of music therapy. **AIMS:** This review seeks to highlight some of the

issues of music therapy research and to initiate a discussion about the need for international multicenter cooperation to bring scientifically sound evidence of the benefits of music therapy in pediatric patients. **METHODS:** Scientific bibliographic databases were searched for randomized controlled trials on use of music therapy for children. Identified articles were evaluated according to criteria for scientific quality. **RESULTS:** Twenty-eight studies were identified. Most of the trials were biased by the number of participants, and some trials showed the need to improve design of control groups. Indeed, the novelty of this area of study has produced a large number of different studies (with variability in diagnoses, interventions, control groups, duration, and/or outcome parameters), and there is a need for a more homogeneous and systematic approach. Available studies highlight the need to address reproducibility issues. **CONCLUSIONS:** This analysis identifies the need for a subsequent series of clinical studies on the efficacy of music in the pediatric population, with more focus on eligibility criteria with respect to EBM and reproducibility.

Dix, L.G., & Koch, H.J. (2010). **[On the relevance of art therapy in psychiatric treatment: History and present time].** *Neurologie und Rehabilitation, 16*(1), 15-23. [Article in German].  
*No abstract is available.*

Duffy, A., & Wall, M. (2010). **The effects of music therapy for older people with dementia.** *British Journal of Nursing, 19*(2), 108-13.

**ABSTRACT:** The aim of this literature review is to explore how music therapy influences the behavior of older people with dementia. **BACKGROUND:** Music therapy is often informally used in residential care units to enhance communication, emotional, cognitive and behavioral skills in elderly patients diagnosed with dementia both nationally and internationally. However, in Ireland the benefits of music therapy have not been fully recognized. Many studies have been carried out to establish the effectiveness of music therapy on the behavior of older people with dementia with positive findings. Music therapy should be welcomed into care of the elderly settings in Ireland and elsewhere; however, more research is required to validate the effects of this therapy as a holistic tool to build altruistic connections between

carers and clients. **METHOD:** A comprehensive review of nursing literature using the online databases CINAHL, PsycINFO and MEDLINE were carried out. The search was limited to articles in the English language and peer-reviewed journals dating 2003-2009. **RESULTS:** Thirteen studies were reviewed and the majority of these studies reported that music therapy influenced the behavior of older people with dementia in a positive way by reducing levels of agitation. The research further identified a positive increase in participants' mood and socialization skills, with carers having a significant role to play in the use of music therapy in care of the elderly nursing. However, methodological limitations were apparent throughout each of the studies reviewed. **RECOMMENDATIONS:** With reference to clinical practice, the authors recommend the undertaking of further research to explore the effects of music therapy on the behavior and wellbeing of older people with dementia.

## 2009

Alyami, A. (2009). **The integration of art therapy into physical rehabilitation in a Saudi hospital.** *Arts in Psychotherapy, 36*(5), 282-288.

**ABSTRACT:** This paper describes the introduction of art therapy into Saudi Arabia. A brief history of art therapy in Saudi Arabia is outlined, focusing on the current approaches of art therapy practice in medical rehabilitation. King Fahad Medical City is highlighted as a pioneering healthcare institute that accepted art therapy as a medical profession by incorporating it into its rehabilitation procedures for its inpatient population. The paper discusses the factors that helped art therapy to integrate into the program at King Fahad Medical City, as well as four case summaries illustrating the author's experiences integrating art therapy into rehabilitation.

Corte, B., & Lodovici, N.P. (2009). **[Music therapy on Parkinson disease].** *Ciencia and Saude Coletiva, 14*(6), 2295-304. [Article in Portuguese].

**ABSTRACT:** This study is a result of a qualitative research, in the Gerontology and Music therapy scenario. It was analyzed the importance of alternative practices like playing an instrument (piano, violin, etc.), singing, or practicing a guided musical exercise as a therapy activity for elder people with Parkinson Disease. The analysis, systematization and interpreta-

tion of the data pointed: music therapy is an excellent way to improve the life of the patient that becomes more sociable, decreasing physical and psychological symptoms ('symptomatology') and the subject change for a singular and own position in the relation with your disease and the people around.

D'Amico, M., Lister, S., Snow, S., & Tanguay, D. (2009). **Development of a creative arts therapies center for people with developmental disabilities.** *Art Therapy 26*(1), 34-7.

Available in full-text at [files.eric.ed.gov/fulltext/EJ833507.pdf](http://files.eric.ed.gov/fulltext/EJ833507.pdf).

**ABSTRACT:** The Centre for the Arts in Human Development in Montreal has provided art, drama, music, and dance/movement therapies to adults with developmental disabilities for over 10 years with the goals of developing and enhancing self-esteem, social skills, and communication abilities. This report describes the development and purpose of the center, sustainability challenges, and efforts made to create community both within the center and with the community at large. Recommendations are made for initiating creative arts therapies centers in other locales.

Gianelli, M.V., & Raglio, A. (2009). **Music therapy for individuals with dementia: Areas of interventions and research perspectives.** *Alzheimer Research, 6*(3), 293-301.

**ABSTRACT:** This contribution focuses on the definition of music therapy as a specific applicative context to be seen as distinct from the generic use of music in a variety of pathologies. Music therapy is presented as a discipline grounded both upon relationship and upon the theoretical-methodological principles peculiar to each applicative model. The therapeutic nature proper to music therapy is highlighted with specific reference to the domain of the dementias. Music therapy facilitates expression, communication and relationship in the non-verbal context. Such an opportunity allows persons with dementia to establish contact, to express, and even contrive an organization/regulation of their emotions, through the sonorous-musical relationship with the music therapist. On the basis of a brief analysis of the relevant literature, attention is drawn to the importance of both evidence-based clinical practice and music therapy evaluations, aimed at proving the effectiveness of music therapy, while promoting its correct application.

Grant, T.J., & Xia, J. (2009). **Dance therapy for schizophrenia.** *Cochrane Database of Systematic Reviews*, (1), CD006868.

**ABSTRACT:** **BACKGROUND:** Dance therapy or dance movement therapy (DMT) is defined as 'the psychotherapeutic use of movement as a process which furthers the emotional, social, cognitive, and physical integration of the individual'. It may be of value for people with developmental, medical, social, physical or psychological impairments. Dance therapy can be practiced in mental health rehabilitation units, nursing homes, day care centers and incorporated into disease prevention and health promotion programs. **OBJECTIVES:** To evaluate the effects of dance therapy for people with schizophrenia or schizophrenia-like illnesses compared with standard care and other interventions. **SEARCH STRATEGY:** We searched the Cochrane Schizophrenia Group Trials Register (July 2007), inspected references of all identified studies (included and excluded), and contacted first authors for additional data. **SELECTION CRITERIA:** We included all randomized controlled trials (RCTs) comparing dance therapy and related approaches with standard care or other psychosocial interventions for people with schizophrenia. **DATA COLLECTION AND ANALYSIS:** We reliably selected, quality assessed and extracted data. We excluded data where more than 30 percent of participants were lost to follow-up. For continuous outcomes we calculated a weighted mean difference; for binary outcomes we calculated a fixed-effect risk ratio (RR) and their 95 percent confidence intervals (CI). **MAIN RESULTS:** We included one single blind study (total n=45) of reasonable quality. It compared dance therapy plus routine care with routine care alone. Most people tolerated the treatment package but about 40 percent were lost in each group by four months (RR 0.68 CI 0.31 to 1.51). PANSS average endpoint total scores were similar in each group (WMD -0.50 CI -11.8 to 10.8) as were the positive subscores (WMD 2.50 CI -0.67 to 5.67). At the end of treatment significantly more people in the dance therapy group had a greater than 20 percent reduction in PANSS negative symptom score (RR 0.62 CI 0.39 to 0.97), and overall average negative endpoint scores were lower (WMD -4.40 CI -8.15 to 0.65). There was no difference in satisfaction score (average CAT score, WMD 0.40 CI -0.78 to 1.58) and quality of life data were also equivocal (average MANSA

score, WMD 0.00 CI -0.48 to 0.48). **AUTHORS' CONCLUSIONS:** There is no evidence to support - or refute - the use of dance therapy in this group of people. This therapy remains unproven and those with schizophrenia, their carers, trialists and funders of research may wish to encourage future work to increase high quality evidence in this area.

Guetin, S., Picot, M.C., Soua, B., & Voiriot, G., et al. (2009). **The effect of music therapy on mood and anxiety-depression: An observational study in institutionalized patients with traumatic brain injury.** *Annals of Physical and Rehabilitation Medicine*, 52(1), 30-40.

**ABSTRACT:** **INTRODUCTION:** A previous study (carried out in 2003-2004) had included 34 patients with traumatic brain injury in order to study the feasibility and usefulness of music therapy in patients with this type of injury. **OBJECTIVE:** To evaluate the effect of music therapy on mood, anxiety and depression in institutionalized patients with traumatic brain injury. **STUDY METHODOLOGY:** A prospective, observational study. **MATERIALS AND METHODS:** Thirteen patients with traumatic brain injury were included in the present study and took part in individual, weekly, 1-hour music therapy sessions over a period of 20 weeks. Each session was divided into two 30-minute periods - one devoted to listening to music (receptive music therapy) and the other to playing an instrument (active music therapy). The assessment criteria (measured at weeks 1, 5, 10, 15 and 20) were mood (on the face scale) and anxiety-depression (on the Hospital Anxiety and Depression [HAD] Scale). Mood was assessed immediately before and after the first music therapy session and every fifth session. **RESULTS:** Music therapy enabled a significant improvement in mood, from the first session onwards. This short-term effect was confirmed by the immediate changes in the scores after music therapy sessions (from 4.6+/-3.2 to 2.6+/-2; p<0.01). Music therapy also led to a significant reduction in anxiety-depression (p<0.05) from week 10 onwards and up until the end of the study (week 20). **CONCLUSION:** These results confirm the usefulness of music therapy in the treatment of anxiety-depression and mood in patients with traumatic brain injury. Music therapy could usefully form an integral part of the management program for these patients.

Sweeney, S. (2009). **Art therapy: Promoting wellbeing in rural and remote communities.** *Australasian Psychiatry*, 17(1), S151-4.

ABSTRACT: Art therapy encompasses both preventative and curative activities and aims to improve ways of engaging those who might be reticent in seeking more traditional forms of psychological support offered through 'talking therapies'. The Longreach base of the Royal Flying Doctor Service in Queensland provides mental health support to people living in rural and remote locations in central western Queensland and has been complemented since 2006 by the addition of a full-time art therapist. This paper provides an overview of art therapy and a description of this innovative approach to addressing mental health needs in a rural and remote setting.

Wetherick, D. (2009). **Music in the family: Music making and music therapy with young children and their families.** *The Journal of Family Health Care*, 19(2), 56-8.

ABSTRACT: Songs and singing games are a healthy part of young children's social, emotional and cognitive development. Such shared music making can facilitate and strengthen relationships between parents and children. Family health workers can encourage carers' informal uses of music with their children. In cases of developmental delay, disability, severe illness or family stress, music can continue to have a significant role in supporting children and parents. In some cases referral to specialist music therapy services may be appropriate for assessment and/or treatment.

## 2008

Amir, D., Bensimon, M., & Wolf, Y. (2008). **Drumming through trauma: Music therapy with post-traumatic soldiers.** *Arts in Psychotherapy*, 35(1), 34-48.

ABSTRACT: Combat stress reaction is common among soldiers and can develop to a post-traumatic stress disorder (PTSD). This distressing condition embraces symptoms such as feelings of loneliness and isolation from society, intrusive memories, outbursts of anger and generalized feelings of helplessness. Drumming has been receiving considerable attention in music therapy. Only few references relate to such activity among those who suffer from PTSD, and even fewer relate to combat induced post-traumatic

syndrome, none of them empirical. The current study presents music therapy group work with six soldiers diagnosed as suffering from combat or terror related PTSD. Data were collected from digital cameras which filmed the sessions, open-ended in-depth interviews, and a self-report of the therapist. Some reduction in PTSD symptoms was observed following drumming, especially increased sense of openness, togetherness, belonging, sharing, closeness, connectedness and intimacy, as well as achieving a non-intimidating access to traumatic memories, facilitating an outlet for rage and regaining a sense of self-control.

Baker, F.A., Dingle, G.A., & Gleadhill, L. (2008). **Can music therapy engage patients in group cognitive behavior therapy for substance abuse treatment?** *Drug and Alcohol Review*, 27(2), 190-6.

ABSTRACT: INTRODUCTION AND AIMS: Despite the availability of effective treatments for substance use disorders, engaging people in treatment remains a challenge. This clinical study describes a 7-week trial of music therapy as an adjunct to group cognitive behavior therapy with the aim of increasing patient engagement in a private hospital open group program. DESIGN AND METHODS: Patient attendance rates and perceptions of the music therapy were collected at the end of each music therapy session by means of an anonymous survey, and only data from each patient's first survey were used in the analysis. Twenty-four surveys were analyzed, representing feedback from 10 men and 14 women, aged between 17 and 52 years. RESULTS: The average attendance rate over the 7-week trial was 75 percent. The results indicated that enjoyment and motivation to participate during the sessions was uniformly high (mean ratings of 4.3 and 4.0 out of 5, respectively). The majority (83 percent) of participants reported that they would attend another music therapy session, and almost half (46 percent) endorsed that '(music therapy) would help them to feel more a part of the group'. Additional analyses revealed that music therapy was able to engage patients regardless of their age group (25 years and under vs. over-25 years) or substance (alcohol only vs. other drugs). DISCUSSION AND CONCLUSIONS: Music therapy is a promising approach to improving engagement in substance abuse treatment groups.

Basso, R.V., & Pelech, W.J. (2008). **A creative arts intervention for children with diabetes Part 2: Evaluation.** *Journal of Psychosocial Nursing and Mental Health Services*, 46(12), 25-8.

ABSTRACT: In Part 1 of this article (published in the October 2008 issue), we discussed the importance of using creative arts skits as an expressive technique for children with Type 1, or juvenile, diabetes. This creative arts intervention offers children the opportunity to decipher emotional difficulties through symbolic play in a secure atmosphere. Analysis of feelings following the skits encourages children to share concerns about their illnesses as well as self-concept issues. In Part 2, we use the case study method to demonstrate the benefits of creative arts skits for children with diabetes.

Bellelli, G., Gianotti, M., Raglio, A., & Traficante, D., et al. (2008). **Efficacy of music therapy in the treatment of behavioral and psychiatric symptoms of dementia.** *Alzheimer Disease and Associated Disorders*, 22(2), 158-62.

ABSTRACT: BACKGROUND: Music therapy (MT) has been proposed as valid approach for behavioral and psychological symptoms (BPSD) of dementia. However, studies demonstrating the effectiveness of this approach are lacking. OBJECTIVE: To assess MT effectiveness in reducing BPSD in subjects with dementia. METHOD: Fifty-nine persons with dementia were enrolled in this study. All of them underwent a multidimensional assessment including Mini Mental State Examination, Barthel Index and Neuropsychiatry Inventory at enrollment and after 8, 16, and 20 weeks. Subjects were randomly assigned to experimental (n=30) or control (n=29) group. The MT sessions were evaluated with standardized criteria. The experimental group received 30 MT sessions (16 weeks of treatment), whereas the control group received educational support or entertainment activities. RESULTS: NPI total score significantly decreased in the experimental group at 8th, 16th, and 20th weeks (interaction time x group:  $F_{3,165}=5.06$ ,  $P=0.002$ ). Specific BPSD (i.e., delusions, agitation, anxiety, apathy, irritability, aberrant motor activity, and night-time disturbances) significantly improved. The empathetic relationship and the patients' active participation in the MT approach, also improved in the experimental group. CONCLUSIONS: The study shows that MT is effective to reduce BPSD in patients with moderate-severe dementia.

Bloch, S., Castle, D., & Grocke, D. (2008). **Is there a role for music therapy in the care of the severely mentally ill?** *Australasian Psychiatry*, 16(6), 442-5.

ABSTRACT: OBJECTIVE: The role of music therapy in psychiatric care in Australia is briefly traced from the early 1990s to the present. With the shift to community-based care, contemporary music therapy practice for the severely mentally ill is reappraised alongside the principles of the recovery model. CONCLUSIONS: Music therapy is a viable option within the creative arts therapies for enhancing quality of life in people with severe and enduring mental illness.

Crawford, M.J., Gold, C., Maratos, A.S., & Wang, X. (2008). **Music therapy for depression.** *Cochrane Database of Systematic Reviews*, 1, CD004517.

ABSTRACT: BACKGROUND: Depression is a highly prevalent disorder associated with reduced social functioning, impaired quality of life, and increased mortality. Music therapy has been used in the treatment of a variety of mental disorders, but its impact on those with depression is unclear. OBJECTIVES: To examine the efficacy of music therapy with standard care compared to standard care alone among people with depression and to compare the effects of music therapy for people with depression against other psychological or pharmacological therapies. SEARCH STRATEGY: CCDANCTR-Studies and CCDANCTR-References were searched on 7/11/2007, MEDLINE, PsycINFO, EMBASE, PsycLit, PSYindex, and other relevant sites were searched in November 2006. Reference lists of retrieved articles were hand searched, as well as specialist music and arts therapies journals. SELECTION CRITERIA: All randomized controlled trials comparing music therapy with standard care or other interventions for depression. DATA COLLECTION AND ANALYSIS: Data on participants, interventions and outcomes were extracted and entered onto a database independently by two review authors. The methodological quality of each study was also assessed independently by two review authors. The primary outcome was reduction in symptoms of depression, based on a continuous scale. MAIN RESULTS: Five studies met the inclusion criteria of the review. Marked variations in the interventions offered and the populations studied meant

that meta-analysis was not appropriate. Four of the five studies individually reported greater reduction in symptoms of depression among those randomized to music therapy than to those in standard care conditions. The fifth study, in which music therapy was used as an active control treatment, reported no significant change in mental state for music therapy compared with standard care. Dropout rates from music therapy conditions appeared to be low in all studies. **AUTHORS' CONCLUSIONS:** Findings from individual randomized trials suggest that music therapy is accepted by people with depression and is associated with improvements in mood. However, the small number and low methodological quality of studies mean that it is not possible to be confident about its effectiveness. High quality trials evaluating the effects of music therapy on depression are required.

Oganesian, N. (2008). **Dance therapy as form of communication activating psychotherapy for schizophrenic patients.** *Body, Movement, and Dance in Psychotherapy*, 3(2), 97-106.

**ABSTRACT:** This paper describes a method of dance therapy for the treatment of schizophrenic patients, based on a methodology from outside Russia and adapted to the conditions of Russia. Aims, purposes, and targets of dance therapy are considered as applied to the rehabilitation treatment of schizophrenic patients. The structure of the entire course of dance therapy consisting of 10 sessions is described, with 260 patients having been subjected to the course. Certain clinical cases of non-verbal communication development dynamics in the process of dance therapy are considered. Dance therapy is shown to be a form of communication activating psychotherapy treatment of schizophrenic patients. This therapy was developed and applied by the author of this paper.

Twardzicki, M. (2008). **Challenging stigma around mental illness and promoting social inclusion using the performing arts.** *Journal of the Royal Society of Health*, 128(2), 68-72.

**ABSTRACT:** This article outlines the rationale, evidence base, method and qualitative evaluation of a project that uses the performing arts to challenge the stigma surrounding mental illness and promote social

inclusion of people with mental health problems. The partnership project has run for three years with students of Reigate Sixth Form College and staff and users of voluntary and statutory mental health services in East Surrey. Collation of three years of evaluation data showed it as a successful approach to: positively influence students' attitudes, knowledge and empathy around mental health issues; and positively affect mental health service clients' mood and their feelings of achievement, confidence and inclusion. Key elements of the project's success and sustainability are summarized.

## 2007

Benoit, M., Gauthier, M., Lacroix, L., & Rousseau, C., et al. (2007). **Classroom drama therapy program for immigrant and refugee adolescents: A pilot study.** *Clinical Child Psychology and Psychiatry*, 12, 451-65 (40 ref).

**ABSTRACT:** This evaluative study assesses the effects of a school drama therapy program for immigrant and refugee adolescents designed to prevent emotional and behavioral problems and to enhance school performance. The 9-week program involved 136 newcomers, aged 12 to 18, attending integration classes in a multiethnic school. Pretest and post-test data were collected from the students and their teachers. The self-report and teacher's forms of the Strengths and Difficulties Questionnaire were used to assess emotional and behavioral symptoms. At the end of the program, although there were no reported improvement in self-esteem or emotional and behavioral symptoms, the adolescents in the experimental group reported lower mean levels of impairment by symptoms than those in the control group, when baseline data were controlled for. Their performance in mathematics also increased significantly compared to that of their control peers. The findings suggest that the workshops may have an impact on social adjustment of recently arrived immigrants and refugees. This drama therapy program appears to be a promising way of working preventively and in a non-stigmatizing manner with adolescents who have been exposed to diverse forms of adversity, among which are war and violence.

Chilcote, R.L. (2007). **Art therapy with child tsunami survivors in Sri Lanka.** *Art Therapy, 24*(4), 156-62.

**ABSTRACT:** This paper details art therapy with children affected by the December 2004 tsunami in Sri Lanka. Over 30,000 Sri Lankans lost their lives when the tsunami decimated coastal areas. The child survivors witnessed horrific traumatic events and the loss of loved ones, but had not been given opportunity to express their grief and pain. A 4-week art therapy intervention was implemented at a local school for 113 children ages 5 to 13. Art therapy was found to be an effective cross-cultural intervention for these young tsunami survivors.

Demczyszak, I., Wrzosek, Z., & Ziolkowska, M. (2007). **Dance therapy as a means facilitating restoration of psychophysical entity in geriatric patients.** *Fizjoterapia, 15*(2), 35-41. [Original article in Polish].

*No abstract is available.*

Dent-Brown, K., & Ruddy, R.A. (2007). **Drama therapy for schizophrenia or schizophrenia-like illnesses.** *Cochrane Database of Systematic Reviews, (1)*, CD005378.

**ABSTRACT:** **BACKGROUND:** Medication is the mainstay of treatment for schizophrenia or schizophrenia-like illnesses, but many people continue to experience symptoms in spite of medication (Johnstone 1998). In addition to medication, creative therapies, such as drama therapy may prove beneficial. Drama therapy is a form of treatment that encourages spontaneity and creativity. It can promote emotional expression, but does not necessarily require the participant to have insight into their condition or psychological-mindset. **OBJECTIVES:** To review the effects of drama therapy and related approaches as an adjunctive treatment for schizophrenia compared with standard care and other psychosocial interventions. **SEARCH STRATEGY:** We searched the Cochrane Schizophrenia Group's Register (October 2006), hand searched reference lists, hand searched Dramatherapy (the journal of the British Association of Dramatherapists) and Arts in Psychotherapy and contacted relevant authors. **SELECTION CRITERIA:** We included all randomized controlled trials that compared drama therapy, psychodrama and related approaches with standard

care or other psychosocial interventions for schizophrenia. **DATA COLLECTION AND ANALYSIS:** We reliably selected, quality assessed and extracted data from the studies. We excluded data where more than 50 percent of participants in any group were lost to follow up. For continuous outcomes we calculated a weighted mean difference and its 95 percent confidence interval. For binary outcomes we calculated a fixed effects risk ratio (RR), its 95 percent confidence interval (CI) and a number needed to treat (NNT). **MAIN RESULTS:** The search identified 183 references but only five studies (total n=210) met the inclusion criteria. All of the studies were on inpatient populations and compared the intervention with standard inpatient care. One study had drama therapy as the intervention, one had role-playing, one had a social drama group and two used psychodrama. Two of the included studies were Chinese and it is difficult to know whether psychodrama and indeed inpatient psychiatric care in China is comparable with the drama interventions and inpatient care in the other included studies. There were no significant findings about the value of drama interventions for keeping inpatients engaged in treatment. Due to poor reporting very little data from the five studies could be used and there were no conclusive findings about the harms or benefits of drama therapy for inpatients with schizophrenia. **AUTHORS' CONCLUSIONS:** Randomized studies are possible in this field. The use of drama therapy for schizophrenia and schizophrenia-like illnesses should continue to be under evaluation as its benefits, or harms, are unclear.

Glockmann, A., Hamre, H.J., Witt, C.M., & Ziegler, R., et al. (2007). **Anthroposophic art therapy in chronic disease: A four-year prospective cohort study.** *Explore: The Journal of Science and Healing, 3*(4), 365-71.

**ABSTRACT:** **BACKGROUND:** Anthroposophic art therapy (painting, clay modeling, music, and speech exercises) is used in 28 countries but has not yet been studied in primary care. **OBJECTIVE:** To study clinical outcomes in patients treated with anthroposophic art therapy for chronic diseases. **DESIGN:** Prospective cohort study. **SETTING:** Fifty-four medical practices in Germany. **PARTICIPANTS AND INTERVENTIONS:** One hundred sixty-one consecutive outpatients (primary care: n = 150), aged 5-71 years,

were treated by 52 different art therapists. **MAIN OUTCOME MEASURES:** Disease and symptom scores (physician and patient assessment, respectively, 0-10) and quality of life (adults: SF-36 Health Survey, children: KINDL Questionnaire for Measuring Health-Related Quality of Life in Children and Adolescents). Outcomes were measured after 3, 6, 12, 18, and 24 months; SF-36 and symptom scores were also measured after 48 months. **RESULTS:** Most common indications were mental disorders (60.9 percent of patients, primarily depression, fatigue, and anxiety) and neurological diseases (6.8 percent). The median number of therapy sessions was 15; median therapy duration was 161 days. All outcomes except KINDL improved significantly between baseline and all subsequent follow-ups. Improvements from baseline to 12 months were: disease score from (mean +/- standard deviation) 6.69 +/- 1.72 to 2.46 +/- 1.90 ( $P < .001$ ), symptom score from 5.99 +/- 1.69 to 3.40 +/- 2.08 ( $P < .001$ ), SF-36 physical component summary measure from 44.12 +/- 10.03 to 48.68 +/- 9.47 ( $P < .001$ ), and SF-36 mental component summary measure from 35.07 +/- 12.23 to 42.13 +/- 11.51 ( $P < .001$ ). All these improvements were maintained until last follow-up. **CONCLUSION:** Patients receiving anthroposophic art therapy had long-term reduction of chronic disease symptoms and improvement of quality of life.

Gold, C., Houtmans, T., & Ulrich, G. (2007). **The additional therapeutic effect of group music therapy for schizophrenic patients: A randomized study.** *Acta Psychiatrica Scandinavica*, 116(5), 362-70.

**ABSTRACT:** **OBJECTIVE:** Schizophrenia is one of the most serious mental disorders. Music therapy has only recently been introduced as a form of treatment. The aim of this study was to examine the effect of music therapy for schizophrenic in-patients needing acute care. **METHOD:** Thirty-seven patients with psychotic disorders were randomly assigned to an experimental group and a control group. Both groups received medication and treatment indicated for their disorder. Additionally, the experimental group ( $n = 21$ ) underwent group music therapy. **RESULTS:** Significant effects of music therapy are found in patients' self-evaluation of their psychosocial orientation and for negative symptoms. No differences were found in

the quality of life. **CONCLUSION:** Musical activity diminishes negative symptoms and improves interpersonal contact. These positive effects of music therapy could increase the patient's abilities to adapt to the social environment in the community after discharge from the hospital.

Koffman, J., & O'Kelly, J. (2007). **Multidisciplinary perspectives of music therapy in adult palliative care.** *Palliative Medicine*, 21(3), 235-41.

**ABSTRACT:** **BACKGROUND:** Music therapy aims to provide holistic support to individuals through the sensitive use of music by trained clinicians. A recent growth in music therapy posts in UK palliative care units has occurred despite a paucity of rigorous research. **STUDY AIM:** To explore the role of music therapy within multidisciplinary palliative care teams, and guide the future development of the discipline. **DESIGN:** In-depth qualitative interviews with 20 multidisciplinary colleagues of music therapists, based in five UK hospices. **RESULTS:** Analysis of interview material revealed a number of themes relevant to the study aims. Music therapy was valued by most interviewees; however there exists some lack of understanding of the role of the music therapist, particularly amongst nurses. Emotional, physical, social, environmental, creative and spiritual benefits of music therapy were described, with some benefits perceived as synergistic, arising from collaborations with other disciplines. Interviewees found experiencing or witnessing music therapy is effective in developing an understanding of the discipline. **CONCLUSION:** Music therapy is an appropriate therapeutic intervention for meeting the holistic needs of palliative care service users. More understanding and integration of music therapy could be encouraged with collaborative work, educational workshops, and the utilization of environmentally focused techniques. The study merits further research to explore and develop these findings.

Podder, L. (2007). **Effects of music therapy on anxiety levels and pain perception.** *Nursing Journal of India*, 98(7), 161.

*No abstract is available.*

2006

Abbey, J., Chang, A.M., & Sung, H.C. (2006). [**Application of music therapy for managing agitated behavior in older people with dementia**]. *Journal of Nursing (Hu Li Tsa Chih)*, 53, 58-62. [Article in Chinese].

ABSTRACT: Older people with dementia may display negative emotions, memory problems, sleep disturbance, and agitated behavior. Among these symptoms, agitated behavior has been identified by families and nursing staff as the care problem that presents the greatest challenge. Several studies have found that music therapy reduced agitated behaviors in those with dementia and recommended use of music as an effective strategy in managing this behavioral problem. Music therapy represents a lower cost, effective care approach that nursing staff can easily learn and apply to those with dementia. Furthermore, reductions in agitated behavior in dementia patients that result from music therapy can also alleviate caregiver stress and burden of care, leading to improvements in the health and quality of life of both dementia patients and their caregivers. This paper aims to introduce the principles and application of music therapy in the management of agitated behavior in those with dementia.

Abdollahnejad, M.R. (2006). **Music therapy in the Tehran therapeutic community**. *Therapeutic Communities: the International Journal for Therapeutic and Supportive Organizations*, 27(1).

ABSTRACT: This two part research aimed to study the effects of lyric analysis and song sharing over 25 sessions and effects of relaxing music on sleep over 30 sessions in the Tehran TC for drug users. Subjects were given a questionnaire for both sections. Results revealed that residents could express their feelings and thoughts better with the use of lyrics and they took shorter time to fall asleep listening to relaxing music. It was concluded that music therapy positively affected the relapse and aggressive consuming of the drugs by the drug abusers during their addiction.

Cesarz, H., Dobrzynska, E., Rymaszewska, J., & Wiecko, R., et al. (2006). [**Music therapy and cognitive-behavioral therapy for older persons suffering from depression**]. *Psychogeriatry Polska*,

3(2), 105-112. [Article in Polish].

ABSTRACT: Background. The article discusses an example of how group therapy, accompanied by music therapy and cognitive-behavioral therapy techniques, can be used effectively in the treatment of elderly persons with depression. The paper describes the theoretical basis and techniques used in therapy. Case report. The course of therapy is shown in case studies of four elderly women, outpatients diagnosed with depression, who received 12 weekly group therapy sessions, each 90 minutes long. Discussion. Music therapy connected with cognitive-behavioral therapy may be a useful method of complementary treatment for elderly with depression, and probably has a positive influence on the patients' subjective quality of life. However, a study with a larger group of patients is necessary to confirm this hypothesis.

Crawford, M.J., Maratos, A., Nur, U., & Talwar, N., et al. (2006). **Music therapy for in-patients with schizophrenia: Exploratory randomized controlled trial**. *Journal: British Journal of Psychiatry*, 189, 405-9.

ABSTRACT: BACKGROUND: Music therapy may provide a means of improving mental health among people with schizophrenia, but its effects in acute psychoses have not been explored. AIMS: To examine the feasibility of a randomized trial of music therapy for inpatients with schizophrenia, and explore its effects on mental health. METHOD: Up to 12 weeks of individual music therapy plus standard care were compared with standard care alone. Masked assessments of mental health, global functioning and satisfaction with care were conducted at three months. RESULTS: Of 115 eligible patients 81 (70 percent) were randomized. Two-thirds of those randomized to music therapy attended at least four sessions (median attendance, eight sessions). Multivariate analysis demonstrated a trend towards improved symptom scores among those randomized to music therapy, especially in general symptoms of schizophrenia. CONCLUSIONS: A randomized trial of music therapy for in-patients with schizophrenia is feasible. The effects and cost-effectiveness of music therapy for acute psychosis should be further explored in an explanatory randomized trial.

Elefant, C., Gold, C., & Wigram, T. (2006). **Music therapy for autistic spectrum disorder**. *Cochrane Database of Systematic Reviews*, 2, CD004381.

**ABSTRACT:** **BACKGROUND:** The central impairments of people with autistic spectrum disorder (ASD) include social interaction and communication. Music therapy uses music and its elements to enable communication and expression, thus attempting to address some of the core problems of people with ASD. **OBJECTIVES:** To review the effects of music therapy for individuals with autistic spectrum disorders. **SEARCH STRATEGY:** The following databases were searched: CENTRAL, 2005, (Issue 3); Medline, (1966 to July 2004); Embase, (1980 to July 2004); LILACS, (1982 to July 2004); PsycINFO, (1872 to July 2004); CINAHL, (1982 to July 2004); ERIC, (1966 to July 2004); ASSIA, (1987 to July 2004); Sociofile, (1963 to July 2004); Dissertation Abstracts International, (late 1960's to July 2004). These searches were supplemented by searching specific sources for music therapy literature and manual searches of reference lists. Personal contacts to some investigators were made. **SELECTION CRITERIA:** All randomized controlled trials or controlled clinical trials comparing music therapy or music therapy added to standard care to "placebo" therapy, no treatment or standard care. **DATA COLLECTION AND ANALYSIS:** Studies were independently selected, quality assessed and data extracted by two authors. Continuous outcomes were synthesized using a standardized mean difference (SMD) in order to enable a meta-analysis combining different scales, and to facilitate the interpretation of effect sizes. Heterogeneity was assessed using the I(2) statistic. **MAIN RESULTS:** Three small studies were included (total n = 24). These examined the short-term effect of brief music therapy interventions (daily sessions over one week) for autistic children. Music therapy was superior to "placebo" therapy with respect to verbal and gestural communicative skills (verbal: 2 RCTs, n = 20, SMD 0.36 CI 0.15 to 0.57; gestural: 2 RCTs, n = 20, SMD 0.50 CI 0.22 to 0.79). Effects on behavioral problems were not significant. **AUTHORS' CONCLUSIONS:** The included studies were of limited applicability to clinical practice. However, the findings indicate that music therapy may help children with autistic spectrum disorder to improve their communicative skills. More research

is needed to examine whether the effects of music therapy are enduring, and to investigate the effects of music therapy in typical clinical practice.

Gianotti, M., Puerari, F., Raglio, A., & Ubezio, M.C., et al. (2006). **[The effectiveness of the music therapy treatment for patients with moderate-severe dementia]**. *Giornale di Gerontologia*, 54(3), 164-169. [Article in Italian].

**ABSTRACT:** The objective of this study was to evaluate the effectiveness of music therapy for patients with moderate-severe dementia. Eight patients, six with Alzheimer disease and two with vascular dementia were treated with music therapy and assessed with the Mini Mental State Examination, Barthel Index and Neuropsychiatric Inventory before and after treatment. A control group was observed with the same criteria at the same time but had not been under any treatment. The group who underwent music therapy showed a significant decrease in behavior disorders and an increase in communication and relationship skills.

Jarosz, A., Nowobilski, R., & Sliwka, A. (2006). **[Music therapy as a part of complex healing]**. *Polski Merkuriusz Lekarski*, 21(124), 401-5. [Article in Polish].

**ABSTRACT:** Music therapy is a method which takes the advantage of therapeutic influence of music on psychological and somatic sphere of the human body. Its therapeutic properties are more and more used. Current scientific research have proved its modifying influence on vegetative, circulatory, respiratory and endocrine systems. Works devoted to the effects of music on the patients' psychological sphere have also confirmed that it reduces psychopathologic symptoms (anxiety and depression), improves self-rating, influences quality and disorders of sleep, reduces pain, improves moral immunity and patients' openness, readiness, co-operation in treatment process. Music therapy is treated as a method which complements conventional treatment and makes up part of an integral whole together with physiotherapy, kinesitherapy and recuperation.

Ostermann, T., & Schmid, W. (2006). **Music therapy in the treatment of multiple sclerosis: A comprehensive literature review.** *Expert Review of Neurotherapeutics*, 6(4), 469-477.

ABSTRACT: Coping with multiple sclerosis symptoms still remains a challenge for each patient suffering from this chronic inflammatory disease. Therefore, patients often turn to using complementary and alternative medicine (CAM). In this review, the authors aimed to investigate the current state of literature of music therapy in the treatment of multiple sclerosis (MS). Medline, PubMed, Embase, AMED, CAMbase and the Music Therapy World Journal Index were searched for the terms MS and 'music therapy'. In addition, an internet search using Google Scholar was performed. The authors found seven case-reports/series and seven studies on music therapy for MS patients. Both the case reports and studies presented here are pioneer work. Most of the studies are naturally predominated by the use of qualitative and uncontrolled research designs. Nevertheless, the results of the studies as well as the case reports demonstrate patients' improvement in the domains of self-acceptance, anxiety and depression. The results of the studies as well as the case reports define a sufficient basis for further music therapeutical work as they show a variety of psychosocial and emotional benefits for MS patients.

Rusted, J., Sheppard, L., & Waller, D. (2006). **A multi-center randomized control group trial on the use of art therapy for older people with dementia.** *Group Analysis*, 39(4), 517-536.

ABSTRACT: The principal aim of this study is to evaluate the immediate and long-term effects of art therapy for older people with dementia, specifically to test the premise that participation in art therapy groups effects significant positive changes in mood and cognition both immediately within sessions and later outside the sessions to impact behavior in the day care/residential care setting. The broader aim is to provide an evidence-based evaluation about the use of art therapy for older people with dementia. In order to isolate the impact of art therapy we compared art therapy groups with activity groups that do not have emotional expression as a central purpose.

Waller, D. (2006). **Art therapy for children: How it leads to change.** *Clinical Child Psychology and Psychiatry*, 11(2), 271-82.

ABSTRACT: The aim of art therapy is to facilitate positive change through engagement with the therapist and the art materials in a safe environment. This article will explore how art therapy is used to help children with emotional, developmental and behavioral problems. It will show how change occurs during the process of physical involvement with the materials; through the making of a significant art object; through sublimation of feelings into the images; and through communication with the therapist via the art object. The article is illustrated with case vignettes which demonstrate how the theories underpinning art therapy are put into practice, drawing attention to the changes that occur as a result.

## 2005

Aldridge, D., Kaeder, M., Schmid, W., & Schmidt, C., et al. (2005). **Functionality or aesthetics? A pilot study of music therapy in the treatment of multiple sclerosis patients.** *Complementary Therapies in Medicine*, 13(1), 25-33.

ABSTRACT: INTRODUCTION: Neuro-degenerative diseases are, and will remain, an enormous public health problem. Interventions that could delay disease onset even modestly will have a major public health impact. The aim of this study is to see which components of the illness are responsive to change when treated with music therapy in contrast to a group of patients receiving standard medical treatment alone. MATERIAL AND METHODS: Twenty multiple sclerosis patients (14 female, 6 male) were involved in the study, their ages ranging from 29 to 47 years. Ten participants formed the therapy group, and 10 the matched control group matched by age, gender and the standard neurological classification scheme Expanded Disability Status Scale (EDSS). Exclusion criteria were pregnancy and mental disorders requiring medication. Patients in the therapy group received three blocks of music therapy in single sessions over the course of the one-year project (8-10 sessions, respectively). Measurements were taken before therapy began (U1), and subsequently every three months (U2-U4) and within a 6-month follow-up without music therapy (U5) after the last consultation. Test battery included indicators of clinical depression and

anxiety (Beck Depression Inventory and Hospital Anxiety and Depression Scale), a self-acceptance scale (SESA) and a life quality assessment (Hamburg Quality of Life Questionnaire in Multiple Sclerosis). In addition, data were collected on cognitive (MSFC) and functional (EDSS) parameters. **RESULTS:** There was no significant difference between the music-therapy treatment group and the control group. However, the effect size statistics comparing both groups show a medium effect size on the scales measuring self-esteem (d, 0.5423), depression HAD-D (d, 0.63) and anxiety HAD-A (d, 0.63). Significant improvements were found for the therapy group over time (U1-U4) in the scale values of self-esteem, depression and anxiety. In the follow-up, scale values for fatigue, anxiety and self-esteem worsen within the group treated with music therapy. **DISCUSSION:** A therapeutic concept for multiple sclerosis, which includes music therapy, brings an improvement in mood, fatigue and self-acceptance. When music therapy is removed, then scale scores worsen and this appears to intimate that music therapy has an influence.

Aldridge, D., & Ridder, H.M. (2005). **Individual music therapy with persons with frontotemporal dementia: Singing dialogue.** *Nordic Journal of Music Therapy*, 14(2), 91-106.

**ABSTRACT:** The purpose of the article is to describe music therapy and its effects on patients with frontotemporal dementia. Songs with personal meaning make it possible to acknowledge the person's emotions, breaking the social isolation, and meeting the music therapy participant's psychosocial needs. In this paper, a case study is illustrated which integrates both qualitative and quantitative data.

Argstatter, H., Bolay, H.V., Hillecke, T., & Nickel, A.K. (2005). **Outcome research in music therapy: A step on the long road to an evidence-based treatment.** *Annals of the New York Academy of Sciences*, 1060, 283-93.

**ABSTRACT:** Music therapy is the therapeutic use of music and musical activities in the treatment of somatic and mental diseases. In the last decades it has developed from a quasi-professional working field into an increasingly evidence-based treatment for various diseases. Selected outcome studies that were carried out in order to give music therapy a scientific and empirical base are presented in this ar-

ticle. Results show that music therapy is an effective intervention for patients with chronic pain, children with migraine, and patients suffering from chronic tinnitus. This positive outcome, in combination with the observed moderate to large effect sizes in different meta-analyses, provides evidence for the use of music therapy in specific clinical fields. Future research should focus on studies that compare well-defined music therapy interventions to standard treatment.

Avrahami, D. (2005). **Visual art therapy's unique contribution in the treatment of post-traumatic stress disorders.** *Journal of Trauma and Dissociation*, 6(4), 5-38.

**ABSTRACT:** This paper describes visual art therapy as an integrative and unique approach, which is most appropriate for the multidimensional treatment of post-traumatic stress disorder (PTSD). The unique contribution of visual art therapy in the treatment of PTSD is expressed in three major areas: (1) working on traumatic memories, (2) the process of symbolization-integration, and (3) containment, transference and countertransference. Two case descriptions of traumatized patients treated in visual art therapy are presented.

Breitenfeld, D., Jagetic, N., Prstacic, M., & Thaller, V., et al. (2005). **Contemporary possibilities of music therapy in social psychiatry and alcoholology.** *Alcoholism*, 41(2).

**ABSTRACT:** This paper presents the contemporary possibilities of music therapy in social psychiatry and especially in combating alcoholism, based on the pieces of experience from the Department of Psychiatry within the Sestre milosrdnice University Hospital, Zagreb, and on the activities related to music therapy with the short-time patients, mainly alcoholics, who were first treated in the hospital and later in the clubs of treated alcoholics.

Clare, A., Collier, E., & Webster, S. (2005). **Creative solutions: Innovative use of the arts in mental health settings.** *Journal of Psychosocial Nursing and Mental Health Services*, 43(5), 42-9.

**ABSTRACT:** A recent study of occupational stress on the unit (Clare, 2004) highlighted that staff valued the importance of the socialization process in reducing their stress levels. This process incorporates the need for peer support and acceptance, and an understanding

of what is expected of them (e.g., roles and responsibilities), supported by a culture of learning, problem solving, and working together. This process is similar to the approach taken by the arts project in nurturing ideas and initiatives in a safe, respectful way. It is apparent that the arts project has been more than just a creative activity; it has had wider implications for both staff and service users in reducing stress. It has: Enabled staff retention. In fact, there is a waiting list of nurses wishing to work on the unit. Reduced incidents of damage to property. Reduced use of P.R.N. medication. Enhanced the good reputation of the service, which is often commented on by visitors to the unit. The arts project promotes well-being and lifelong learning for the ward community through meaningful engagement in creative activity.

Coudeyre, E., Ginies, P., Guetin, S., & Picot, M.C., et al. (2005). **[Effect of music therapy among hospitalized patients with chronic low back pain: a controlled, randomized trial]**. *Annales de Readaptation et de Medecine Physique*, 48(5), 217-24. [Article in French].

ABSTRACT: OBJECTIVE: To evaluate the influence of music therapy in hospitalized patients with chronic low back pain. METHODS: A controlled, randomized study (N = 65). During a stationary rehabilitation stay of 12 days, 65 patients with low back pain were randomized to receive on alternate months standardized physical therapy plus 4 music therapy sessions between day 1 and day 5 (intervention group; N = 33) or standardized physical therapy alone (control group; N = 32). Scores for pain (as measured on a visual analogue scale [VAS]), disability (Oswestry index) and anxiety and depression (as measured on the hospital anxiety and depression scale [HAD]) were collected on day 1, 5 and 12. Pain intensity was also evaluated on a VAS just before and after music therapy sessions. RESULTS: Introduced music therapy sessions during a stationary rehabilitation stay in patients with chronic low back pain reduce pain (-2.0+/-2.7 vs -1.8+/-2.6) but not significantly. However, music therapy significantly ( $p < 0.01$ ) reduced disability as measured on the Oswestry index between day 1 and day 5 (-11.8+/-17.8 vs -2.5+/-9.4), anxiety (-3.5+/-3.7 vs -0.9+/-2.7) and depression (-2.1+/-3.0 vs 0.6+/-2.4). The immediate effect on pain intensity (VAS score) was confirmed ( $p < 0.001$ ), CONCLUSION: Our results confirmed the effectiveness of music therapy for hospitalized

patients with chronic low back pain. Music therapy can be a useful complementary treatment in chronic pain and associated anxiety-depression and behavioural consequences.

Czyz, P., Furgal, M., Nowobilski, R., & Wegrzyn-Sliwka, A., et al. (2005). **[The effect of music therapy on anxiety level in hospitalized asthmatic patients]**. *Polskie Archiwum Medycyny Wewnetrznej*, 113(4), 314-9.

ABSTRACT: The role of music therapy as a supportive treatment is not well defined. The music therapy cannot be estimated as the isolated method it is often only the part of the complex therapy. The aim of this study was to evaluate the influence of music therapy on anxiety level in hospitalized asthmatic patients. The patient group was consisted of 36 patients with bronchial asthma (23 women and 13 men). In all patients we evaluated the level of anxiety (attribute and state) according to Spielberger and intensity of dyspnoe according to Borg scale at the first day of examination and after 10 days of rehabilitation program. Moreover we performed spirometry. The respiratory rehabilitation program included: exercise of breath control, correction of respiratory pattern, training of diaphragm and additional respiratory muscles. The duration of music therapy lasted 15 minutes. After 10 days rehabilitation with or without music therapy we found the reduction of anxiety (state) ( $p < 0.0001$ ). However we did not observe the difference between two studied groups with or without music therapy in diminishing of anxiety ( $p = 0.55$ ). In conclusion, we believe that the music therapy can play important role in treatment of somatic disease but our study did not confirm its additive positive meaning in patients with bronchial asthma.

Dahle, T., Gold, C., Heldal, T.O., & Wigram, T. (2005). **Music therapy for schizophrenia or schizophrenia-like illnesses**. *Cochrane Database of Systematic Reviews*, 2, CD004025.

ABSTRACT: BACKGROUND: Music therapy is a psychotherapeutic method that uses musical interaction as a means of communication and expression. The aim of the therapy is to help people with serious mental illness to develop relationships and to address issues they may not be able to using words alone. OBJECTIVES: To review the effects of music therapy, or music therapy added to standard

care, compared to placebo, standard care or no treatment for people with serious mental illnesses such as schizophrenia. **SEARCH STRATEGY:** The Cochrane Schizophrenia Group's Register (July 2002) was searched. This was supplemented by hand searching of music therapy journals, manual searches of reference lists, and contacting relevant authors. **SELECTION CRITERIA:** All randomized controlled trials that compared music therapy with standard care or other psychosocial interventions for schizophrenia. **DATA COLLECTION AND ANALYSIS:** Studies were reliably selected, quality assessed and data extracted. Data were excluded where more than 30% of participants in any group were lost to follow up. Non-skewed continuous endpoint data from valid scales were synthesized using a standardized mean difference (SMD). If statistical heterogeneity was found, treatment 'dosage' and treatment approach were examined as possible sources of heterogeneity. **MAIN RESULTS:** Four studies were included. These examined the effects of music therapy over the short to medium term (1 to 3 months), with treatment 'dosage' varying from 7 to 78 sessions. Music therapy added to standard care was superior to standard care alone for global state (medium term, 1 RCT,  $n = 72$ , RR 0.10 CI 0.03 to 0.31, NNT 2 CI 1.2 to 2.2). Continuous data suggested some positive effects on general mental state (1 RCT,  $n = 69$ , SMD average endpoint PANSS -0.36 CI -0.85 to 0.12; 1 RCT,  $n = 70$ , SMD average endpoint BPRS -1.25 CI -1.77 to -0.73), on negative symptoms (3 RCTs,  $n = 180$ , SMD average endpoint SANS -0.86 CI -1.17 to -0.55) and social functioning (1 RCT,  $n = 70$ , SMD average endpoint SDSI score -0.78 CI -1.27 to -0.28). However these latter effects were inconsistent across studies and depended on the number of music therapy sessions. All results were for the 1-3 month follow up. **AUTHORS' CONCLUSIONS:** Music therapy as an addition to standard care helps people with schizophrenia to improve their global state and may also improve mental state and functioning if a sufficient number of music therapy sessions are provided. Further research should address the dose-effect relationship and the long-term effects of music therapy.

De Sousa, A. (2005). **The role of music therapy in psychiatry.** *Alternative Therapies in Health and Medicine*, 11(6), 52-3.

**ABSTRACT:** Music has soothed the souls of human

beings for ages. It also has helped people recover from ailments since ancient times. Today, there is a widespread interest in the use of music therapy in treating psychiatric disorders. This article describes the various types of music therapy in use today and also offers insight into how music therapy can be incorporated into the management of psychiatric disorders and as an element of psychotherapy.

Lauritzen, S.O. (2005). **Expressive bodies: Demented persons' communication in a dance therapy context.** *Health*, 9(3), 297-317.

**ABSTRACT:** Dementia is a disease that brings with it various limitations in the afflicted person's communication with others. The purpose of this study is to explore, not the limitations, but the capacity of the demented person to communicate under conditions that differ from the everyday life of the care institution. Group dance therapy sessions with elderly, demented persons were video-taped and analyzed with a focus on how verbal and non-verbal modes of communication were used by the participants. The ways the demented persons use body movements, free dance movements, speech and singing in different combinations is described and discussed in terms of different expressive modes, where body movements are used to substitute or support speech as well as to express thoughts, memories and emotions. The results from the study indicate that under conditions that allow for different modes of expression, the communication of the demented person can be found to be rich and varied in expression and content.

Mannheim, E.G., Weis, J. (2005). **[Dance therapy with cancer patients: Results of a pilot study].** *Musik, Tanz, und Kunsttherapie*, 16(3), 121-128. [Article in German].  
*No abstract is available.*

Marti, P., & Mercadal, M. (2005). **[Music therapy].** *Revista de Enfermeria*, 28(3), 54-8. [Article in Spanish].

**ABSTRACT:** Music therapy is a discipline which often is included in the group of natural, complementary and non-pharmaceutical therapies. In this therapy, the importance of teamwork and interdisciplinary communication between the musical therapist and the other professionals deserve to be highlighted.

Sabbatella, P.L. (2005). **Music therapy research in Ibero-American countries: An overview focused on assessment and clinical evaluation.** *Annals of the New York Academy of Sciences*, 1060, 294-302.

ABSTRACT: The aim of this article is to present an overview of some contemporary ideas concerning the status of music therapy research in Ibero-American countries, with a focus on assessment and clinical evaluation of music therapy clinical practice.

#### 2004

Birks, J.S., Bruinsma, M.S., Scholten, R.J., & Vink, A.C. (2004). **Music therapy for people with dementia.** *Cochrane Database of Systematic Reviews*, 3, CD003477.

ABSTRACT: BACKGROUND: Dementia is a clinical syndrome with a number of different causes which is characterized by deterioration in cognitive functions. Research is pursuing a variety of promising findings for the treatment of dementia. Pharmacological interventions are available but have limited ability to treat many of the syndrome's features. Little research has been directed towards non-pharmacological treatments. In this review the evidence for music therapy as a treatment is examined. OBJECTIVES: To assess the effects of music therapy in the treatment of behavioral, social, cognitive and emotional problems of older people with dementia. SEARCH STRATEGY: The Cochrane Dementia and Cognitive Improvement Group (CD-CIG) Specialized Register was searched on 30 June 2003 using the term "music\*". This Register contains records from all major health care databases and many ongoing trial databases and is updated regularly. The principal reviewer conducted additional searches to retrieve randomized controlled trials (RCTs) concerning the effect of music therapy on older people with dementia. SELECTION CRITERIA: Randomized controlled trials that reported clinically relevant outcomes associated with music therapy in treatment of behavioral, social, cognitive and emotional problems of older people with dementia. DATA COLLECTION AND ANALYSIS: Two reviewers screened retrieved studies independently for methodological quality using a checklist. Data from accepted studies were independently extracted by the reviewers. MAIN RESULTS: Five studies were included. The method-

ological quality of the studies was generally poor and the study results could not be validated or pooled for further analyses. REVIEWERS' CONCLUSIONS: The methodological quality and the reporting of the included studies were too poor to draw any useful conclusions.

Gao, X.C., & Zhou, Y.P. (2004). **[Effect of psychodrama therapy on the trait-anxiety of patients with schizophrenia].** *Chinese Journal of Clinical Rehabilitation*, 8(27), 5753-5755. [Article in Chinese]. No abstract is available.

Krout, R.E. (2004). **Music therapy in facility-based aged care in Aotearoa New Zealand.** *American Journal of Recreation Therapy*, 3(2), 15-9.

ABSTRACT: In Aotearoa New Zealand (Aotearoa is the Maori name for the country), diversional therapy is defined as a professional clinical practice that makes use of purposeful recreational leisure activities with individuals and groups to improve the intellectual, spiritual, physical, and emotional well-being of people in supportive environments. For older people, these environments can include facilities such as rest homes, nursing homes, and hospitals. Currently, the New Zealand Society of Diversional Therapists, Incorporated includes recreational professionals. Diversional therapy is described as client-centered and acknowledges that recreational experiences improve the quality of life of older people. Therapeutic recreation is fairly new as a professional field in Aotearoa New Zealand. The country's first academic program was established in 1999. This paper describes how music therapy has been used to augment diversional therapy programs at sample aged-care facilities in Aotearoa New Zealand. The author describes his work with diversional therapists to provide music therapy group programming. This study outlines some sample session experiences and goals for the residents. Key words: music therapy, diversional therapy, older adults, New Zealand.

Myskja, A. (2004). **[Can music therapy for patients with neurological disorders?].** *Tidsskrift for Den Norske Laegeforening*, 124(24), 3229-30. [Article in Norwegian].

ABSTRACT: Recent developments in brain research and in the field of music therapy have led to the development of music-based methods specifically

aimed at relieving symptoms of Parkinson's disease and other neurologic disorders. Rhythmic auditory stimulation uses external rhythmic auditory cues from song, music or metronome to aid patients improving their walking functioning and has been shown to be effective both within sessions and as a result of training over time. Melodic intonation therapy and related vocal techniques can improve expressive dysphasia and aid rehabilitation of neurologic disorders, particularly Parkinson's disease, stroke and developmental disorders.

Yao, C.Y. (2004). [**Application of music therapy in the rehabilitation of aphasia: One case report**]. *Chinese Journal of Clinical Rehabilitation*, 8(25), 5228-5229. [Article in Chinese].  
*No abstract is available.*

### 2003

Bernatzky, G., Hesse, H.P., Kullich, W., & Wendtner, F., et al. (2003). [**Music therapy - Impact on pain, sleep, and quality of life in low back pain**]. *Wiener Medizinische Wochenschrift*, 153(9-10), 217-221. [Article in German].  
*No abstract is available.*

Brotons, M., & Marti, P. (2003). **Music therapy with Alzheimer's patients and their family caregivers: A pilot project**. *Journal of Music Therapy*, 40(2), 138-50.

ABSTRACT: The purpose of this paper is to present the results of a pilot project sponsored by a private foundation in Spain ("Fundació la Caixa"), in order to demonstrate some of the applications of music therapy, and to measure more systematically some of its effects on people with a probable diagnosis of Alzheimer's Disease and Related Disorders (ADRD) in early-moderate stages of the disease, and their family caregivers. Subjects for this project were 14 patients (5 women and 9 men) with a probable diagnosis of Alzheimer's disease, and 14 family caregivers (9 women and 5 men) from a rural area outside of Barcelona. Their age range was 70 to 80 years. Prior to the beginning of the project, a neuropsychologist specialized in gerontology administered a series of standardized tests to the participants. These same tests were administered again two days before the end of the project and two months later for follow-up purposes. The

results of the satisfaction questionnaire showed that the caregivers perceived an improvement in the social and emotional areas of their patients, and statistical tests showed significant differences between pre and posttest scores in the following tests: (a) Dementia Scale ( $X^2 = 12.29$ ,  $p = .002$ ), (b) NPI ( $X^2 = 17.72$ ,  $p = .001$ ), (c) the Cohen-Mansfield agitation scale ( $X^2 = 11.45$ ,  $p = .003$ ), (d) Burden Interview ( $X^2 = 9.19$ ,  $p = .01$ ), (e) Memory and Behavior Problems Checklist (frequency subscale) ( $X^2 = 11.09$ ,  $p = .004$ ), (f) STAI-S ( $X^2 = 14.72$ ,  $p = .001$ ), and (g) Beck's Depression Inventory ( $X^2 = 9.38$ ,  $p = .009$ ). These results and their implications are discussed extensively.

Glawischnig-Goschnik, M. (2003). [**"Without song or sound?" Possibilities and effects of music therapy**]. *Wiener Medizinische Wochenschrift*, 153(7-8), 178-81. [Article in German].

ABSTRACT: Music therapy is still not widely known within everyday medical and psychotherapeutical contexts. Music touches fundamental themes of human existence and is important in preventive as well as in clinical and rehabilitative areas. The highly specialized and technical areas of medicine need to be complemented by artistic therapeutic approaches that recognize the physical and sensory aspects of the suffering person. Active and receptive music therapy and training have evolved in different fields of health care. A theory embracing various approaches is particularly useful. Fundamental attitudes in the music therapy relationship will be differentiated and the importance of music therapy will be presented using examples based on the treatment of cancer patients.

Kachele, H., Oerter, U., Scheytt, H.N., & Schmidt, H.U. (2003). [**Music therapy in psychosomatic medicine. State of implementation, training and research in Germany**]. *Psychotherapeut*, 48(3), 155-165. [Article in German].

ABSTRACT: This survey was done using a sample of practicing music therapists to assess the clinical implementation of music therapy in psychosomatic hospitals in Federal Republic of Germany. The qualification of music therapists, their integration and the problem of indication are emphasized. The study also discusses the extent to which the music therapy is discussed in the standard textbooks on psychosomatic medicine and the current status of research on music therapy.

Rainey, P.M.M. (2003). **Relating improvisational music therapy with severely and multiply disabled children to communication development.** *Journal of Music Therapy*, 40(3), 227-46.

ABSTRACT: The effect of different levels of pre-intentional and intentional communication development on musical interaction with children with severe and multiple disabilities has not been explored in the music therapy literature. Aside from stage of communication development, what are the particular influences of disability on musical interaction with children who have pre-intentional and early intentional communication? A qualitative research project explored these issues. Ten school-aged children with severe and multiple disabilities participated in the project. The most common medical diagnosis was cerebral palsy. Analysis of video recordings and other data confirmed that the children's level of communication development was reflected in individual music therapy. Specifically, children at different levels of communication development varied in their abilities to initiate, anticipate, and sustain participation in turn taking, and to maintain attention to and engagement in the interaction. Both turn taking and playing and singing together were found to be important forms of communication during music therapy. Communication problems related to disability included: difficulties in using objects as a focus of joint attention, difficulties in interpreting the interactive environment, being sufficiently motivated to communicate, severely limited means of interaction, attaining and maintaining an appropriate level of arousal, and lack of interest in interaction and the outside environment. Further study of how music therapy can be related to general issues in communication for individuals with severe and multiple disabilities is recommended.

Woolf, L. (2003). **Art therapy in Canada: Origins and explorations.** *Canadian Art Therapy Association Journal*, 16(2), 2-9.  
*No abstract is available.*

## 2002

Benveniste, M.K., & Boisvert, S. (2002). **Music therapy with children having physical or sensory deficits.** *Canadian Journal of Music Therapy (Revue*

*Canadienne de Musicotherapie)*, 9, 65-74.

ABSTRACT: This paper describes a project funded by the Music Therapy Trust Fund of Canada in a rehabilitation center, which deals with children who have physical or sensory deficits. The rehabilitation center has developed a special program to observe children in kindergarten or school. The project, evaluation process, and the role of parents and educators is discussed in the paper. The case studies of two children aged 4 years is examined.

Bolay, H.V., Hillecke, T., & Nickel, A.K. (2002). **[A pilot study on the development and evaluation of a music therapy concept for severely regressed nursing home residents].** *Musik, Tanz, und Kunsttherapie*, 13(1), 1-6. [Article in German].

ABSTRACT: The paper talks about the authors' development and evaluation of the concept of music therapy for the nursing home residents who are severely regressed. A pilot study was conducted, the background, concept, and results of which have been described. The authors conducted this project between March-August 2000 at the Viktor Dulger Institute in Heidelberg, Germany.

Mallay, J.N. (2002). **Art therapy, an effective outreach intervention with traumatized children with suspected acquired brain injury.** *Arts in Psychotherapy*, 29(3), 159-172.

ABSTRACT: The study examines the usefulness of art therapy in treatment of posttraumatic stress disorder (PTSD) in children. It also discusses a case study. PTSD is a comparatively recent diagnosis for children and is characterized by depression, anxiety, fearfulness, disturbances in sleep-eating patterns, and self-blame and feeling damaged. The art therapy in PTSD children aims to help the children reestablishing boundaries, feel secure and in control, helping them to develop body integrity, freedom from guilt and self-blame, and helping them to understand the event in context. Art psychotherapy allows expression and provide verbal supports and is therefore appropriate in PTSD. The article also discusses the case of a 10 year old male who experienced trauma related to being hit by an automobile to demonstrate the usefulness of art psychotherapy.

Wood, M. (2002). **Researching art therapy with people suffering from AIDS related dementia.** *Arts in Psychotherapy, 29*(4), 207-219.

ABSTRACT: The study examines the relationship between the author as an art therapist and patient with AIDS dementia or brain impairment and the art equipment. Grounded theory was used to analyze the case studies of six patients in the age range of 31-45 yrs. The impact of the patient's health, communication, developing the therapeutic encounter, ending the art therapy work, and ideas or thoughts directing the therapist were the six themes that were identified.

## 2001

Aasgaard, T. (2001). **An ecology of love: Aspects of music therapy in the pediatric oncology environment.** *Journal of Palliative Care, 17*(3), 177-181.

ABSTRACT: This paper explores how music therapy can assist patients and relatives in the processes of making friendship and love audible in a child cancer ward. Four short patient histories are presented to illustrate a health-oriented, ecological music therapy practice. Two histories describe how texts, made by patients, become songs, and how the songs are performed and used. Another two histories deal with musical communication with dying children and their parents. The paper indicates that these interventions may involve more than palliation (making a disease less severe and unpleasant without removing its cause). Not least, such activities can make it possible for the sick child to expand from being "just a patient" into playing, if only for a moment, a more active social role. The processes of artistic interplay, in- and outside the sickroom, influence various relationships in the child's social environment.

## 2000

Aglieri, R., Fundaro, C., Mancini, F., & Pacchetti, C., et al. (2000). **Active music therapy in Parkinson's disease: An integrative method for motor and emotional rehabilitation.** *Psychosomatic Medicine, 62*(3), 386-93.

ABSTRACT: BACKGROUND: Modern management of Parkinson's disease (PD) aims to obtain symptom control, to reduce clinical disability, and to improve quality of life. Music acts as a specific

stimulus to obtain motor and emotional responses by combining movement and stimulation of different sensory pathways. We explored the efficacy of active music therapy (MT) on motor and emotional functions in patients with PD. METHODS: This prospective, randomized, controlled, single-blinded study lasted three months. It consisted of weekly sessions of MT and physical therapy (PT). Thirty-two patients with PD, all stable responders to levodopa and in Hoehn and Yahr stage 2 or 3, were randomly assigned to two groups of 16 patients each. We assessed severity of PD with the Unified Parkinson's Disease Rating Scale, emotional functions with the Happiness Measure, and quality of life using the Parkinson's Disease Quality of Life Questionnaire. MT sessions consisted of choral singing, voice exercise, rhythmic and free body movements, and active music involving collective invention. PT sessions included a series of passive stretching exercises, specific motor tasks, and strategies to improve balance and gait. RESULTS: MT had a significant overall effect on bradykinesia as measured by the Unified Parkinson's Disease Rating Scale ( $p < .034$ ). Post-MT session findings were consistent with motor improvement, especially in bradykinesia items ( $p < .0001$ ). Over time, changes on the Happiness Measure confirmed a beneficial effect of MT on emotional functions ( $p < .0001$ ). Improvements in activities of daily living and in quality of life were also documented in the MT group ( $p < .0001$ ). PT improved rigidity ( $p < .0001$ ). CONCLUSIONS: MT is effective on motor, affective, and behavioral functions. We propose active MT as a new method for inclusion in PD rehabilitation programs.

Duffy, B., & Fuller, R. (2000). **Role of music therapy in social skills development in children with moderate intellectual disability.** *Journal of Applied Research in Intellectual Disabilities, 13*(2), 77-89.

ABSTRACT: The study was done with a sample of 32 children with moderate intellectual disability (age range=5-10 years) to examine the effectiveness of a music therapy on social skills of children. The study was done at four intellectual disability centers and children were randomly selected from those centers. A control group had four children who did not receive music therapy. For 8 weeks, half hour sessions were conducted twice a week by a staff member trained in each group procedure at each center. Turn-taking,

imitation, vocalization, initiation and eye contact were the five outcome social skills selected. The pre-intervention scores were compared to the post-intervention scores on these five target skills using a brief social skills test to assess the effectiveness of intervention. The social skills assessment used in the study was specially formulated for the study. Feedback from the teachers was also used to measure the effectiveness. The eight week therapy showed improved social skills for both the music and non-music intervention groups.

Gonen, J., & Soroker, N. (2000). **Art therapy in stroke rehabilitation: A model of short-term group treatment.** *Arts in Psychotherapy, 27*(1), 41-50.  
*No abstract is available.*

### 1999

Amir, D. (1999). **Musical and verbal interventions in music therapy: A qualitative study.** *Journal of Music Therapy, 36*(2), 144-75.

ABSTRACT: In clinical work, our main task as music therapists is to make interventions: we give our clients guidance, encouragement, and support; we offer interpretations; we play with and for them. Most of the interventions are either musical or verbal. As a music therapy clinician, supervisor, and educator, I wanted to explore the following questions: (a) How do music therapists define musical and verbal interventions?, (b) When does a music therapist intervene musically and when does the therapist intervene verbally?, (c) When and why do music therapists suggest to their clients exploring an issue musically or verbally?, (d) Do musical and verbal interventions serve the same purpose or different purposes?, (d) How is the decision about the type of intervention made?, and (e) is there a difference between the power and meaning of musical interventions versus verbal interventions for both the therapist and the client?

Mariauzouls, C., Michel, D., & Schifftan, Y. (1999). **[Vibration supported music therapy reduces pain and enhances relaxation in persons with paraplegia or tetraplegia: A pilot study of the psychological and autonomic effects of simultaneous acoustic and somatosensory music stimulation to manage pain].** *Journal: Rehabilitation, 38*(4), 245-248.  
[Article in German].

ABSTRACT: Pain is a well-known phenomenon in posttraumatic spinal cord injuries. Nearly 10 percent of the patients develop most severe, invalidizing, as a rule neurogenic pain conditions that are hardly accessible to conventional therapies. A pilot study was therefore conducted with 10 paraplegics and tetraplegics suffering chronic pain, investigating how vibration supported music therapy with the Musica Medica method affected pain experience, tension/relaxation and well-being. In addition to subjective experience, we measured physiological parameters (finger tip skin temperature, electrodermal activity, heart rate, respiration frequency) during the therapy sessions. All patients had a high acceptance of the method which throughout the group had brought about an increase in relaxation and well-being as well as a decrease of pain experience. The autonomic nervous system variables correlated with relaxation and in addition pointed to an activating impact of the therapy chosen.

### 1998

Aglieri, R., Mancini, F., Martignoni, E., & Pacchetti, C., et al. (1998). **Active music therapy and Parkinson's disease: Methods.** *Functional Neurology, 13*(1), 57-67.

ABSTRACT: Music therapy (MT) is an unconventional, multisensorial therapy poorly assessed in medical care but widely used to different ends in a variety of settings. MT has two branches: active and passive. In active MT the utilization of instruments is structured to correspond to all sensory organs so as to obtain suitable motor and emotional responses. We conducted a prospective study to evaluate the effects of MT in the neurorehabilitation of patients with Parkinson's disease (PD), a common degenerative disorder involving movement and emotional impairment. Sixteen PD patients took part in 13 weekly sessions of MT each lasting 2 hours. At the beginning and at the end of the session, every two weeks, the patients were evaluated by a neurologist, who assessed PD severity with UPDRS, emotional functions with Happiness Measures (HM) and quality of life using the Parkinson's Disease Quality of Life Questionnaire (PDQL). After every session a significant improvement in motor function, particularly in relation to hypokinesia, was observed both in the overall and in the pre-post session evaluations. HM, UPDRS-ADL

and PDQL changes confirmed an improving effect of MT on emotional functions, activities of daily living and quality of life. In conclusion, active MT, operating at a multisensorial level, stimulates motor, affective and behavioral functions. Finally, we propose active MT as new method to include in PD rehabilitation programs. This article describes the methods adopted during MT sessions with PD patients.

Yang, W.Y., Yong, Z.W., Zhang, H.Y., & Zheng, L., et al. (1998). **Psychosocial rehabilitation effects of music therapy in chronic schizophrenia.** *Hong Kong Journal of Psychiatry*, 8(1), 38-40.

ABSTRACT: This study was conducted to investigate the use of music in psychosocial rehabilitation. There were 70 subjects who were diagnosed with chronic schizophrenia with social disability randomly assigned to an experimental group and a control group. Individual and group music therapy combined with antipsychotic medications were given to the experimental group, while the control group received only neuroleptic therapy. There was a positive effect of music therapy along with medication than medication alone. There was a significant decrease in the severity in psychiatric disability following music therapy.

### 1997

Baldwin, S., Hamilton, S., & Purdie, H. (1997). **Music therapy: facilitating behavioral and psychological change in people with stroke: A pilot study.** *International Journal of Rehabilitation Research*, 20(3), 325-7.

*No abstract is available.*

Purdie, H. (1997). **Music therapy in neurorehabilitation: Recent developments and new challenges.** *Critical Reviews in Physical and Rehabilitation Medicine*, 9(3-4), 205-217.

ABSTRACT: This article reviews the literature on music therapy and neurorehabilitation from 1981 to the present. The relevance of hemispheric lateralization and cognitive processes are discussed, as well as clinical approaches and research in physical rehabilitation, speech and language revalidation and cognitive/psychological adjustment. The literature provides insight into the development of music therapy and its application through small single-case studies and descriptive research. Additional quantita-

tive research is needed to evaluate the effectiveness of music therapy. An increased readership of articles in refereed journals should be promoted. A wider dissemination of clinical techniques and stronger outcome measures will promote increased utilization of music therapy services.

### 1994

Tang, W., Yao, X., & Zheng, Z. (1994). **Rehabilitative effect of music therapy for residual schizophrenia: A one-month randomized controlled trial in Shanghai.** *British Journal of Psychiatry*, 24(AUG/SUPPL), 38-44.

ABSTRACT: Seventy-six in-patients who had the residual subtype of schizophrenia were randomly assigned to a treatment group or a control group. Both groups received standard medication as prescribed by their treating physicians, but the treatment group also received a one-month course of music therapy that included both passive listening to music and active participation in the singing of popular songs with other patients. Outcome was evaluated by four nurses using Chinese versions of the Scale for Assessment of Negative Symptoms and the in-patient version of the World Health Organization's Disability Assessment Scale. Music therapy significantly diminished patients' negative symptoms, increased their ability to converse with others, reduced their social isolation, and increased their level of interest in external events. As music therapy has no side-effects and is relatively inexpensive, it merits further evaluation and wider application.

### 1993

Aldridge, D. (1993). **Hope, meaning, and the creative arts therapies in the treatment of AIDS.** *Arts in Psychotherapy*, 20(4), 285-297.

ABSTRACT: Creative arts therapies is important in the treatment of AIDS patients because they accept the patients as they are. Instead of the pathology, they focus on aesthetic issues of form and potential of the patient. They also allow the patients to define themselves as they want to be. These therapies value the creativity and productivity of the patients. They provide hope to the patient and encourage personal contact.

Aldridge, D. (1993). **Music therapy research II: Research methods suitable for music therapy.** *Arts in Psychotherapy*, 20(2), 117-131.

ABSTRACT: The study was done with the purpose of interpreting the therapeutic facts about music therapy, and the challenges in administering such a therapy. Lack of universally accepted valid assessment tool in music therapy is described as one of the problems in music therapy. Music therapists believe that it is necessary to have such an assessment so that changes in the musical playing of patients can be compared with bodily changes, and that this type of assessment should not have parameters from medical science or psychology. Instead musical parameters on these assessment should be chosen from their therapeutic epistemology. The assessment techniques for improvised music playing in adults are discussed. The ways to correlate a child development scale with improvised music playing are also described. The applications of music therapy in treating Alzheimer's disease and movement disturbances due to neurological phenomena are proposed, taking into account the relationship between music and the experience of the body in time and space.

### 1991

Aldridge, D. (1991). **Creativity and consciousness: Music therapy in intensive care.** *Arts in Psychotherapy*, 18(4), 359-362.

ABSTRACT: The study examined the effects of music therapy on five patients with severe coma in intensive care unit. The patients were in the age range of 15 to 40 years. About 8 to 12 minutes of wordless music therapy was provided to each patient. The tempo of each S's pulse and breathing pattern was used as the base on which the therapy was based. The nature of music was selected as per the character of each S's breathing. The results included changes in the breathing, with a decrease in heart rate initially and an increase as the therapy progressed until it became steady at the high level. Fine motor and grabbing movements of the hand, turning of the head, and eyes opening to the regaining of consciousness were the other effects observed.

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*Documents from the Education Resource Information Center (ERIC) search at [www.eric.ed.gov](http://www.eric.ed.gov) are listed below:*

### 2014

Betts, D.J., Blausey, D., & Feldman, M.B. (2014). **Process and outcome evaluation of an art therapy program for people living with HIV/AIDS.** *Art Therapy: Journal of the American Art Therapy Association*, 31(3), 102-109.

ERIC Number: EJ1041028

ABSTRACT: Program evaluation offers an opportunity for improving the implementation and impact of art therapy. This article describes a process and outcomes evaluation of an art therapy program within the mental health services unit of a community-based organization for people living with HIV/AIDS. The aims were to assess utilization patterns and program impact on decreasing depression and improving health-related quality of life among HIV-positive individuals who received art therapy services during a 5-year period (N = 255). Short-term group art therapy services were found to be most frequently utilized. Significant changes in symptoms of depression and mental health--related quality of life were observed in a subsample of clients (n = 25) between baseline and a 6-month follow-up assessment. The findings, which underscore the value of program evaluation, may be useful in improving art therapy services for people living with HIV/AIDS.

Cutlip, M., Jarmolowicz, D.P., McBean, A.L., Panzironi, H., & Schlosnagle, L. (2014). **Evaluating the fine arts program at the Center for Excellence in Disabilities.** *Art Therapy: Journal of the American Art Therapy Association*, 31(3), 110-117.

ERIC Number: EJ1041020

ABSTRACT: Art programs for people with disabilities may encourage creativity, promote engagement, emphasize inclusion, and extend access and opportunities for community involvement. This mixed methods study utilized quantitative and qualitative data, repeated measures, action research, and stakeholder collaboration to develop and implement an evaluation tool that would enable a fine arts program to become a self-improving system. Participants viewed the

program favorably and reported improved artistic and professional skills, social integration, self-esteem, and sense of purpose. The evaluation model described can be adapted to a variety of art therapy and arts-related programs to assess the efficacy of interventions or program features.

Darrow, A-A. (2014). **Promoting social and emotional growth of students with disabilities.** *General Music Today*, 28(1), 29-32.

ERIC Number: EJ1037991

ABSTRACT: Students with disabilities are often faced with numerous challenges as they progress through their school years. In addition to disability-related challenges, they may encounter additional difficulties such as bullying in school and lack of social acceptance by their peers. It is important that students with disabilities develop competence in skills that will promote their social success in school. Affective education during their school years may improve the quality of life for students with disabilities as they transition into adulthood. Music-making experiences can provide opportunities to practice important life skills that will benefit students' social and emotional development.

Kendall, E., Maujean, A., & Pepping, C.A. (2014). **A systematic review of randomized controlled studies of art therapy.** *Art Therapy: Journal of the American Art Therapy Association*, 31(1), 37-44.

ERIC Number: EJ1022555

ABSTRACT: This review article examines current knowledge about the efficacy of art therapy based on the findings of eight randomized controlled trials conducted with adult populations from 2008-2013 that met a high standard of rigor. Of these studies, all but one reported beneficial effects of art therapy. Review findings suggest that art therapy may benefit a range of individuals, including older adults, war veterans, and prison inmates. However, there is a need for further research using RCTs to examine more conclusively art therapy outcomes and the specific populations in which art therapy interventions offer greatest benefit.

## 2013

Pelayo, J.M.G., III, & Sanchez, C.S. (2013). **Music therapy with autistic children: A multiple case study.**

ERIC Number: ED544079

Available in full-text at: <http://files.eric.ed.gov/full-text/ED544079.pdf>

ABSTRACT: The aim of the researchers was to determine if there are alternative methods in treating children with autism. Children diagnosed with autism are currently attending special schools with a different type of curriculum. Many methods have been used by psychologists and psychiatrists to treat children diagnosed with autism. Children with mental or physical disabilities have been isolated in the common educational environment. The focus of this study was to try to help and enhance methods that may, in return, aide in the rehabilitation and treatment of children with mental and physical disabilities, specifically children with autism. There were eight participants, seven Male and one Female and were all diagnosed with autism. The average age was 12.75 years old. The youngest is 4 and the oldest is eighteen 18.

## 2012

Gallo-Lopez, L., & Rubin, L.C., (Eds.). (2012). **Play-based interventions for children and adolescents with autism spectrum disorders**

ERIC Number: ED529687

ABSTRACT: "Play-Based Interventions for Children and Adolescents with Autism Spectrum Disorders" explores the most recognized, researched, and practical methods for using play therapy with the increasing number of children diagnosed with Autism Spectrum Disorders (ASDs), and shows clinicians how to integrate these methods into their practices. Using a diverse array of play-based approaches, the book brings together the voices of researchers and practicing clinicians who are successfully utilizing play and play-based interventions with children and adolescents on the autism spectrum. It also examines the neurobiological underpinnings of play in children on the autism spectrum and the overall effect of play on neuro-typical and neuro-atypical development. Finally, through careful integration of theory with real-world clinical case application, each chapter also shows clinicians how to incorporate a particular treatment approach and make it a viable and effective part of their work with this challenging clinical population. This book is divided into four parts. Part I, Foundations, contains the following: (1) Safety

and Connection: The Neurobiology of Play (Badenoch and Bogdan); and (2) Playing on the Autism Spectrum (Rubin). Part II, Individualized Play-Based Interventions, contains the following: (3) Helping Children with ASD Through Canine-assisted Play Therapy (VanFleet and Coltea); (4) Family Therapy: Connecting with Children on the Autism Spectrum (Bundy-Myrow); (5) From Monologue to Dialogue: The Use of Play and Drama Therapy for Children with Autism Spectrum Disorders (Gallo-Lopez); (6) LEGO-based Play Therapy for Improving Social Competence in Children and Adolescents with Autism Spectrum Disorder (LeGoff, Krauss and Allen); (7) Touching Autism through Developmental Play Therapy (Courtney); (8) Relational Intervention: Child-centered Play Therapy with Children on the Autism Spectrum (Ray, Sullivan and Carlson); (9) The Narcissus Myth: Resplendent Reflections, and Self-Healing: A Jungian Perspective on Counseling a Child with Asperger's Syndrome (Green); (10) Communication and Connection: Filial Therapy with Families of Children with ASD (VanFleet); and (11) The World of Sandtray and the Child on the Autism Spectrum (Richardson). Part III, Programmatic Play-Based Interventions, contains the following: (12) DIR/Floor Time: A Developmental/Relational Play Therapy Approach Towards the Treatment of Children Impacted by Autism (Hess); (13) The PLAY Project: A Train-the-Trainer Model of Early Intervention for Children with Autism Spectrum Disorders (Solomon); and (14) The ACT Project: Enhancing Social Competence through Drama Therapy and Performance (Powers-Tricoli and Gallo-Lopez). Part IV, Expressive/Creative Interventions, contains the following: (15) Art Therapy: Connecting and Communicating with Children on the Autism Spectrum (Goucher); (16) Music Therapy Interventions for Social, Communication, and Emotional Development for Children and Adolescents with Autism Spectrum Disorders (Walworth); and (17) Moving into Relationship: Dance/Movement Therapy with Children on the Autism Spectrum (Devereaux).

Kimport, E.R., & Robbins, S.J. (2012). **Efficacy of creative clay work for reducing negative mood: A randomized controlled trial.** *Art Therapy: Journal of the American Art Therapy Association*, 29(2), 74-79.

ERIC Number: EJ988121

**ABSTRACT:** Clay work has long been used in art therapy to achieve therapeutic goals. However, little empirical evidence exists to document the efficacy of such work. The present study randomly assigned 102 adult participants to one of four conditions following induction of a negative mood: (a) handling clay with instructions to create a pinch pot, (b) handling clay with instructions to manipulate it freely, (c) handling a soft stress ball with instructions to toss the ball in a structured manner, or (d) handling a soft stress ball with instructions to manipulate it freely. Self-reports revealed greater mood enhancement following clay handling compared to ball handling. This randomized controlled trial documents that clay work has specific efficacy for reducing negative mood states.

Pienaar, D. (2012). **Music therapy for children with Down syndrome: Perceptions of caregivers in a special school setting.** *Kairaranga*, 13(1), 36-43. ERIC Number: EJ976663

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ976663.pdf>

**ABSTRACT:** Down syndrome (DS) is a genetic disorder resulting from chromosome 21 having three copies (trisomy 21). Cognitive functioning and anatomical features cause speech and language development delay (Kumin, 2003). Children with DS generally enjoy communication (Schoenbrodt, 2004), and respond well to interaction and social scripts. Music therapy has been extensively used in the past four decades as a treatment for children with disabilities (Nordoff & Robbins, 2007; Wigram, Pederson & Bonde, 2002). Children with DS seem specifically responsive to music and show potential to be part of group music-making (Wigram et al., 2002). In both speech and music, rhythm and sound are primary elements and all elements of music may be integrated into a speech-language program (Birkenshaw, 1994; Wilmot, 2004). Family and caregiver support are required for therapy to be effective. Caregivers' views of music therapy for children with DS were examined as a preliminary step in the evaluation of music therapy outcomes for this population. A questionnaire examining perspectives of effects of music on the communication development of children with DS was given to 19 caregivers of children with DS working in a special school environment. Consistent with reports in the literature, caregivers perceive children with DS as responsive to music, and to have musical and

communicative strengths. Caregivers perceived that communication and social skills may develop through regular music therapy sessions. These perceptions corresponded with the views of music therapists who were later interviewed as part of this study.

## 2011

Angheluta, A.-M., & Lee, B.K. (2011). **Art therapy for chronic pain: Applications and future directions.** *Canadian Journal of Counselling and Psychotherapy, 45*(2), 112-131.

ERIC Number: EJ930794

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ930794.pdf>

**ABSTRACT:** Chronic pain is acknowledged as a phenomenological experience resulting from biological, psychological, and social interactions. Consequently, treatment for this complex and debilitating health phenomenon is often approached from multidisciplinary and biopsychosocial perspectives. One approach to treating chronic pain involves implementing mind-body treatments such as art therapy. Art therapy for chronic pain is a nascent area of study, and this literature review endeavors to (a) evaluate the quality of literature investigating this area, (b) discuss how art therapy and other creative arts therapies treated the biopsychosocial dimensions of chronic pain, and (c) identify challenges and future directions for research on this topic.

Malchiodi, C.A., Ed. (2011). **Handbook of art therapy. Second Edition.**

ERIC Number: ED535953

**ABSTRACT:** Providing a complete overview of art therapy, from theory and research to practical applications, this is the definitive handbook in the field. Leading practitioners demonstrate the nuts and bolts of arts-based intervention with children, adults, families, couples, and groups dealing with a wide range of clinical issues. Rich with illustrative case material, the volume features 110 drawings and other artwork. The inclusion of diverse theoretical approaches and practice settings makes the "Handbook" eminently useful for all mental health professionals interested in using art in evaluation and treatment. New to this edition are: (1) Incorporation of the latest clinical applications, methods, and research; (2) Chapter on art materials and media (including uses

of new technologies); (3) Chapters on intervening with domestic violence survivors, bereaved children, and military personnel; and (4) Expanded coverage of neuroscience, cultural diversity, and ethics. This book is divided into five parts. Part I, The Art and Science of Art Therapy, contains: (1) A Brief History of Art Therapy (Randy M. Vick); (2) Art Therapy and the Brain (Cathy A. Malchiodi); (3) Art Therapy Materials, Media, and Methods (Cathy A. Malchiodi); and (4) Art Therapy in Practice: Ethics, Evidence, and Cultural Sensitivity (Cathy A. Malchiodi). Part II, Clinical Approaches to Art Therapy, contains: (5) Psychoanalytic, Analytic, and Object Relations Approaches (Cathy A. Malchiodi); (6) Humanistic Approaches (Cathy A. Malchiodi); (7) Cognitive-Behavioral and Mind-Body Approaches (Cathy A. Malchiodi and Aimee Loth Rozum); (8) Solution-Focused and Narrative Approaches (Shirley Riley and Cathy A. Malchiodi); (9) Developmental Art Therapy (Cathy A. Malchiodi); and (10) Expressive Arts Therapy and Multimodal Approaches (Cathy A. Malchiodi). Part III, Clinical Applications with Children and Adolescents, contains: (11) Drawing and Storytelling as Psychotherapy with Children (Masahiro Tanaka and Madoka Takuda Urhausen); (12) Using Drawing in Short-Term Trauma Resolution (William Steele and Caelan Kuban); (13) Art and Play Therapy with Sexually Abused Children (Eliana Gil); (14) An Art Therapy Approach to Attention-Deficit/Hyperactivity Disorder (Diane S. Safran); (15) Art Therapy with Children on the Autism Spectrum (Robin L. Gabriels and Lyndsay J. Gaffey); (16) Medical Art Therapy with Children (Tracy Council); and (17) Art Therapy with Adolescents (Gretchen Miller). Part IV, Clinical Applications with Adults, contains: (18) Art in Counseling (Samuel T. Gladding); (19) Creativity and Aging: An Art Therapy Perspective (Cathy A. Malchiodi); (20) Art Therapy with Adults with Severe Mental Illness (Susan Spaniol); (21) Art Therapy in Addictions Treatment: Creativity and Shame Reduction (Marie Wilson); (22) Art Therapy with Combat Veterans and Military Personnel (Cathy A. Malchiodi); and (23) Art Therapy and Domestic Violence (Cathy A. Malchiodi and Gretchen Miller). Part V, Clinical Applications with Groups, Families, and Couples, contains: (24) Group Art Therapy: An Interactive Approach (Diane Waller); (25) Developing Themes for Art Therapy Groups (Marian Liebmann); (26) Group Approaches with Sexually Abused

Children (P. Gussie Klorer); (27) Using Art Therapy with Medical Support Groups (Cathy A. Malchiodi); (28) Art Therapy with Families and Couples (Cathy A. Malchiodi); and (29) Art Therapy with Children in Grief and Loss Groups (Aimee Loth Rozum). Part VI, Art-Based Assessments, contains: (30) A Brief Overview of Art-Based Assessments (Cathy A. Malchiodi); and (31) What Art Can and Cannot Tell Us (Frances F. Kaplan). Appended are: (1) Credentials, Education, Supervision, Standards of Practice, and Ethical Standards.

## 2010

Bush, J., Isis, P.D., Siegel, C.A., & Ventura, Y. (2010). **Empowering students through creativity: Art therapy in Miami-Dade county public schools.** *Art Therapy: Journal of the American Art Therapy Association*, 27(2), 56-61.

ERIC Number: EJ901196

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ901196.pdf>

ABSTRACT: Miami-Dade County Public Schools (M-DCPS) has been at the forefront of integrating art therapy in schools since 1979, helping children with emotional/behavioral disabilities become more receptive to academic involvement while maximizing their social and emotional potential. This article describes the history, development, current configuration, and future outlook for school art therapy services provided by the M-DCPS Clinical Art Therapy Department.

Kim, S. (2010). **A story of a healing relationship: The person-centered approach in expressive arts therapy.** *Journal of Creativity in Mental Health*, 5(1), 93-98.

ERIC Number: EJ881248

ABSTRACT: In expressive arts therapy, visual art, movement, music, poetry, and creative writing offer clients opportunities to explore their hidden feelings expressed in the art forms. The colors, lines, motions, or sounds expressed during the therapy session promote better understanding of the self with support of the therapist. It is crucial to have a creative connection, not only between the self and its inner world but also between the client and the therapist for the healing process to unfold. This article presents a story of a healing relationship using Rogers's person-centered approach in expressive arts therapy.

Klavdianou, N-D., Krikeli, V., & Michailidis, A. (2010). **Communication improvement through music: The case of children with developmental disabilities.** *International Journal of Special Education*, 25(1), 1-9.

ERIC Number: EJ890560

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ890560.pdf>

ABSTRACT: This paper investigates the effect of music on the communication improvement of children with developmental disabilities (CWDD). Forty subjects (18 boys and 22 girls) 7-12 years old, were divided into an experimental group (n = 20) which participated in music therapy activities and a control group (n = 20) which was discussing and watching television, both for one hour. The State-Trait Anxiety Inventory Scale for children was used to measure state and trait anxiety respectively. In addition, heart rate response to music therapy was monitored for assessing probable music therapy effect. Findings from paired t-tests revealed that the State Anxiety Inventory Scale score was significantly influenced by the music therapy (t = 5.36, p less than 0.001) as well as it was not significantly influenced by the discussing and watching television session (t = 1.02, p greater than 0.05: NS). Besides, heart rate alteration analysis revealed that music therapy helps calm young children with developmental disabilities. Consequently, music therapy could lead not only to significant improvements in young CWDD's psychological and physical well-being but also could produce mental benefits, and should constitute a part of therapeutically programs that aim both to the improvement of young CWDD's psychological state and quality of life.

## 2009

Comte, M. (2009). **Don't hang your dreams in a closet: Sing them, paint them, dance them, act them.** *Australian Journal of Music Education*, 2, 58-66.

ERIC Number: EJ912422

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ912422.pdf>

ABSTRACT: The paper challenges some of the social and cultural attitudes to disability today and ways in which The Arts can be used to express and bring our dreams to life. It highlights issues relating

to children who need special education, children who attend special schools, children for who, for whatever reason, do not attend mainstream schools. It questions whether governments regard each special needs child as “a valued member of our community”. Questions explored in the paper include: Do governments ensure that special needs children are extended “every courtesy and assistance”? Does the community in general regard these young people as valued members of our society? What is the attitude of government to such children when they reach adulthood? And how does government show that it values them then? Does government in fact extend every courtesy and assistance to special needs children when they reach adulthood?

## 2008

Clair, A.A., & Memmott, J. (2008). *Therapeutic uses of music with older adults. Second Edition. American Music Therapy Association.*

ERIC Number: ED504544

ABSTRACT: In this comprehensively updated second edition, written by Alicia Ann Clair and Jenny Memmott the extraordinary benefits of music therapy for older adults are detailed. “Therapeutic Uses of Music with Older Adults” not only examines these benefits but also clarifies the reasons that music is beneficial. This important book shows both informal and formal caregivers how to use music to enhance the quality of life of older adults--including people with physical impairments and people with dementia. Written by two of the nation’s leading music therapists, “Therapeutic Uses of Music with Older Adults” offers strategies for using music to: provide diversion for inactivity, discomfort, and daily routine; decrease symptoms of depression, anxiety insomnia, and agitation; handle problem behaviors; provide physical and emotional stimulation; help in the rehabilitation of people with cardiac disease, Parkinson’s disease, and impairments related to stroke; help in the management of pain; facilitate social integration; communication; and the expression of feelings, including anger and grief; and relieve the stress and tension associated with caring for older adults.

Corrato, S., Elkis-Abuhoff, D.L., Gaydos, M., & Goldblatt, R.B. (2008). **Effects of clay manipulation on somatic dysfunction and emotional distress in patients with Parkinson’s disease.** *Art Therapy:*

*Journal of the American Art Therapy Association, 25(3), 122-128.*

ERIC Number: EJ811584

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ811584.pdf>

ABSTRACT: The focus of this outcome study was on art therapy as a support for medical treatment and palliative care. A total of 41 patients were placed in 2 matched groups: 22 patients with Parkinson’s disease and 19 patients without Parkinson’s disease. Each participant completed the Brief Symptom Inventory (BSI) (Derogatis, 1993) pre- and post-session, and was asked to manipulate a ball of clay and to respond to follow up questions on the experience. Quantitative and qualitative results showed a positive outcome with significant decrease in somatic and emotional symptoms in both groups. This research supports the value of an art therapeutic clay program for patients diagnosed with Parkinson’s disease and recommends future studies addressing art therapy with caregivers.

Goyal, A., & Keightley, M.L. (2008). **Expressive art for the social and community integration of adolescents with acquired brain injuries: A systematic review.** *Research in Drama Education, 13(3), 337-352.*

ERIC Number: EJ815188

ABSTRACT: Adolescents with acquired brain injuries suffer from social and community withdrawal that result in isolation from their peer groups. The review highlights the evidence of effectiveness of expressive art interventions in the form of theatre for populations with difficulties in physical, emotional, cognitive, or social functioning. A systematic search from 1995 to May 2007 was carried out and 10 studies were retrieved that focused on drama-based treatments and programs used to improve aspects of social or community integration for a broad range of populations. The studies were published in English in Canada, the USA, and the UK. Current evidence supports the effectiveness of drama therapy in terms of improvements in psychological health, emotional intelligence, cognitive function, social integration, but not necessarily community integration. The findings indicate that theatre skills training might facilitate community integration in addition to social integration in adolescents with acquired brain injuries if it is formally measured as such.

Malchiodi, C.A., Ed. (2008). *Creative interventions with traumatized children*.

ERIC Number: ED498764

**ABSTRACT:** Rich with case material and artwork samples, this volume demonstrates a range of creative approaches for facilitating children's emotional reparation and recovery from trauma. Contributors include experienced practitioners of play, art, music, movement and drama therapies, bibliotherapy, and integrative therapies, who describe step-by-step strategies for working with individual children, families, and groups. The case-based format makes the book especially practical and user-friendly. Specific types of stressful experiences addressed include parental loss, child abuse, accidents, family violence, bullying, and mass trauma. Broader approaches to promoting resilience and preventing posttraumatic problems in children at risk are also presented. Following a Foreword by Bruce D. Perry, the book divides into four sections and fifteen chapters. Section I: Creative Interventions and Children: Basics of Practice, contains: (1) Creative Interventions and Childhood Trauma (Cathy A. Malchiodi); and (2) Effective Practice with Traumatized Children: Ethics, Evidence, and Cultural Sensitivity (Cathy A. Malchiodi). Section II: Creative Interventions with Individuals, contains: (3) Expressive Therapy for Severe Maltreatment and Attachment Disorders: A Neuroscience Framework (P. Gussie Klorer); (4) Music and Grief Work with Children and Adolescents (Russell E. Hilliard); (5) Grieving in the Public Eye: Art Therapy with Children Who Lost Parents in the World Trade Center Attacks (Laura V. Loumeau-May); (6) Medical Art and Play Therapy with Accident Survivors (Elizabeth Sanders); (7) Creative Approaches to Minimize the Traumatic Impact of Bullying Behavior (Diane S. Safran and Elysa R. Safran); and (8) Trauma, Loss, and Bibliotherapy: The Healing Process of Stories (Cathy A. Malchiodi and Deanne Ginns-Gruenberg). Section III: Creative Interventions with Families and Groups, contains: (9) Creative Crisis Intervention Techniques with Children and Families (Lennis G. Echterling and Anne Stewart); (10) Working Creatively with Children and Their Families after Trauma: The Storied Life (Ann Cattanach); (11) Vanquishing Monsters: Drama Therapy for Treating Childhood Trauma in the Group Setting (Craig Haen); (12) A Group Art and Play Therapy Program for Children from Violent

Homes (Cathy A. Malchiodi); and (13) Interventions for Parents of Traumatized Children (William Steele and Cathy A. Malchiodi). Section IV: Creative Intervention as Prevention, contains: (14) Resilience and Posttraumatic Growth in Traumatized Children (Cathy A. Malchiodi, William Steele, and Caelan Kuban); and (15) Ready..., Set..., R.E.L.A.X.!: Relaxation Strategies with Children and Adolescents (Roger J. Klein).

## 2007

Chemtob, C.M., Lyshak-Stelzer, F., Singer, P., & St. John, P. (2007). **Art therapy for adolescents with posttraumatic stress disorder symptoms: A pilot study.** *Art Therapy: Journal of the American Art Therapy Association*, 24(4), 163-169.

ERIC Number: EJ791440

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ791440.pdf>

**ABSTRACT:** This study examined the efficacy of an adjunctive trauma-focused art therapy intervention in reducing chronic child posttraumatic stress disorder (PTSD) symptoms in an inpatient psychiatric facility for youth. We compared 2 treatment conditions, each delivered in one 1-hour group sessions over 16 weeks: (a) a trauma-focused expressive art therapy protocol (TF-ART) and (b) a treatment-as-usual (TAU) control condition, the standard arts-and-craft-making activity used at the two participating facilities. Youths were randomized to either treatment condition, and assessed before and after treatment. The principal outcome measure was the severity of PTSD symptoms measured using the UCLA PTSD Reaction Index, administered as an interview. There was a significant treatment-by-condition interaction indicating that adolescents in the TF-ART condition had greater reduction in PTSD symptom severity than youths in the TAU condition. TF-ART was not found to be associated with more behavioral problems during the treatment period. Results indicate that TF-ART may be a promising adjunctive treatment for inpatient adolescents with PTSD symptoms.

Drapeau, M-C., & Kronish, N. (2007). **Creative art therapy groups: A treatment modality for psychiatric outpatients.** *Art Therapy: Journal of the American Art Therapy Association*, 24(2), 76-81.

ERIC Number: EJ777028

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ777028.pdf>

ABSTRACT: This brief report examines the benefits of a creative art therapy group program for outpatients suffering from psychiatric disorders. Included is a review of relevant treatment outcomes literature on the effectiveness of group art therapy. The authors describe the Creative Art Therapy Group Program offered to adult psychiatric outpatients that is followed in various teaching hospitals. Case examples illustrate the clinical effectiveness of creative art therapy groups and highlight specific changes that improved patients' quality of life. The report's findings suggest that participating in a Creative Art Therapy Group Program is a beneficial treatment for patients in ambulatory psychiatric clinics.

## 2006

Jobling, A., Nichols, D., & Virji-Babul, N. (2006). **Children with Down syndrome: Discovering the joy of movement.** *Journal of Physical Education, Recreation & Dance (JOPERD)*, 77(6), 34-38, 53-54.

ERIC Number: EJ794465

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ794465.pdf>

ABSTRACT: Learning to move and moving to learn are vital aspects of every child's growth and development. Physical therapists and educators have consistently advocated the importance of being involved in a range of movement activities and games. Movement can provide an avenue for learning and interaction with others and can be linked to language and creative development. Children with Down syndrome (DS) often have a variety of health related problems and movement difficulties that may limit such opportunities. This article briefly outlines the perceptual-motor challenges typically faced by children with DS. Then, a framework for enhancing motor behavior using creative dance and Laban's concepts of movement is presented.

## 2005

Marks, R. (2005). **Dance-based exercise and tai chi and their benefits for people with arthritis: A review.** *Health Education*, 105(5), 374-391.

ERIC Number: EJ803161

ABSTRACT: Purpose: The first aim of this review article is to systematically summarize, synthesize, and critically evaluate the research base concerning the use of two art forms, namely, dance-based exercises and Tai Chi, as applied to people with arthritis (a chronic condition that results in considerable disability and, particularly in later life, severely impacts the life quality of the individual with this condition). A second is to provide directives for health educators who work or are likely to work with this population in the future. Design/methodology/approach: The material specifically focuses on examining the efficacy of dance therapy and Tai Chi as intervention strategies for minimizing arthritis disability and dependence and improving life quality. The paper includes a review of all relevant articles published in the English language on the topic. Findings: Collectively, these data reveal that dance-based exercises and Tai Chi—practiced widely in China for many centuries as an art form, as well as a religious ritual, relaxation technique, exercise, and self-defense method—may be very useful rehabilitation strategies for people with different forms of arthritis. Originality/value: While more research is indicated, health educators working with people who have chronic arthritis can safely recommend these two forms of exercise to most people with arthritis with the expectation that both will heighten the life quality of the individual with this condition.

Sze, S. (2005). *Effects of origami construction on children with disabilities.*

ERIC Number: ED490351

Available in full-text at: <http://files.eric.ed.gov/full-text/ED490351.pdf>

ABSTRACT: The purpose of this paper is to explain how origami can be used to foster life and academic skills in struggling students in rural schools. At-risk students often lack the social, behavioral, study, self-management, academic and life skills to face their daily challenges. This paper describes: (1) benefits of origami and its integration into various aspects of special education services, (2) operational definitions of origami, diversity and disabilities, (3) how origami is instructed, (4) consideration for origami and types of disabilities, and (5) cultural and linguistic impact in rural schools. A graphic instruction on how to paper fold a drinking cup is also provided.

## 2004

Diamond, E., Fox, C. (2004). **Just do it: Supporting a world of difference.** *Kairaranga*, 5(2), 25-27.  
ERIC Number: EJ914556

Available in full-text at: <http://files.eric.ed.gov/full-text/EJ914556.pdf>

ABSTRACT: As Physiotherapist and Occupational Therapist in Tai Tokerau, we have worked in collaboration with CCS Northland over the last two years to facilitate two day workshops for students attending mainstream schools that have moderate to severe physical disabilities. We chose venues that were community based so that the students could be out of their normal school environments. We used worksheets, discussion, guest speakers, group games and activities, the performing arts and adventure as tools to reach our objectives. The aim is to bring students together for mutual sharing and support to strengthen and empower. Students and their parents acknowledged and appreciated advantages of time together to share experiences, struggles and aspirations. This has led to friendships, networking for all and a request for continued workshops.

Sze, S., Yu, S. (2004). **Educational benefits of music in an inclusive classroom.**

ERIC Number: ED490348

Available in full-text at: <http://files.eric.ed.gov/full-text/ED490348.pdf>

ABSTRACT: The purpose of this study is to highlight literature concerning the effects of music therapy on children with disabilities. The paper is organized in the following sections: (1) background of music and children with disabilities, (2) the aims of music therapy, (3) main contributions to cognitive, biopsychosocial development of children with disabilities, (4) implications for learning, and (5) implications for using music to accommodate children with disabilities in an inclusive classroom.

## 2002

Kim, J., Lee, H-S., Lee, S.B., & Lee, S.H. (2002). **Encouraging social skills through dance: An inclusion program in Korea.** *TEACHING Exceptional Children*, 34(5), 40-44.

ERIC Number: EJ645169

ABSTRACT: Two American teachers in a Korean school used their expertise with song and dance to

teach social skills to an inclusive group of kindergartners. The group of 10 included three children with disabilities. The children with disabilities showed behavior changes in both appropriate response behaviors and inappropriate response behaviors.

## 1997

Shore, A. (1997). **Promoting wisdom: The role of art therapy in geriatric settings.** *Art Therapy: Journal of the American Art Therapy Association*, 14(3), 172-77.

ERIC Number: EJ562296

ABSTRACT: Explores adult developmental theories regarding implications for art therapy with impaired elderly. Examines the struggle inherent in the creative art process as a means to facilitate developmental struggle. Claims that artistic processes facilitate struggles, which can elicit conflict resolution and utilization of mature defenses with even severely impaired patients.

## 1996

Church, R.P., & Smitheman-Brown, V. (1996). **Mandala drawing: Facilitating creative growth in children with ADD Or ADHD.** *Art Therapy: Journal of the American Art Therapy Association*, 13(4), 252-60.

ERIC Number: EJ550322

ABSTRACT: Investigates the creativity and behavior precipitated by employing the mandala as an active centering device for children with Attention-Deficit Disorder or Attention-Deficit Hyperactivity Disorder. Drawings were requested and rated according to the Formal Elements Art Therapy Scale. Preliminary findings indicate that attentional abilities increased while impulsive behaviors decreased.

## 1995

Grayson, D.E. (1995). **The bridge of hope: The use of the creative arts therapies in group treatment for people with AIDS and HIV infection.** *Journal of Poetry Therapy*, 8(3), 123-33.

ERIC Number: EJ506459

ABSTRACT: Describes the use of the creative arts as therapeutic techniques in group treatment for people with AIDS and HIV infection. Gives particular attention to poetry and art techniques in workshops on "intimacy and dating."

McGraw, M.K. (1995). **The Art Studio: A studio-based art therapy program.** *Art Therapy: Journal of the American Art Therapy Association*, 12(3), 167-74. ERIC Number: EJ514499

ABSTRACT: Describes the history and development of the Art Studio, a studio-based art therapy program in Cleveland, Ohio, and discusses specific patient needs that are uniquely addressed by the Art Studio model. The Art Studio was developed for use by medically ill and physically disabled persons, and is the result of a unique cooperative relationship between a nonprofit organization and a county hospital.

#### 1994

Carrigan, J. (1994). **Attitudes about persons with disabilities: A pilot program.** *Art Education*, 47(6), 16-21.

ERIC Number: EJ496990

ABSTRACT: Asserts that art teachers must be prepared to understand and work with persons with disabilities. Describes a one-semester pilot program for art education students designed to examine what kinds of academic preparation and practicum experiences are needed.

#### 1992

Carmichael, K.D. (1992). **Play therapy with special populations.**

ERIC Number: ED360577

Available in full-text at: <http://files.eric.ed.gov/full-text/ED360577.pdf>

ABSTRACT: This paper notes that therapists often feel unqualified to deal with special populations of children because of a lack of understanding of the universalness of play therapy. Suggestions are offered for beginning play therapists who may work with a number of special populations of children. It is recommended that the social learning approach to play therapy be used when working with children who have a gender identity disorder, defined as distress about one's assigned sex and the desire to be (or insistence that one is) the opposite sex. A section on working with culturally different children considers how people are defined within different cultures and notes that, with minority children, a more structured approach to play therapy is advised. For therapists working with physically challenged children, it is suggested that the therapist accept and not protect

the child from feelings of rage, anger, disappointment, and depression. The importance of allowing the child as much independence as safety permits is emphasized. Suggestions are made for adapting toys or creative arts materials for use with intellectually challenged children. Games, techniques, and materials appropriate for challenged children are described and their use is discussed. The final section of the paper deals with play therapy techniques that are appropriate for use with chronically ill, terminally ill, and grieved children.

Levy, F.J., (Ed.). (1992). **Dance movement therapy: Healing art. [Revised Edition.]**

ERIC Number: ED352336

ABSTRACT: The concern of this text is the need that many individuals have for nonverbal, primarily physical forms of expression, and how this need has fueled the development of a new psychomotor discipline. The book treats the theory and practice of dance therapy, and examines the entire field from its inception through the present. Dance therapy, the use of dance/movement as a healing tool, is rooted in the idea that the body and mind are inseparable. The book is organized into three units. Unit 1, containing three sections and eight chapters, presents a view of the early development of the field of dance/movement therapy, along with an historical and chronological description of the profession as described in the published and privately circulated literature about six major pioneers in the field (Marian Chace, Blanche Evan, Liljan Espenak, Mary Whitehouse, Trudi Schoop, and Alma Hawkins) and their followers and proteges. Unit 2, "Subsequent Development of Dance Therapy," includes three sections: Laban Movement Analysis and Dance Therapy in the United States, Further Expansion of Dance Therapy Theory and Practice (East and West Coast influences, and psychotherapy), and Dance Therapy with Other Patient Groups. Unit 3 contains two sections which present respectively, results of a survey of registered dance/movement therapists and dance therapy heritage trees--the spread of influence of the major pioneers. Three appendices provide: names of survey respondents, a list of American Dance Therapy Association members, and a copy of the dance therapy questionnaire. A bibliography of approximately 800 references completes the volume.



*Documents from the Cochrane Database of Systematic Reviews search at [www.thecochranelibrary.org](http://www.thecochranelibrary.org) are listed below:*

## 2015

Bradt, J., Goodill, S.W., & Shim, M. (2015). **Dance/movement therapy for improving psychological and physical outcomes in cancer patients.** *Cochrane Database of Systematic Reviews, 1*, DOI: 10.1002/14651858.CD007103.pub3.

ID: CD007103

**ABSTRACT:** Background: Current cancer care increasingly incorporates psychosocial interventions. Cancer patients use dance/movement therapy to learn to accept and reconnect with their bodies, build new self-confidence, enhance self-expression, address feelings of isolation, depression, anger and fear and to strengthen personal resources. Objectives: To update the previously published review that examined the effects of dance/movement therapy and standard care versus standard care alone or standard care and other interventions on psychological and physical outcomes in patients with cancer. Search methods: We searched the Cochrane Central Register of Controlled Trials (CENTRAL) (The Cochrane Library 2014, Issue 6), MEDLINE (OvidSP, 1950 to June week 4, 2014), EMBASE (OvidSP, 1980 to 2014 week 26), CINAHL (EBSCOhost, 1982 to July 15 2014), PsycINFO (EBSCOhost, 1806 to July 15 2014), LILACS (Virual Health Library, 1982 to July 15 2014), Science Citation Index (ISI, 1974 to July 15 2014), CancerLit (1983 to 2003), International Bibliography of Theatre and Dance (1989 to July 15 2014), the National Research Register (2000 to September 2007), Proquest Digital Dissertations, ClinicalTrials.gov, and Current Controlled Trials (all to July 15 2014). We hand-searched dance/movement therapy and related topics journals, reviewed reference lists and contacted experts. There was no language restriction. Selection criteria: We included all randomized and quasi-randomized controlled trials of dance/movement therapy interventions for improving psychological and physical outcomes in patients with cancer. We considered studies only if dance/movement therapy was provided by a formally trained dance/movement therapist or by trainees in a formal dance/movement therapy program. Data collection and analysis: Two review authors independently extracted the data and assessed the methodological

quality, seeking additional information from the trial researchers when necessary. Results were presented using standardized mean differences. Main results: We identified one new trial for inclusion in this update. In total, the evidence for this review rests on three studies with a total of 207 participants. We found no evidence for an effect of dance/movement therapy on depression (standardized mean difference (SMD) = 0.02, 95 percent confidence interval (CI) -0.28 to 0.32, P = 0.89, I<sup>2</sup> = 0 percent) (two studies, N = 170), stress (SMD = -0.18, 95 percent CI -0.48 to 0.12, P = 0.24, I<sup>2</sup> = 0 percent) (two studies, N = 170), anxiety (SMD = 0.21, 95 percent CI -0.09 to 0.51 P = 0.18, I<sup>2</sup> = 0 percent) (two studies, N = 170), fatigue (SMD = -0.36, 95 percent -1.26 to 0.55, P = 0.44, I<sup>2</sup> = 80 percent) (two studies, N = 170) and body image (SMD = -0.13, 95 percent CI -0.61 to 0.34, P = 0.58, I<sup>2</sup> = 0 percent) (two studies, N = 68) in women with breast cancer. The data of one study with moderate risk of bias suggested that dance/movement therapy had a large beneficial effect on 37 participants' quality of life (QoL) (SMD = 0.89, 95 percent CI 0.21 to 1.57). One study with a high risk of bias reported greater improvements in vigor and greater reduction in somatization in the dance/movement therapy group compared to a standard care control group (N = 31). The individual studies did not find support for an effect of dance/movement therapy on mood, mental health, and pain. It is unclear whether this was due to ineffectiveness of the treatment, inappropriate outcome measures or limited power of the trials. Finally, the results of one study did not find evidence for an effect of dance/movement therapy on shoulder range of motion (ROM) or arm circumference in 37 women who underwent a lumpectomy or breast surgery. However, this was likely due to large within-group variability for shoulder ROM and a limited number of participants with lymphedema. Two studies presented moderate risk of bias and one study high risk of bias. Therefore, overall, the quality of the evidence is very low. Authors' conclusions: We did not find support for an effect of dance/movement therapy on depression, stress, anxiety, fatigue and body image. The findings of individual studies suggest that dance/movement therapy may have a beneficial effect on QoL, somatization, and vigor. However, the limited number of studies prevents us from drawing conclusions concerning the effects of dance/movement therapy on psychological and physical outcomes in cancer patients.

Karkou, V., Meekums, B., & Nelson, E.A. (2015). **Dance movement therapy for depression.** *Cochrane Database of Systematic Reviews*, 2, DOI: 10.1002/14651858.CD009895.pub2.

ID: CD009895

**ABSTRACT:** Background: Depression is a debilitating condition affecting more than 350 million people worldwide (WHO 2012) with a limited number of evidence-based treatments. Drug treatments may be inappropriate due to side effects and cost, and not everyone can use talking therapies. There is a need for evidence-based treatments that can be applied across cultures and with people who find it difficult to verbally articulate thoughts and feelings. Dance movement therapy (DMT) is used with people from a range of cultural and intellectual backgrounds, but effectiveness remains unclear. Objectives: To examine the effects of DMT for depression with or without standard care, compared to no treatment or standard care alone, psychological therapies, drug treatment, or other physical interventions. Also, to compare the effectiveness of different DMT approaches. Search methods: The Cochrane Depression, Anxiety and Neurosis Review Group's Specialized Register (CCDANCTR-Studies and CCDANCTR-References) and CINAHL were searched (to 2 Oct 2014) together with the World Health Organization's International Clinical Trials Registry Platform (WHO ICTRP) and ClinicalTrials.gov. The review authors also searched the Allied and Complementary Medicine Database (AMED), the Education Resources Information Center (ERIC) and Dissertation Abstracts (to August 2013), hand-searched bibliographies, contacted professional associations, educational programs and dance therapy experts worldwide. Selection criteria: Inclusion criteria were: randomized controlled trials (RCTs) studying outcomes for people of any age with depression as defined by the trialist, with at least one group being DMT. DMT was defined as: participatory dance movement with clear psychotherapeutic intent, facilitated by an individual with a level of training that could be reasonably expected within the country in which the trial was conducted. For example, in the USA this would either be a trainee, or qualified and credentialed by the American Dance Therapy Association (ADTA). In the UK, the therapist would either be in training with, or accredited by, the Association for Dance Movement Psychotherapy (ADMP, UK). Similar professional bodies exist in Europe, but in some countries (e.g. China) where the profession is

in development, a lower level of qualification would mirror the situation some decades previously in the USA or UK. Hence, the review authors accepted a relevant professional qualification (e.g. nursing or psychodynamic therapies) plus a clear description of the treatment that would indicate its adherence to published guidelines including Levy 1992, ADMP UK 2015, Meekums 2002, and Karkou 2006. Data collection and analysis: Study methodological quality was evaluated and data were extracted independently by the first two review authors using a data extraction form, the third author acting as an arbitrator. Main results: Three studies totaling 147 participants (107 adults and 40 adolescents) met the inclusion criteria. Seventy-four participants took part in DMT treatment, while 73 comprised the control groups. Two studies included male and female adults with depression. One of these studies included outpatient participants; the other study was conducted with inpatients at an urban hospital. The third study reported findings with female adolescents in a middle-school setting. All included studies collected continuous data using two different depression measures: the clinician-completed Hamilton Depression Rating Scale (HAM-D); and the Symptom Checklist-90-R (SCL-90-R) (self-rating scale). Statistical heterogeneity was identified between the three studies. There was no reliable effect of DMT on depression (SMD -0.67 95 percent CI -1.40 to 0.05; very low quality evidence). A planned subgroup analysis indicated a positive effect in adults, across two studies, 107 participants, but this failed to meet clinical significance (SMD -7.33 95 percent CI -9.92 to -4.73). One adult study reported drop-out rates, found to be non-significant with an odds ratio of 1.82 [95 percent CI 0.35 to 9.45]; low quality evidence. One study measured social functioning, demonstrating a large positive effect (MD -6.80 95 percent CI -11.44 to -2.16; very low quality evidence), but this result was imprecise. One study showed no effect in either direction for quality of life (0.30 95 percent CI -0.60 to 1.20; low quality evidence) or self-esteem (1.70 95 percent CI -2.36 to 5.76; low quality evidence). Authors' conclusions: The low-quality evidence from three small trials with 147 participants does not allow any firm conclusions to be drawn regarding the effectiveness of DMT for depression. Larger trials of high methodological quality are needed to assess DMT for depression, with economic analyses and acceptability measures and for all age groups.

2014

Elefant, C., Geretsegger, M., Gold, C., Mössler, K.A. (2014). **Music therapy for people with autism spectrum disorder.** *Cochrane Database of Systematic Reviews*, 6, DOI: 10.1002/14651858.CD004381.pub3.

ID: CD004381

**ABSTRACT:** Background: The central impairments of people with autism spectrum disorder (ASD) affect social interaction and communication. Music therapy uses musical experiences and the relationships that develop through them to enable communication and expression, thus attempting to address some of the core problems of people with ASD. The present version of this review on music therapy for ASD is an update of the original Cochrane review published in 2006. Objectives: To assess the effects of music therapy for individuals with ASD. Search methods: We searched the following databases in July 2013: CENTRAL, Ovid MEDLINE, EMBASE, LILACS, PsycINFO, CINAHL, ERIC, ASSIA, Sociological Abstracts, and Dissertation Abstracts International. We also checked the reference lists of relevant studies and contacted investigators in person. Selection criteria: All randomized controlled trials (RCTs) or controlled clinical trials comparing music therapy or music therapy added to standard care to ‘placebo’ therapy, no treatment, or standard care for individuals with ASD were considered for inclusion. Data collection and analysis: Two authors independently selected studies, assessed risk of bias, and extracted data from all included studies. We calculated the pooled standardized mean difference (SMD) and corresponding 95 percent confidence interval (CI) for continuous outcomes to allow the combination data from different scales and to facilitate the interpretation of effect sizes. Heterogeneity was assessed using the  $I^2$  statistic. In cases of statistical heterogeneity within outcome subgroups, we examined clients’ age, intensity of therapy (number and frequency of therapy sessions), and treatment approach as possible sources of heterogeneity. Main results: We included 10 studies (165 participants) that examined the short- and medium-term effect of music therapy interventions (one week to seven months) for children with ASD. Music was superior to ‘placebo’ therapy or standard care with respect to the primary outcomes social interaction within the therapy context (SMD 1.06, 95 percent

CI 0.02 to 2.10, 1 RCT, n = 10); generalized social interaction outside of the therapy context (SMD 0.71, 95 percent CI 0.18 to 1.25, 3 RCTs, n = 57, moderate quality evidence), non-verbal communicative skills within the therapy context (SMD 0.57, 95 percent CI 0.29 to 0.85, 3 RCTs, n = 30), verbal communicative skills (SMD 0.33, 95 percent CI 0.16 to 0.49, 6 RCTs, n = 139), initiating behavior (SMD 0.73, 95 percent CI 0.36 to 1.11, 3 RCTs, n = 22, moderate quality evidence), and social-emotional reciprocity (SMD 2.28, 95 percent CI 0.73 to 3.83, 1 RCT, n = 10, low quality evidence). There was no statistically significant difference in non-verbal communicative skills outside of the therapy context (SMD 0.48, 95 percent CI -0.02 to 0.98, 3 RCTs, n = 57, low quality evidence). Music therapy was also superior to ‘placebo’ therapy or standard care in secondary outcome areas, including social adaptation (SMD 0.41, 95 percent CI 0.21 to 0.60, 4 RCTs, n = 26), joy (SMD 0.96, 95 percent CI 0.04 to 1.88, 1 RCT, n = 10), and quality of parent-child relationships (SMD 0.82, 95 percent CI 0.13 to 1.52, 2 RCTs, n = 33, moderate quality evidence). None of the included studies reported any adverse effects. The small sample sizes of the studies limit the methodological strength of these findings. Authors’ conclusions: The findings of this updated review provide evidence that music therapy may help children with ASD to improve their skills in primary outcome areas that constitute the core of the condition including social interaction, verbal communication, initiating behavior, and social-emotional reciprocity. Music therapy may also help to enhance non-verbal communication skills within the therapy context. Furthermore, in secondary outcome areas, music therapy may contribute to increasing social adaptation skills in children with ASD and to promoting the quality of parent-child relationships. In contrast to the studies included in an earlier version of this review published in 2006, the new studies included in this update enhanced the applicability of findings to clinical practice. More research using larger samples and generalized outcome measures is needed to corroborate these findings and to examine whether the effects of music therapy are enduring. When applying the results of this review to practice, it is important to note that the application of music therapy requires specialized academic and clinical training.

## 2013

Ren, J., & Xia, J. (2013). **Dance therapy for schizophrenia.** *Cochrane Database of Systematic Reviews*, 10, DOI: 10.1002/14651858.CD006868.pub3.

ID: CD006868

**ABSTRACT:** Background: Dance therapy or dance movement therapy (DMT) is defined as ‘the psychotherapeutic use of movement as a process which furthers the emotional, social, cognitive, and physical integration of the individual’. It may be of value for people with developmental, medical, social, physical or psychological impairments. Dance therapy can be practiced in mental health rehabilitation units, nursing homes, day care centers and incorporated into disease prevention and health promotion programs. Objectives: To evaluate the effects of dance therapy for people with schizophrenia or schizophrenia-like illnesses compared with standard care and other interventions. Search methods: We updated the original July 2007 search of the Cochrane Schizophrenia Group’ register in July 2012. We also searched Chinese main medical databases. Selection criteria: We included one randomized controlled trial (RCT) comparing dance therapy and related approaches with standard care or other psychosocial interventions for people with schizophrenia. Data collection and analysis: We reliably selected, quality assessed and extracted data. For continuous outcomes, we calculated a mean difference (MD); for binary outcomes we calculated a fixed-effect risk ratio (RR) and their 95 percent confidence intervals (CI). We created a ‘Summary of findings’ table using the GRADE approach. Main results: We included one single blind study (total n = 45) of reasonable quality. It compared dance therapy plus routine care with routine care alone. Most people tolerated the treatment package but nearly 40 percent were lost in both groups by four months (1 RCT n = 45, RR 0.68 95 percent CI 0.31 to 1.51, low quality evidence). The Positive and Negative Syndrome Scale (PANSS) average endpoint total scores were similar in both groups (1 RCT n = 43, MD -0.50 95 percent CI -11.80 to 10.80, moderate quality evidence) as were the positive sub-scores (1 RCT n = 43, MD 2.50 CI -0.67 to 5.67, moderate quality evidence). At the end of treatment, significantly more people in the dance therapy group had a greater than 20 percent reduction in PANSS negative symptom score (1 RCT n = 45, RR 0.62 CI 0.39 to 0.97, moderate quality evidence), and overall, average negative endpoint scores were lower

(1 RCT n = 43, MD -4.40 CI -8.15 to -0.65, moderate quality evidence). There was no difference in satisfaction score (average Client’s Assessment of Treatment Scale (CAT) score, 1 RCT n = 42, MD 0.40 CI -0.78 to 1.58, moderate quality evidence) and quality of life data were also equivocal (average Manchester Short Assessment of Quality of life (MANSA) score, 1 RCT n = 39, MD 0.00 CI -0.48 to 0.48, moderate quality evidence). Authors’ conclusions: Based on predominantly moderate quality data, there is no evidence to support - or refute - the use of dance therapy in this group of people. This therapy remains unproven and those with schizophrenia, their carers, trialists and funders of research may wish to encourage future work to increase high quality evidence in this area.

## 2010

Bradt, J., Dileo, C., Magee, W.L., McGilloway, E., & Wheeler, B.L. (2010). **Music therapy for acquired brain injury.** *Cochrane Database of Systematic Reviews*, 7, DOI: 10.1002/14651858.CD006787.pub2. ID: CD006787

**ABSTRACT:** Background: Acquired brain injury (ABI) can result in impairments in motor function, language, cognition, sensory processing and emotional disturbances. This may severely reduce a survivor’s quality of life. Music therapy has been used in rehabilitation to stimulate brain functions involved in movement, cognition, speech, emotions and sensory perceptions. A systematic review is needed to gauge the efficacy of music therapy as a rehabilitation intervention for people with ABI. Objectives: To examine the effects of music therapy with standard care versus standard care alone or standard care combined with other therapies on gait, upper extremity function, communication, mood and emotions, social skills, pain, behavioral outcomes, activities of daily living and adverse events. Search methods: We searched the Cochrane Stroke Group Trials Register (February 2010), the Cochrane Central Register of Controlled Trials (The Cochrane Library Issue 2, 2009), MEDLINE (July 2009), EMBASE (August 2009), CINAHL (March 2010), PsycINFO (July 2009), LILACS (August 2009), AMED (August 2009) and Science Citation Index (August 2009). We hand-searched music therapy journals and conference proceedings, searched dissertation and specialist music databases, trials and research registers, reference lists, and contacted experts and music therapy associations. There

was no language restriction. Selection criteria: Randomized and quasi-randomized controlled trials that compared music therapy interventions and standard care with standard care alone or combined with other therapies for people older than 16 years of age who had acquired brain damage of a non-degenerative nature and were participating in treatment programs offered in hospital, outpatient or community settings. Data collection and analysis: Two review authors independently assessed methodological quality and extracted data. We present results using mean differences (using post-test scores) as all outcomes were measured with the same scale. Main results: We included seven studies (184 participants). The results suggest that rhythmic auditory stimulation (RAS) may be beneficial for improving gait parameters in stroke patients, including gait velocity, cadence, stride length, and gait symmetry. These results were based on two studies that received a low risk of bias score. There were insufficient data to examine the effect of music therapy on other outcomes. Authors' conclusions: RAS may be beneficial for gait improvement in people with stroke. These results are encouraging, but more RCTs are needed before recommendations can be made for clinical practice. More research is needed to examine the effects of music therapy on other outcomes in people with ABI.

## 2005

Milnes, D., & Ruddy, R. (2005). **Art therapy for schizophrenia or schizophrenia-like illnesses.** *Cochrane Database of Systematic Reviews*, 4, DOI: 10.1002/14651858.CD003728.pub2.

ID: CD003728

**ABSTRACT:** Background: Many people with schizophrenia or schizophrenia-like illnesses continue to experience symptoms in spite of medication. In addition to medication, creative therapies, such as art therapy, may be helpful. Art therapy allows exploration of the patient's inner world in a non-threatening way through a therapeutic relationship and the use of art materials. It was mainly developed in adult psychiatric inpatient units and was designed for use with people for whom verbal psychotherapy would be impossible. Objectives: To review the effects of art

therapy as an adjunctive treatment for schizophrenia compared with standard care and other psychosocial interventions. Search methods: We updated the search of the Cochrane Schizophrenia Group's Register (February 2005), hand searched reference lists and 'Inscape' (the Journal of the British Association of Art Therapists), and contacted relevant authors. Selection criteria: We included all randomized controlled trials that compared art therapy with standard care or other psychosocial interventions for schizophrenia. Data collection and analysis: We reliably selected, quality assessed and extracted data from the studies. We excluded data where more than 50 percent of participants in any group were lost to follow up. For continuous outcomes we calculated a weighted mean difference and its 95 percent confidence interval. For binary outcomes we calculated a fixed effects risk ratio (RR), its 95 percent confidence interval (CI) and a number needed to treat (NNT). Main results: The search identified 61 reports but only two studies (total n=137) met the inclusion criteria. Both compared art therapy plus standard care with standard care alone. More people completed the therapy if allocated to the art therapy group compared with standard care in the short (n=90, 1 RCT, RR 0.97 CI 0.41 to 2.29), medium (n=47, 1 RCT, RR 0.34 CI 0.15 to 0.80) and long term (n=47, 1 RCT, RR 0.96 CI 0.57 to 1.60). Data from one mental state measure (SANS) showed a small but significant difference favoring the art-therapy group (n=73, 1 RCT, WMD -2.3 CI -4.10 to -0.5). In the short term, a measure of social functioning (SFS) showed no clear difference between groups in endpoint scores (n=70, 1 RCT, WMD 7.20 CI -2.53 to 16.93) and quality of life, as measured by the PerQoL, did not indicate effects of art therapy (n=74, 1 RCT, WMD 0.1 CI -2.7 to 0.47). Authors' conclusions: Randomized studies are possible in this field. Further evaluation of the use of art therapy for serious mental illnesses is needed as its benefits or harms remain unclear.

2003

Bruinsma, M.S., Scholten, R.J.P.M., & Vink, A.C. (2003). **Music therapy for people with dementia.** *Cochrane Database of Systematic Reviews*, 4, DOI: 10.1002/14651858.CD003477.pub2.

ID: CD003477

**ABSTRACT:** Background: Dementia is a clinical syndrome with a number of different causes which is characterized by deterioration in cognitive functions. Research is pursuing a variety of promising findings for the treatment of dementia. Pharmacological interventions are available but have limited ability to treat many of the syndrome's features. Little research has been directed towards non-pharmacological treatments. In this review the evidence for music therapy as a treatment is examined. Objectives: To assess the effects of music therapy in the treatment of behavioral, social, cognitive and emotional problems of older people with dementia, in relation to the type of music therapy intervention. Search methods: ALOIS, the Specialized Register of the Cochrane Dementia and Cognitive Improvement Group (CDCIG) was searched on 14 April 2010 using the terms: music therapy, music, singing, sing, auditory stimulation. Additional searches were also carried out on 14 April 2010 in the major healthcare databases MEDLINE, EMBASE, PSYCinfo, CINAHL and LILACS, trial registers and grey literature sources to ensure the search was as up-to-date and as comprehensive as possible. Selection criteria: Randomized controlled trials that reported clinically relevant outcomes associated with music therapy in treatment of behavioral, social, cognitive and emotional problems of older people with dementia. Data collection and analysis: Two reviewers screened the retrieved studies independently for methodological quality. Data from accepted studies were independently extracted by the reviewers. Main results: Ten studies were included. The methodological quality of the studies was generally poor and the study results could not be validated or pooled for further analyses. Authors' conclusions: The methodological quality and the reporting of the included studies were too poor to draw any useful conclusions.

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Documents from the National Library of Medicine PubMed search at [www.pubmed.com](http://www.pubmed.com) are listed below:

2015

Bhriain, O.N., Clifford, A.M., Morris, M.E., Saunders, J., & Shanahan, J. (2015). **Dance for people with Parkinson disease: What is the evidence telling us?** *Archives of Physical Medicine and Rehabilitation*, 96(1), 141-53.

PMID: 25223491

**ABSTRACT:** OBJECTIVES: (1) To appraise and synthesize the literature on dance interventions for individuals with Parkinson disease (PD); (2) to provide information regarding the frequency, intensity, duration, and type of dance used in these programs; and (3) to inform the development of future studies evaluating dance interventions in this population. DATA SOURCES: Eight databases (MEDLINE, Cumulative Index to Nursing and Allied Health Literature [CINAHL], the Allied and Complementary Medicine Database [AMED], SPORTDiscus, PubMed, PubMed Central, Sage, and ScienceDirect) were electronically searched in April 2014. The references lists from the included articles were also searched. STUDY SELECTION: Studies retrieved during the literature search were reviewed by two reviewers independently. Suitable articles were identified by applying inclusion criteria. DATA EXTRACTION: Data regarding participants and the frequency, intensity, duration, and type of dance form used were extracted. The effect that each dance program had on defined outcomes and the feasibility of each program were also reviewed. DATA SYNTHESIS: Thirteen articles were identified. The quality of studies varied, and methodological limitations were evident in some. The evidence evaluated suggests that two 1-hour dance classes per week over 10 to 13 weeks may have beneficial effects on endurance, motor impairment, and balance. CONCLUSIONS: Dance may be helpful for some people with PD. This article provides preliminary information to aid clinicians when implementing dance programs for people with PD. Higher-quality multicenter studies are needed to determine the effect of other dance genres and the optimal therapy volume and intensity.

Chen, C.H., Chou, M.C., Lai, C.L., Li, C.H., Liu, C.K., & Yang, Y.H. (2015). **Adjunct effect of music therapy on cognition in Alzheimer's disease in Taiwan: A pilot study.** *Neuropsychiatric Disease and Treatment*, 11, 291-6.

PMID: 25678794

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4322884/pdf/ndt-11-291.pdf>

**ABSTRACT:** PURPOSE: Music therapy (MT) reviews have found beneficial effects on behaviors and social interaction in Alzheimer's disease (AD) but inconsistent effects on cognition. The purpose of the study was to evaluate the adjunct effect of long-term and home-based MT in AD patients under pharmacological treatment. PATIENTS AND METHODS: Mild AD cases (clinical dementia rating =0.5~1) were consecutively recruited and voluntarily separated into an MT group or control group (CG) for 6 months. Outcome assessments included Cognitive Abilities Screening Instrument (CASI), CASI-estimated mini-mental state examination, clinical dementia rating with sum of box scores, and neuropsychiatric inventory. The MT interventions were Mozart's Sonata (KV 448) and Pachelbel's Canon, listening with headphones for 30 minutes daily in the morning and before sleep, respectively. RESULTS: Forty-one cases (MT versus CG number =20 versus 21) were analyzed. Adjusted differences of CASI-estimated mini-mental state examination and CASI after 6 months in the MT group were slightly less decreased than the CG without statistical significance. In further analysis of cognitive domains of CASI, the adjusted difference of abstraction domain in the MT group was significantly better than the CG. CONCLUSION: Although there were no apparent additional benefits of this MT on the global cognition and daily functioning in mild AD patients, it confirms the adjunct cognition effect on the abstraction. This MT contributes to the supplementary treatment of AD.

DeSouza, J.F., Dhama, P., & Moreno, S. (2015). **New framework for rehabilitation – Fusion of cognitive and physical rehabilitation: The hope for dancing.** *Frontiers in Psychology*, 5, 1478.

PMID: 25674066

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4309167/pdf/fpsyg-05-01478.pdf>

**ABSTRACT:** Neurorehabilitation programs are commonly employed with the goal to help restore functionality in patients. However, many of these therapies report only having a small impact. In response to the need for more effective and innovative approaches, rehabilitative methods that take advantage of the neuroplastic properties of the brain have been used to aid with both physical and cognitive impairments. Following this path of reasoning, there has been a particular interest in the use of physical exercise as well as musical related activities. Although such therapies demonstrate potential, they also have limitations that may affect their use, calling for further exploration. Here, we propose dance as a potential parallel to physical and music therapies. Dance may be able to aid with both physical and cognitive impairments, particularly due to its combined nature of including both physical and cognitive stimulation. Not only does it incorporate physical and motor skill related activities, but it can also engage various cognitive functions such as perception, emotion, and memory, all while done in an enriched environment. Other more practical benefits, such as promoting adherence due to being enjoyable, are also discussed, along with the current literature on the application of dance as an intervention tool, as well as future directions required to evaluate the potential of dance as an alternative therapy in neurorehabilitation.

Eum, Y., & Yim, J. (2015). **Literature and art therapy in post-stroke psychological disorders.** *The Tohoku journal of Experimental Medicine*, 235(1), 17-23.

PMID: 25744067

Available in full-text at: [https://www.jstage.jst.go.jp/article/tjem/235/1/235\\_17/\\_pdf](https://www.jstage.jst.go.jp/article/tjem/235/1/235_17/_pdf)

**ABSTRACT:** Stroke is one of the leading causes of morbidity and long-term disability worldwide, and post-stroke depression (PSD) is a common and serious psychiatric complication of stroke. PSD makes patients have more severe deficits in activities of daily living, a worse functional outcome, more severe cognitive deficits and increased mortality as compared to stroke patients without depression. Therefore, to reduce or prevent mental problems of stroke patients, psychological treatment should be recommended.

Literature and art therapy are highly effective psychological treatment for stroke patients. Literature therapy divided into poetry and story therapy is an assistive tool that treats neurosis as well as emotional or behavioral disorders. Poetry can add impression to the lethargic life of a patient with PSD, thereby acting as a natural treatment. Story therapy can change the gloomy psychological state of patients into a bright and healthy story, and therefore can help stroke patients to overcome their emotional disabilities. Art therapy is one form of psychological therapy that can treat depression and anxiety in stroke patients. Stroke patients can express their internal conflicts, emotions, and psychological status through art works or processes and it would be a healing process of mental problems. Music therapy can relieve the suppressed emotions of patients and add vitality to the body, while giving them the energy to share their feelings with others. In conclusion, literature and art therapy can identify the emotional status of patients and serve as a useful auxiliary tool to help stroke patients in their rehabilitation process.

George, O., & Kasinathan, J. (2015). **Mural art therapy for young offenders hospitalized with a mental illness.** *Australasian Psychiatry*, 23(1), 49-53.

PMID: 25519999

ABSTRACT: OBJECTIVE: To describe a mural art therapy project completed within an adolescent unit of a secure forensic psychiatric hospital. METHOD: The planning, implementation and consecutive stages of the mural art therapy project are described. Pertinent themes are identified. RESULTS: A cohort of adolescent forensic inpatients was engaged in a group therapeutic process involving collaboration, design and the completion of an art mural. The participants generally approved of the project and identified themes of gaining a sense of achievement, empowerment, teamwork, involvement and ownership. The art mural transformed and improved the visual and spatial environment of the Adolescent unit courtyard. CONCLUSIONS: Mural art therapy was acceptable to young offenders hospitalized with mental illness, which has relevance for adolescent psychiatric units and youth detention centers.

Iliya, Y.A. (2015). **Music therapy as grief therapy for adults with mental illness and complicated grief: A pilot study.** *Death Studies*, 2, 1-12.

PMID: 25730407

ABSTRACT: This randomized, controlled, mixed-methods pilot study examined the effectiveness and experiences of grief-specific music therapy, in addition to standard care, with adults (N = 10) who have complicated grief and mental illness, as compared to standard care alone. The study tested Worden's (2009) theories of grief therapy as well as a new grief-specific music therapy intervention, based on Shear, Frank, Houck, and Reynolds' (2005) imaginal dialogue intervention and Austin's (2008) method of vocal psychotherapy. Results demonstrated that participants in the experimental group had a greater decrease of grief symptoms, as measured by the ICG-R, as compared with the control group.

Matthews, S. (2015). **Dementia and the power of music therapy.** *Bioethics*, doi: 10.1111/bioe.12148.

PMID: 25655812

Dementia is now a leading cause of both mortality and morbidity, particularly in western nations, and current projections for rates of dementia suggest this will worsen. More than ever, cost effective and creative non-pharmacological therapies are needed to ensure we have an adequate system of care and supervision. Music therapy is one such measure, yet to date statements of what music therapy is supposed to bring about in ethical terms have been limited to fairly vague and under-developed claims about an improvement in well-being. This article identifies the relevant sense of wellbeing at stake in the question of dementia therapies of this type. In broad terms the idea is that this kind of therapy has a restorative effect on social agency. To the extent that music arouses a person through its rhythms and memory-inducing effects, particularly in communal settings, it may give rise to the recovery of one's narrative agency, and in turn allow for both carer and patient to participate in a more meaningful and mutually engaging social connection.

2014

Abe, T., Handa, S., Honda, T., Kamioka, H., Kitayuguchi, J., Mutoh, Y., Okada, S., Okuizumi, H., Oshio, T., Park, H., Park, S.J., Tsuruoka, K., Tsutani, K., & Yamada, M. (2014). **Effectiveness of music therapy: A summary of systematic reviews based on randomized controlled trials of music interventions.** *Patient Preference and Adherence*, 8, 727-54. PMID: 24876768

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4036702/pdf/ppa-8-727.pdf>

ABSTRACT: OBJECTIVE: The objective of this review was to summarize evidence for the effectiveness of music therapy (MT) and to assess the quality of systematic reviews (SRs) based on randomized controlled trials (RCTs). STUDY DESIGN: An SR of SRs based on RCTs. METHODS: Studies were eligible if they were RCTs. Studies included were those with at least one treatment group in which MT was applied. We searched the following databases from 1995 to October 1, 2012: MEDLINE via PubMed, CINAHL (Cumulative Index of Nursing and Allied Health Literature), Web of Science, Global Health Library, and Ichushi-Web. We also searched all Cochrane Database and Campbell Systematic Reviews up to October 1, 2012. Based on the International Classification of Diseases, 10<sup>th</sup> revision, we identified a disease targeted for each article. RESULTS: Twenty-one studies met all inclusion criteria. This study included 16 Cochrane reviews. As a whole, the quality of the articles was very good. Eight studies were about “Mental and behavioral disorders (F00-99)”; there were two studies on “Diseases of the nervous system (G00-99)” and “Diseases of the respiratory system (J00-99)”; and there was one study each for “Endocrine, nutritional and metabolic diseases (E00-90)”, “Diseases of the circulatory system (I00-99)”, and “Pregnancy, childbirth and the puerperium (O60)”. MT treatment improved the following: global and social functioning in schizophrenia and/or serious mental disorders, gait and related activities in Parkinson’s disease, depressive symptoms, and sleep quality. CONCLUSION: THIS COMPREHENSIVE SUMMARY OF SRS DEMONSTRATED THAT MT TREATMENT IMPROVED THE FOLLOWING: global and social functioning in schizophrenia and/or serious mental disorders, gait and related activities in Parkinson’s disease, depressive symptoms, and sleep quality. MT may have the potential for improving

other diseases, but there is not enough evidence at present. Most importantly, no specific adverse effect or harmful phenomenon occurred in any of the studies, and MT was well tolerated by almost all patients.

Agnihotri, S., Cameron, D., Colantonio, A., Gray, J., Keightley, M., Polatajko, H., Rumney, P., & Wiseman-Hakes, C. (2014). **Arts-based social skills interventions for adolescents with acquired brain injuries: Five case reports.** *Developmental Neurorehabilitation*, 17(1), 44-63. PMID: 24180636

ABSTRACT: OBJECTIVE: Previous research has demonstrated the value of arts-based programs for adolescents with childhood brain disorder to facilitate social skills and participation. The current study extends this work by examining the feasibility and effectiveness of an arts-based intervention for youth with acquired brain injuries (ABI). METHODS: A case study approach was used with four adolescent participants and one case control. A battery of quantitative measures were administered four and one week pre-intervention, one week post-intervention, as well six to eight month post-intervention. RESULTS: Improvements in pragmatic communication skills and social and participation goals were observed across intervention participants. Similar improvements were not seen with the case control participant. CONCLUSION: Results support the use of an arts-based intervention for youth with ABI to facilitate social skills and participation. Findings also highlight the need for more sensitive measures of these skills for these youth. Suggested guidelines for program implementation are provided.

Aiba, I., Hori, M., Iizuka, M., Kinoshita, A., Kubota, M., Nakamura, M., Saito, Y., & Urabe, M. (2014). **[At-home music therapy intervention using video phone (Skype) for elderly people with dementia].** *Gan to Kagaku Ryoho (Cancer & Chemotherapy)*, 41 Suppl.1, 33-5. [Article in Japanese]. PMID: 25595076

ABSTRACT: There are various nonpharmacological therapies available for elderly people with dementia, and these can improve quality of life and the behavioral and psychological symptoms of dementia (BPSD) that appear throughout the progression of the disease. Since a substantial number of effects have been reported for music therapy, we focused on this nonpharmacological intervention. Generally,

musical therapy is provided collectively in facilities. However, the music used in this context may not consider the preferences and music abilities of each person. Therefore, in this study we created made-to-order music CDs that accounted for each participant's musical preferences and abilities. Utilizing the CDs, we conducted an intervention study of music therapy using a video phone (Skype) that elderly people with dementia can use at home. An advantage of conducting music therapy for individuals with dementia using a video phone is that those who have difficulty going to the hospital or participating in dementia-related therapy groups can participate in therapy in a familiar place. The results of this intervention showed that participants demonstrated signs of improvement as measured by the smile degree (Smile scan) and Behavior Pathology in Alzheimer's Disease (BEHAVE-AD) scale.

Aletraris, L., Bride, B.E., Edmond, M.B., Paino, M., & Roman, P.M. (2014). **The use of art and music therapy in substance abuse treatment programs.** *Journal of Addictions Nursing*, 25(4), 190-6.

PMID: 25514689

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4268880/pdf/nihms630708.pdf>

**ABSTRACT:** Although the implementation of evidence-based practices in the treatment of substance use disorders has attracted substantial research attention, little consideration has been given to parallel implementation of complementary and alternative medical (CAM) practices. Using data from a nationally representative sample (N = 299) of U.S. substance abuse treatment programs, this study modeled organizational factors falling in the domains of patient characteristics, treatment ideologies, and structural characteristics, associated with the use of art therapy and music therapy. We found that 36.8 percent of treatment programs offered art therapy and 14.7 percent of programs offered music therapy. Programs with a greater proportion of women were more likely to use both therapies, and programs with larger proportions of adolescents were more likely to offer music therapy. In terms of other treatment ideologies, programs' use of Motivational Enhancement Therapy was positively related to offering art therapy, whereas use of contingency management was positively associated with offering music therapy.

Finally, our findings showed a significant relationship between requiring 12-step meetings and the use of both art therapy and music therapy. With increasing use of CAM in a diverse range of medical settings and recent federal legislation likely to reduce barriers in accessing CAM, the inclusion of CAM in addiction treatment is growing in importance. Our findings suggest treatment programs may be utilizing art and music therapies to address unique patient needs of women and adolescents.

Ali, K., Gammidge, T., & Waller, D. (2014). **Fight like a ferret: A novel approach of using art therapy to reduce anxiety in stroke patients undergoing hospital rehabilitation.** *Medical Humanities*, 40(1), 56-60.

PMID: 24429732

**ABSTRACT: RATIONALE:** The holistic aspect of stroke rehabilitation to include psychological well-being is currently neglected, with more emphasis placed on physical recovery despite anxiety and depression being common poststroke. From the limited amount of current literature, it seems that creative strategies such as art therapy (AT) can be beneficial in reducing isolation and anxiety among stroke patients. **METHODS:** Stroke patients (able to consent) in a hospital rehabilitation unit were invited to participate in two weekly AT sessions for 6 weeks, facilitated by an art psychotherapist using paints, crayons, clay, a camera and an iPad. Hospital anxiety and depression scales (HAD) and therapy outcome measures (TOM) were measured at the beginning and end of the study. **RESULTS:** Six male patients were recruited, average age 69 years (38-85). Group discussions allowed patients to express openly feelings of frustration as well as hope for physical and emotional recovery: 'fight like a ferret', an expression used by a group member. The group produced several art objects and photographic images that were collated using stop-frame animation to produce a 10 min film. Median HAD score for the group was eight points upon entering the study and six points on finishing the study. **KEY CONCLUSIONS:** There is little attention to the emotional needs of stroke patients in rehabilitation. Properly designed research studies exploring the role of AT in addressing anxiety and depression poststroke are needed. Our study showed that AT was a feasible intervention that helped patients explore the sequel of stroke in an open supportive environment.

Altenmüller, E., Ritter, J., Rollnik, J.D., & Van Vugt, F.T. (2014). **Music-supported motor training after stroke reveals no superiority of synchronization in group therapy.** *Frontiers in Human Neuroscience*, 8, 315.

PMID: 24904358

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4033001/pdf/fnhum-08-00315.pdf>

**ABSTRACT:** **BACKGROUND:** Music-supported therapy has been shown to be an effective tool for rehabilitation of motor deficits after stroke. A unique feature of music performance is that it is inherently social: music can be played together in synchrony. **AIM:** The present study explored the potential of synchronized music playing during therapy, asking whether synchronized playing could improve fine motor rehabilitation and mood. **METHOD:** Twenty-eight patients in neurological early rehabilitation after stroke with no substantial previous musical training were included. Patients learned to play simple finger exercises and familiar children's songs on the piano for 10 sessions of half an hour. Patients first received three individual therapy sessions and then continued in pairs. The patient pairs were divided into two groups. Patients in one group played synchronously (together group) whereas the patients in the other group played one after the other (in-turn group). To assess fine motor skill recovery the patients performed standard clinical tests such as the nine-hole-pegboard test (9HPT) and index finger-tapping speed and regularity, and metronome-paced finger tapping. Patients' mood was established using the Profile of Mood States (POMS). **RESULTS:** Both groups showed improvements in fine motor control. In metronome-paced finger tapping, patients in both groups improved significantly. Mood tests revealed reductions in depression and fatigue in both groups. During therapy, patients in the in-turn group rated their partner as more sympathetic than the together-group in a visual-analog scale. **CONCLUSIONS:** Our results suggest that music-supported stroke rehabilitation can improve fine motor control and mood not only individually but also in patient pairs. Patients who were playing in turn rather than simultaneously tended to reveal greater improvement in fine motor skill. We speculate that patients in the former group may benefit from the opportunity to learn from observation.

Assmus, J., Brown, F.K., Gold, C., Hansen, A.L., Hjørnevik, K., Qvale, L.G., Stige, B., & Waage, L. (2014). **Music therapy for prisoners: Pilot randomized controlled trial and implications for evaluating psychosocial interventions.** *International Journal of Offender Therapy and Comparative Criminology*, 58(12), 1520-39.

PMID: 23985355

**ABSTRACT:** Mental health problems are common among prison inmates. Music therapy has been shown to reduce mental health problems. It may also be beneficial in the rehabilitation of prisoners, but rigorous outcome research is lacking. We compared group music therapy with standard care for prisoners in a pilot randomized controlled trial that started with the establishment of music therapy services in a prison near Bergen in 2008. In all, 113 prisoners agreed to participate. Anxiety (STAI-State [State-Trait Anxiety Inventory], STAI-Trait), depression (HADS-D [Hospital Anxiety and Depression Scale]), and social relationships (Quality of Life Enjoyment and Satisfaction Questionnaire [Q-LES-Q]) were assessed at baseline; every 2 weeks in the experimental group; after 1, 3, and 6 months in the control group; and at release. No restrictions were placed on the frequency, duration, or contents of music therapy. Duration of stay in the institution was short (62 percent stayed less than 1 month). Only a minority reached clinical cutoffs for anxiety and depression at baseline. Between-group analyses of effects were not possible. Music therapy was well accepted and attractive among the prisoners. Post hoc analysis of within-group changes suggested a reduction of state anxiety after two weeks of music therapy ( $d = 0.33$ ,  $p = .025$ ). Short sentences and low baseline levels of psychological disturbance impeded the examination of effects in this study. Recommendations for planning future studies are given, concerning the careful choice of participants, interventions and settings, comparison condition and design aspects, choice of outcomes, and integration of research approaches. Thus, the present study has important implications for future studies evaluating interventions for improving prisoners' mental health. **TRIAL REGISTRATION:** ISRCTN22518605.

Baker, F.A., Berlowitz, D.J., Buttifant, M., & Tamplin, J. (2014). **The effect of singing training on voice quality for people with quadriplegia.** *Journal of Voice: Official Journal of the Voice Foundation*, 28(1), 128.e19-128.e26.

PMID: 24291444

**ABSTRACT:** **OBJECTIVES:** Despite anecdotal reports of voice impairment in quadriplegia, the exact nature of these impairments is not well described in the literature. This article details objective and subjective voice assessments for people with quadriplegia at baseline and after a respiratory-targeted singing intervention. **STUDY DESIGN:** Randomized controlled trial. **METHODS:** Twenty-four participants with quadriplegia were randomly assigned to a 12-week program of either a singing intervention or active music therapy control. Recordings of singing and speech were made at baseline, 6 weeks, 12 weeks, and 6 months post-intervention. These deidentified recordings were used to measure sound pressure levels and assess voice quality using the Multidimensional Voice Profile and the Perceptual Voice Profile. **RESULTS:** Baseline voice quality data indicated deviation from normality in the areas of breathiness, strain, and roughness. A greater percentage of intervention participants moved toward more normal voice quality in terms of jitter, shimmer, and noise-to-harmonic ratio; however, the improvements failed to achieve statistical significance. **CONCLUSIONS:** Subjective and objective assessments of voice quality indicate that quadriplegia may have a detrimental effect on voice quality; in particular, causing a perception of roughness and breathiness in the voice. The results of this study suggest that singing training may have a role in ameliorating these voice impairments.

Baker, F.A., Berlowitz, D.J., Grocke, D., & Tamplin, J. (2014). **Thematic analysis of the experience of group music therapy for people with chronic quadriplegia.** *Topics in Spinal Cord Injury Rehabilitation*, 20(3), 236-47.

PMID: 25484569

**ABSTRACT:** **BACKGROUND:** People living with quadriplegia are at risk for social isolation and depression. Research with other marginalized groups has indicated that music therapy can have a positive effect on mood and social interaction. **OBJECTIVE:** To gather descriptions of participants' experience of two

types of group music therapy — therapeutic singing or music appreciation and relaxation — and to determine commonalities and differences between participants' experience of these two methods. **METHODS:** We interviewed 20 people with quadriplegia about their experience of participating in 12 weeks of therapeutic singing (n = 10) or music appreciation and relaxation (n = 10). These methods of group music therapy were the interventions tested in a previously reported randomized controlled trial. The interview data were subjected to an inductive thematic analysis. **RESULTS:** Six main themes were generated from the interview data. Four of these were shared themes and indicated that both types of group music therapy had a positive effect on mood/mental state and physical state, encouraged social engagement, and reconnected participants with their music identity or relationship with music. In addition, the participants who participated in the singing groups found singing to be challenging and confronting, but experienced a general increase in motivation. **CONCLUSIONS:** Group music therapy was experienced as an enjoyable and accessible activity that reconnected participants with their own music. Participants frequently described positive shifts in mood and energy levels, and social interaction was stimulated both within and beyond the music therapy groups.

Bellandi, D., Filippi, S., Raglio, A., & Strambadiale, M. (2014). **Global music approach to persons with dementia: evidence and practice.** *Clinical Interventions in Aging*, 9, 1669-76.

PMID: 25336931

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4199985/pdf/cia-9-1669.pdf>

**ABSTRACT:** Music is an important resource for achieving psychological, cognitive, and social goals in the field of dementia. This paper describes the different types of evidence-based music interventions that can be found in literature and proposes a structured intervention model (global music approach to persons with dementia, GMA-D). The literature concerning music and dementia was considered and analyzed. The reported studies included more recent studies and/or studies with relevant scientific characteristics. From this background, a global music approach was proposed using music and sound-music elements according to the needs, clinical characteris-

tics, and therapeutic-rehabilitation goals that emerge in the care of persons with dementia. From the literature analysis the following evidence-based interventions emerged: active music therapy (psychological and rehabilitative approaches), active music therapy with family caregivers and persons with dementia, music-based interventions, caregivers singing, individualized listening to music, and background music. Characteristics of each type of intervention are described and discussed. Standardizing the operational methods and evaluation of the single activities and a joint practice can contribute to achieve the validation of the application model. The proposed model can be considered a low-cost nonpharmacological intervention and a therapeutic-rehabilitation method for the reduction of behavioral disturbances, for stimulation of cognitive functions, and for increasing the overall quality of life of persons with dementia.

Bitonte, R.A., & De Santo, M. (2014). **Art therapy: An underutilized, yet effective tool.** *Mental Illness*, 6(1), 5354.

PMID: 25478139

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4253394/pdf/mi-2014-1-5354.pdf>

**ABSTRACT:** Art therapy has been recognized as beneficial and effective since first described by Adrian Hill in 1942. Even before this time, art therapy was utilized for moral reinforcement and psychoanalysis. Art therapy aids patients with, but not limited to, chronic illness, physical challenges, and cancer in both pediatric and adult scenarios. Although effective in patient care, the practice of art therapy is extremely underutilized, especially in suburban areas. While conducting our own study in northeastern Ohio, USA, we found that only one out of the five inpatient institutions in the suburban area of Mahoning County, Ohio, that we contacted provided continuous art therapy to its' patients. In the metropolitan area of Cuyahoga County, Ohio, only eight of the twenty-two inpatient institutions in the area provided art therapy. There could be many reasons as to why art therapy is not frequently used in these areas, and medical institutions in general. The cause of this could be the amount of research done on the practice. Although difficult to conduct formal research on such a broad field, the American Art Therapy Association has succeeded in doing such, with studies showing improvement of the patient groups emotionally and mentally in many case types.

Bloch, S., Castle, D., Gold, C., Grocke, D., Newton, R., Stewart, S., & Thompson, G. (2014). **Group music therapy for severe mental illness: A randomized embedded-experimental mixed methods study.** *Acta Psychiatrica Scandinavica*, 130(2), 144-53.

PMID: 24256453

**ABSTRACT: OBJECTIVE:** Music therapy is an innovative approach to support people with severe mental illness (SMI). The aim of the study was to determine whether group music therapy (GMT) positively impacted on quality of life (QoL), social enrichment, self-esteem, spirituality and psychiatric symptoms of participants with SMI and how they experienced the intervention. **METHOD:** The primary outcome was QoL; secondary measures assessed social enrichment, self-esteem, spirituality and psychiatric symptoms. The 13-week intervention comprised singing familiar songs and composing original songs recorded in a professional studio. Qualitative data were generated from focus group interviews and song lyric analysis. **RESULTS:** Ninety-nine adults (57 female) were recruited, with an initial cohort (n = 75) randomized to either: weekly GMT followed by standard care (SC) or SC followed by GMT. Crossover occurred after 13 weeks. Measures were conducted at baseline, 13, 26 and 39 weeks. A second cohort (n = 24) could not be randomized and were assigned to GMT followed by SC. Intention-to-treat analysis showed a significant difference between GMT and SC on QoL and spirituality. This was robust to different assumptions about missing data (list wise deletion, last observation carried forward or multiple imputation). Per-protocol analysis suggested greater benefit for those receiving more sessions. Focus group interview and song lyric analyses suggested that GMT was enjoyable; self-esteem was enhanced; participants appreciated therapists and peers; and although challenges were experienced, the program was recommended to others. **CONCLUSION:** Group music therapy may enhance QoL and spirituality of persons with SMI.

Bower, J., Catroppa, C., Grocke, D., & Shoemark, H. (2014). **Music therapy for early cognitive rehabilitation post-childhood TBI: An intrinsic mixed methods case study.** *Developmental Neuro-rehabilitation*, 17(5), 339-46.

PMID: 23815784

**ABSTRACT: OBJECTIVE:** The primary aim of this case study was to explore the behavioral changes of a

paediatric patient in post-traumatic amnesia during a music therapy session. A secondary objective was to measure the effect of the music therapy intervention on agitation. **METHOD:** Video data from pre, during and post-music therapy sessions were collected and analyzed using video micro-analysis and the Agitated Behavior Scale. **RESULTS:** The participant displayed four discrete categories of behaviors: Neutral, Acceptance, Recruitment and Rejection. Further analysis revealed brief but consistent and repeated periods of awareness and responsiveness to the live singing of familiar songs, which were classified as Islands of Awareness. Song offered an Environment of Potential to maximize these periods of emerging consciousness. The quantitative data analysis yielded inconclusive results in determining if music therapy was effective in reducing agitation during and immediately post the music therapy sessions. **CONCLUSION:** The process of micro-analysis illuminated four discrete participant behaviors not apparent in the immediate clinical setting. The results of this case suggest that the use of familiar song as a music therapy intervention may harness early patient responsiveness to foster cognitive rehabilitation in the early acute phase post-TBI.

Çelik, S., Eyigör, C., Hakverdioğlu Yönt, G., Khorshid, L., Korhan, E.A., & Uyar, M. (2014). **The effects of music therapy on pain in patients with neuropathic pain.** *Pain Management Nursing: Official Journal of the American Society of Pain Management Nurses*, 15(1), 306-14.

PMID: 23375348

**ABSTRACT:** The aim of this study was to investigate the effect of relaxing music on pain intensity in patients with neuropathic pain. A quasi-experimental study, repeated measures design was used. Thirty patients, aged 18-70 years, with neuropathic pain and hospitalized in an Algology clinic were identified as a convenience sample. Participants received 60 minutes of music therapy. Classical Turkish music was played to patients using a media player (MP3) and headphones. Participants had pain scores taken immediately before the intervention and at the 30<sup>th</sup> and 60<sup>th</sup> minutes of the intervention. Data were collected over a 6-month period in 2012. The patients' mean pain intensity scores were reduced by music, and that decrease was progressive over the 30<sup>th</sup> and 60<sup>th</sup> minutes of the intervention, indicating a cumulative dose effect. The results of this study implied that

the inclusion of music therapy in the routine care of patients with neuropathic pain could provide nurses with an effective practice for reducing patients' pain intensity.

Chancellor, B., Chatterjee, A., & Duncan, A. (2014). **Art therapy for Alzheimer's disease and other dementias.** *Journal of Alzheimer's Disease*, 39(1), 1-11. PMID: 24121964

**ABSTRACT:** Patients with dementias commonly experience neuropsychiatric symptoms that diminish their quality of life. Pharmacologic treatments for these symptoms are limited in their efficacy. In the absence of near-future prospects for a cure for degenerative dementias, treatments that improve neuropsychiatric symptoms and quality of life are needed. We explore the hypothesis that art therapy is useful in dementia by reviewing the extant literature. With appropriate structure, patients with dementia can produce and appreciate visual art. Case studies and several small trials suggest that art therapy engages attention, provides pleasure, and improves neuropsychiatric symptoms, social behavior, and self-esteem. Whether these benefits generalize beyond the studio remains unknown. We offer a theoretical framework that motivates the use of art therapy and propose that clinical enquiry to establish methods, assess efficacy, and define optimal conditions for the use of art therapy in Alzheimer's and other dementing disorders is timely.

Chou, K.R., Chu, H., Lee, T.Y., Lin, Y., O'Brien, A.P., Ou, K.L., & Yang, C.Y. (2014). **The impact of group music therapy on depression and cognition in elderly persons with dementia: A randomized controlled study.** *Biological Research for Nursing*, 16(2), 209-17.

PMID: 23639952

**ABSTRACT: OBJECTIVE:** The aims of this study were to determine the effectiveness of group music therapy for improving depression and delaying the deterioration of cognitive functions in elderly persons with dementia. **METHOD:** The study had a prospective, parallel-group design with permuted-block randomization. Older persons with dementia (N = 104) were randomly assigned to the experimental or control group. The experimental group received 12 sessions of group music therapy (two 30-min sessions per week for 6 weeks), and the control group

received usual care. Data were collected four times: (1) 1 week before the intervention, (2) the 6<sup>th</sup> session of the intervention, (3) the 12<sup>th</sup> session of the intervention, and (4) 1 month after the final session. RESULTS: Group music therapy reduced depression in persons with dementia. Improvements in depression occurred immediately after music therapy and were apparent throughout the course of therapy. The cortisol level did not significantly decrease after the group music therapy. Cognitive function significantly improved slightly at the 6<sup>th</sup> session, the 12<sup>th</sup> session, and one month after the sessions ended; in particular, short-term recall function improved. The group music therapy intervention had the greatest impact in subjects with mild and moderate dementia. CONCLUSION: The group music intervention is a noninvasive and inexpensive therapy that appeared to reduce elders' depression. It also delayed the deterioration of cognitive functions, particularly short-term recall function. Group music therapy may be an appropriate intervention among elderly persons with mild and moderate dementia.

Craig, J. (2014). **Music therapy to reduce agitation in dementia.** *Nursing Times*, 110(32-33), 12-5. PMID: 25188964

ABSTRACT: BACKGROUND: Music therapy is a non-pharmacological intervention that aims to increase emotional wellbeing through cognitive stimulation and social interaction. AIM AND METHOD: I aimed to investigate the efficacy of group music therapy to reduce agitation in people with dementia. To this end, I carried out a systematic review of the literature. RESULTS: Eight articles show that music therapy is feasible for use with people with all stages of dementia. The best results involved using familiar music and a qualified group music therapist, with the optimum frequency of intervention being two to three times a week for 30-50 minutes. Control interventions such as reading and recreational activities also reduced agitation. CONCLUSION: Music therapy should be implemented by qualified music therapists in care homes and day care units. Further research should be conducted to ascertain the most suitable music types to be used in therapy sessions.

De Castro, M., Galati, A., Mercadal-Brotons, M., & Solé, C. (2014). **Effects of group music therapy on quality of life, affect, and participation in people with varying levels of dementia.** *Journal of Music Therapy*, 51(1), 103-25. PMID: 25014925

ABSTRACT: BACKGROUND: There is substantive literature reporting the importance and benefits of music and music therapy programs for older adults, and more specifically for those with dementia. However, few studies have focused on how these programs may contribute to quality of life. OBJECTIVES: Objectives for this exploratory study were: (a) to evaluate the potential effect of group music therapy program participation on the quality of life of older people with mild, moderate, and severe dementia living in a nursing home; (b) to identify and analyze changes in affect and participation that take place during music therapy sessions; and (c) to suggest recommendations and strategies for the design of future music therapy studies with people in various stages of dementias. METHODS: Sixteen participants (15 women; 1 man), with varying level of dementia participated in 12 weekly music therapy sessions. Based on Global Deterioration Scale (GDS) scores, phases of cognitive function were as follows: mild (n = 9; GDS 3-4), moderate (n = 5; GDS 5), and severe (n = 2; GDS 6-7). Data were collected using the GENCAT scale on Quality of Life. Sessions 1, 6, and 12 were also video recorded for post-hoc analysis of facial affect and participation behaviors. RESULTS: There was no significant difference in quality of life scores from pre- to post-test ( $z = -0.824$ ;  $p = 0.410$ ). However, there was a significant improvement in median subscale scores for Emotional Well-being ( $z = -2.176$ ,  $p = 0.030$ ), and significant worsening in median subscale scores for Interpersonal Relations ( $z = -2.074$ ;  $p = 0.038$ ) from pre to posttest. With regard to affect and participation, a sustained high level of participation was observed throughout the intervention program. Expressions of emotion remained low. CONCLUSIONS: Authors discuss implications of study findings to inform and improve future research in the areas of music therapy, quality of life, and individuals with dementia.

de Moraes, A.H., Eler, G.J., Roecker, S., & Salvagioni, D.A. (2014). **Significance of clay art therapy for psychiatric patients admitted in a day hospital.** *Investigación y Educación en Enfermería*, 32(1), 128-38. [Article in English, Portuguese]. PMID: 25229912

Available in full-text [English] at: <http://www.scielo.org.co/pdf/iee/v32n1/v32n1a15.pdf>

Available in full-text [Portuguese] at: <http://tinyurl.com/ove9bef>

ABSTRACT: OBJECTIVE: To understand the significance of clay art therapy for psychiatric patients

admitted in a day hospital. **METHODOLOGY:** Qualitative, descriptive and exploratory research, undertaken with 16 patients in a day hospital in Londrina, in the state of Parana, Brazil, who participated in seven clay therapy sessions. Data collection took place from January to July 2012 through interviews guided by a semi structured questionnaire and the data were submitted to content analysis. **RESULTS:** Three themes emerged: Becoming familiar with clay art therapy; Feeling clay therapy; and Realizing the effect of clay therapy. **CONCLUSION:** The use of clay as a therapeutic method by psychiatric patients promoted creativity, self-consciousness, and benefited those who sought anxiety relief.

Farina, E., Giovagnoli, A.R., & Raglio, A. (2014). **Can music therapy alleviate psychological, cognitive, and behavioral impairment in epilepsy?** *Epilepsy & Behavior, 31*, 7-8.  
PMID: 24287099  
*No abstract is available.*

Flores-Nieto, A., Garrido-Ardila, E.M., Gómez-Romero, M., González-LópezArza, M.V., Jiménez-Palomares, M., & Rodríguez-Mansilla, J. (2014). **Benefits of music therapy on behavior disorders in subjects diagnosed with dementia: A systematic review.** *Neurología: Publicación Oficial de la Sociedad Española de Neurología, pii: S0213-4853(14)00248-5*. [Article in English, Spanish].  
PMID: 25553932

**ABSTRACT: INTRODUCTION:** Dementia is characterized by cognitive deterioration and the manifestation of psychological and behavioral symptoms, especially changes in perception, thought content, mood, and conduct. In addition to drug therapy, non-pharmacological treatments are used to manage these symptoms, and one of these latter treatments is music therapy. Since this novel technique in non-verbal, it can be used to treat patients with dementia at any stage, even when cognitive deterioration is very severe. Patients' responses to music are conserved even in the most advanced stages of the disease  
**DEVELOPMENT:** A literature research was carried out using the following databases: Academic Search Complete, PubMed, Science Direct y Dialnet. The

period of publication was 2003 to 2013 and the search keywords were 'Music Therapy, Dementia, Behavior, Behavior Disorders y Behavioral Disturbances'. Out of the 2188 studies that were identified, 11 studies met inclusion criteria for the systematic review. **CONCLUSIONS:** Music therapy is beneficial and improves behavior disorders, anxiety and agitation in subjects diagnosed with dementia.

Gold, C., McFerran, K.S., & Thompson, G.A. (2014). **Family-centered music therapy to promote social engagement in young children with severe autism spectrum disorder: A randomized controlled study.** *Child: Care, Health, and Development, 40(6)*, 840-52.

PMID: 24261547

**ABSTRACT: BACKGROUND:** Limited capacity for social engagement is a core feature of autism spectrum disorder (ASD), often evident early in the child's development. While these skills are difficult to train, there is some evidence that active involvement in music-making provides unique opportunities for social interaction between participants. Family-centered music therapy (FCMT) endeavors to support social engagement between child and parent within active music-making, yet the extent of benefits provided is unknown. **AIM:** This study investigated the impacts of FCMT on social engagement abilities. **METHODS:** Twenty-three children (36-60 months) with severe ASD received either 16 weeks of FCMT in addition to their early intervention programs (n = 12), or their early intervention program only (n = 11). Change in social engagement was measured with standardized parent-report assessments, parent interviews and clinician observation. **RESULTS:** Intention-to-treat analysis for the Vineland Social Emotional Early Childhood Scale indicated a significant effect in favor of FCMT. Thematic qualitative analysis of the parent interviews showed that the parent-child relationship grew stronger. **CONCLUSION:** FCMT improves social interactions in the home and community and the parent-child relationship, but not language skills or general social responsiveness. This study provides preliminary support for the use of FCMT to promote social engagement in children with severe ASD.

Gooding, L., & Yinger, O.S. (2014). **Music therapy and music medicine for children and adolescents.** *Child and Adolescent Psychiatric Clinics of North America*, 23(3), 535-53.

PMID: 24975624

ABSTRACT: This article summarizes the research on music therapy and music medicine for children and adolescents with diagnoses commonly treated by psychiatrists. Music therapy and music medicine are defined, effects of music on the brain are described, and music therapy research in psychiatric treatment is discussed. Music therapy research with specific child/adolescent populations is summarized, including disorders usually diagnosed in childhood, substance abuse, mood/anxiety disorders, and eating disorders. Clinical implications are listed, including suggestions for health care professionals seeking to use music medicine techniques. Strengths and weaknesses of music therapy treatment are discussed, as well as areas for future research.

Hegde, S. (2014). **Music-based cognitive remediation therapy for patients with traumatic brain injury.** *Frontiers in Neurology*, 5, 34.

PMID: 24715887

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3970008/pdf/fneur-05-00034.pdf>

ABSTRACT: Traumatic brain injury (TBI) is one of the common causes of disability in physical, psychological, and social domains of functioning leading to poor quality of life. TBI leads to impairment in sensory, motor, language, and emotional processing, and also in cognitive functions such as attention, information processing, executive functions, and memory. Cognitive impairment plays a central role in functional recovery in TBI. Innovative methods such as music therapy to alleviate cognitive impairments have been investigated recently. The role of music in cognitive rehabilitation is evolving, based on newer findings emerging from the fields of neuromusicology and music cognition. Research findings from these fields have contributed significantly to our understanding of music perception and cognition, and its neural underpinnings. From a neuroscientific perspective, indulging in music is considered as one of the best cognitive exercises. With “plasticity” as its veritable nature, brain engages in producing music indulging

an array of cognitive functions and the product, the music, in turn permits restoration and alters brain functions. With scientific findings as its basis, “neurologic music therapy” (NMT) has been developed as a systematic treatment method to improve sensorimotor, language, and cognitive domains of functioning via music. A preliminary study examining the effect of NMT in cognitive rehabilitation has reported promising results in improving executive functions along with improvement in emotional adjustment and decreasing depression and anxiety following TBI. The potential usage of music-based cognitive rehabilitation therapy in various clinical conditions including TBI is yet to be fully explored. There is a need for systematic research studies to bridge the gap between increasing theoretical understanding of usage of music in cognitive rehabilitation and application of the same in a heterogeneous condition such as TBI.

Hutschemaekers, G.J., Kleber, R.J., Knipscheer, J.W., Niet, G.J., & Schouten, K.A. (2014). **The effectiveness of art therapy in the treatment of traumatized adults: A systematic review on art therapy and trauma.** *Trauma, Violence & Abuse*, pii: 1524838014555032.

PMID: 25403446

ABSTRACT: Art therapy has often been applied in the treatment of traumatized adults, and good results in clinical practice have been reported. However, although art therapy experts underline these benefits, the effectiveness of art therapy in trauma treatment has not been established by systematic review. The aim of this systematic review is to identify and evaluate empirical evidence of the effectiveness of art therapy for trauma treatment. As a result of the systematic review, six controlled, comparative studies on art therapy for trauma in adult patients were found. In half of the included studies, a significant decrease in psychological trauma symptoms was found in the treatment groups, and one study reported a significant decrease in depression. Although there are limitations in the number of included studies, the number of participants, the heterogeneity of included studies, and their methodological quality, the results contribute to insight into the effectiveness of art therapy in trauma treatment and form an evidence base for the urgent need for further research on art therapy and trauma treatment.

Im, M.L., & Lee, J.I. (2014). **Effects of art and music therapy on depression and cognitive function of the elderly.** *Technology and Health Care*, 22(3), 453-8.

PMID: 24704654

ABSTRACT: The purpose of this study was to examine effects of art and music therapy on depression and cognitive function of the elderly. This was one group pre-test, post-test design. Data were collected from January to March, 2013, from 94 elderly. The results were collected as follows: 1) Art therapy was revealed a statistical significant difference between before and after treatment on the depression of participants. 2) Music therapy was revealed a statistical significant at previous and after treatment on the depression of participants. 3) Treatment according to the severity of depression than the music therapy and art therapy were examined statistically significantly lower. This study will be provided basic information in order to develop program for success healthy life of elderly.

Jones, O., O'Neil, N., Pavlicevic, M., Powell, H., & Sampathianaki, E. (2014). **Making music, making friends: Long-term music therapy with young adults with severe learning disabilities.** *Journal of Intellectual Disabilities*, 18(1), 5-19.

PMID: 24196841

ABSTRACT: This collaborative practitioner research study emerged from music therapists' concerns about the value of improvisational, music-centered music therapy for young adults with severe learning disabilities (SLDs), given the long-term nature of such work. Concerns included the relevance, in this context, of formulating, and reporting on, therapeutic aims, development, change; and working in 'goal-oriented' way. Focus groups with the young adults' families and a range of professionals suggest that, rather than leading to developmental change, long-term shared therapeutic musicking provides young adults with ongoing opportunities for experiencing confidence and self-esteem, with feelings of shared acceptance and success, and also provides young adults and their families with opportunities for developing and sustaining friendships. In addition, families experienced meeting other parents and carers in the communal reception area as supportive and countering their isolation. Focus groups assigned intrapersonal, relational and social values to long-term music therapy for young adults with SLDs.

Josephsson, S., Lindquist, I., & Thornberg, K. (2014). **Experiences of participation in rhythm and movement therapy after stroke.** *Disability and Rehabilitation*, 36(22), 1869-74.

PMID: 24400709

ABSTRACT: PURPOSE: The aim of this study was to investigate how persons with stroke experience participation in rhythm and music therapy. METHODS: To gain knowledge of the qualitatively different ways persons with stroke experience participation in Ronnie Gardiner Rhythm and Music (RGRM) therapy, a phenomenographic approach was chosen. Interviews with 17 persons with stroke were done. Selection criteria were set to capture the variations in how the phenomenon appeared to the informants. RESULTS: Two qualitatively different ways of experiencing the RGRM therapy were identified: (A) challenge leading to connection with the body and (B) being able. A feeling of being connected to the body was achieved as a result of the challenging tasks. By gaining a feeling of body awareness joy, energy and desire to do things increased. Learning new skills was promoted by having to be concentrated during therapy sessions and a sense of being able to carry out difficult tasks was achieved. CONCLUSIONS: Participation in RGRM seems to have helped the persons come to terms with their changed bodies, leading to feelings of being connected with their bodies. A feeling of change in competence occurred when an ability to carry out the tasks was simultaneously achieved. IMPLICATIONS FOR REHABILITATION: Stroke may cause considerable functional limitations with needs of rehabilitation services as a consequence. Participation in rhythm and movement activities may help persons who have had a stroke come to terms with their "new" bodies. The rhythm and movement activities were considered demanding and helped return to a meaningful life.

LaGasse, A.B. (2014). **Effects of a music therapy group intervention on enhancing social skills in children with autism.** *Journal of Music Therapy*, 51(3), 250-75.

PMID: 25053766

ABSTRACT: BACKGROUND: Research indicates that music therapy can improve social behaviors and joint attention in children with Autism Spectrum Disorder (ASD); however, more research on the

use of music therapy interventions for social skills is needed to determine the impact of group music therapy. **OBJECTIVE:** To examine the effects of a music therapy group intervention on eye gaze, joint attention, and communication in children with ASD. **METHOD:** Seventeen children, ages 6 to 9, with a diagnosis of ASD were randomly assigned to the music therapy group (MTG) or the no-music social skills group (SSG). Children participated in ten 50-minute group sessions over a period of 5 weeks. All group sessions were designed to target social skills. The Social Responsiveness Scale (SRS), the Autism Treatment Evaluation Checklist (ATEC), and video analysis of sessions were used to evaluate changes in social behavior. **RESULTS:** There were significant between-group differences for joint attention with peers and eye gaze towards persons, with participants in the MTG demonstrating greater gains. There were no significant between-group differences for initiation of communication, response to communication, or social withdraw/behaviors. There was a significant interaction between time and group for SRS scores, with improvements for the MTG but not the SSG. Scores on the ATEC did not differ over time between the MTG and SSG. **CONCLUSIONS:** The results of this study support further research on the use of music therapy group interventions for social skills in children with ASD. Statistical results demonstrate initial support for the use of music therapy social groups to develop joint attention.

Osman, S.E., Schneider, J., & Tischler, V. (2014). **'Singing for the Brain': A qualitative study exploring the health and well-being benefits of singing for people with dementia and their carers.** *Dementia*, pii: 1471301214556291.

PMID: 25425445

**ABSTRACT:** Dementia has detrimental effects on cognitive, psychological and behavioral functioning, as well as significant impact on those who provide care. There is a need to find suitable psychosocial interventions to help manage the condition, enhance well-being, and to provide support for caregivers. This study explored the impact of Singing for the Brain™, an intervention based on group singing activities developed by The Alzheimer's Society for people with dementia and their carers. This qualitative study used semi-structured interviews with people with dementia

and their carers. Ten interviews involving 20 participants were analyzed thematically. Social inclusiveness and improvements in relationships, memory and mood were found to be especially important to participants. As well as enjoying the sessions, participants found that attending Singing for the Brain™ helped in accepting and coping with dementia.

Perron, L. (2014). **[Art therapy to support autistic people].** *Soins. Pédiatrie, Puériculture*, (276), 36-8. [Article in French]

PMID: 24617093

Art therapy, the result of a psychodynamic approach with mediation, can help autistic children and adults to express themselves and communicate. A one-to-one session gives rise to a therapeutic encounter which uses both analytical and educational approaches.

Tromeur, E. (2014). **[Music therapy and Alzheimer disease].** *Soins. Gériatrie*, (107), 16-8. [Article in French].

PMID: 24908841

**ABSTRACT:** Music therapy and Alzheimer's dementia. Dementia such as Alzheimer's leads to the deterioration of the patient's global capacities. The cognitive disorders associated with it are disabling and affect every area of the patient's life. Every therapy's session undertaken with and by patients can act as a mirror of the progress of their disease and help to feel better, as described in this article on music therapy.

## 2013

Arbus, C., Berard, A., Berthelon, P., Blanc, F., Blayac, J.P., Bonte, F., Bouceffa, J.P., Charras, K., Clement, S., Ducourneau, G., Guetin, S., Gzil, F., Laeng, N., Lecourt, E., Ledoux, S., Leger, J.M., Platel, H., Thomas-Anterion, C., Touchon, J., & Vrait, F.X. (2013). **An overview of the use of music therapy in the context of Alzheimer's disease: A report of a French expert group.** *Dementia*, 12(5), 619-34.

PMID: 24337333

**ABSTRACT: OBJECTIVES:** The aim of this overview is to present the developments of music therapy in France, its techniques, mechanisms and principal indications, mainly in the context of Alzheimer's disease. **METHODS:** An international review of the

literature on music therapy applied to Alzheimer's disease was conducted using the principal scientific search engines. A work group of experts in music therapy and psychosocial techniques then considered the different points highlighted in the review of literature and discussed them. **RESULTS AND DISCUSSION:** Clinical and neurophysiological studies have enlightened some positive benefits of music in providing support for people with Alzheimer's disease or related disorders. Music therapy acts mainly through emotional and psycho-physiological pathways. It includes a series of techniques that can respond to targeted therapeutic objectives. Some studies have shown that music therapy reduces anxiety, alleviates periods of depression and aggressive behavior and thus significantly improves mood, communication and autonomy of patients. **CONCLUSION:** Psychosocial interventions, such as music therapy, can contribute to maintain or rehabilitate functional cognitive and sensory abilities, as well as emotional and social skills and to reduce the severity of some behavioral disorders.

Bhat, A.N., & Srinivasan, S.M. (2013). **A review of "music and movement" therapies for children with autism: Embodied interventions for multisystem development.** *Frontiers in Integrative Neuroscience*, 7, 22.

PMID: 23576962

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3620584/pdf/fnint-07-00022.pdf>

**ABSTRACT:** The rising incidence of Autism Spectrum Disorders (ASDs) has led to a surge in the number of children needing autism interventions. This paper is a call to clinicians to diversify autism interventions and to promote the use of embodied music-based approaches to facilitate multisystem development. Approximately 12 percent of all autism interventions and 45 percent of all alternative treatment strategies in schools involve music-based activities. Musical training impacts various forms of development including communication, social-emotional, and motor development in children with ASDs and other developmental disorders as well as typically developing children. In this review, we will highlight the multisystem impairments of ASDs, explain why music and movement therapies are a powerful clinical tool, as well as describe mechanisms

and offer evidence in support of music therapies for children with ASDs. We will support our claims by reviewing results from brain imaging studies reporting on music therapy effects in children with autism. We will also discuss the critical elements and the different types of music therapy approaches commonly used in pediatric neurological populations including autism. We provide strong arguments for the use of music and movement interventions as a multisystem treatment tool for children with ASDs. Finally, we also make recommendations for assessment and treatment of children with ASDs, and provide directions for future research.

Castelino, A., Fisher, M., Hoskyns, S., Waite, A., & Zeng, I. (2013). **The effect of group music therapy on anxiety, depression, and quality of life in older adults with psychiatric disorders.** *Australasian Psychiatry*, 21(5), 506-7.

PMID: 24085719

*No abstract is available.*

Di Pietro, E., Franzoni, E., Iero, L., Pellicciari, A., Rossi, F., & Verrotti, A. (2013). **Drama therapy and eating disorders: A historical perspective and an overview of a Bolognese project for adolescents.** *The Journal of Alternative and Complementary Medicine*, 19(7), 607-12.

PMID: 23402668

**ABSTRACT: OBJECTIVES:** The authors present a description of a theater workshop ("Metamorphosis Project"), developed at the Bologna Eating Disorders Center. **DESIGN:** The workshops are aimed at young, hospitalized patients, and are largely based on the principles of drama therapy. In this article, this therapeutic modality is introduced by a discussion of the theoretical basis for the use of theater in psychiatry from the points of view of several preeminent psychiatrists, including Freud, Winnicott, Klein, and Moreno. **RESULTS:** Three (3) clinical reports are presented. The satisfaction rate among the first groups of participants was 93 percent. **CONCLUSIONS:** It is suggested that theater can be useful in decreasing defense mechanisms, allowing a patient-focused approach, mitigating specific symptoms, and improving the quality of life during the hospital stay.

Gajić, G.M. (2013). **Group art therapy as adjunct therapy for the treatment of schizophrenic patients in day hospital.** *Vojnosanitetski Pregled [Military-medical and Pharmaceutical Review]*, 70(11), 1065-9.

PMID: 24397206

**ABSTRACT:** **INTRODUCTION:** The schizophrenics are frequently disinterested and resistant to standard care. **CASE REPORT:** We presented clinical observations of group art therapy of two schizophrenic patients during integrative therapy in Day Hospital. We modified the original "Synallactic collective image technique" (Vassiliou G, Vassiliou V.). The group is open, heterogeneous, meets once a week and discusses on exhibited drawings, drawn by free associations. The patients' drawings and group protocols showed clinical improvement by lowering depressive themes, more human figures and self-confidence. The obvious severity of markedly impairment on Clinical Global Impression and Global Assessment of Functioning scales on admission with minimal improvement at discharge was rated. **CONCLUSION:** Group art therapy enables visual expression of emotions, perceptions and cognitions, develops creative potentials and support within the group, thus facilitating the integrative therapeutic process of schizophrenics. It may be useful adjunctive therapy for schizophrenic patients.

Gang, M., Kwon, M., & Oh, K. (2013). **Effect of the group music therapy on brain wave, behavior, and cognitive function among patients with chronic schizophrenia.** *Asian Nursing Research*, 7(4), 168-74.

PMID: 25030341

Available in full-text at: <http://tinyurl.com/njyb8h7>

**ABSTRACT:** **PURPOSE:** The purpose of the study was to examine the effect of group music therapy on brain waves, behavior, and cognitive function among patients with chronic schizophrenia. **METHODS:** A quasi-experimental pretest-posttest design was used with nonequivalent control group. The potential participants were recruited from inpatients in a psychiatric facility in a metropolitan city, assigned either to the experimental group (n = 28) or to the control group (n = 27) according to their wards to avoid treatment contamination. The experimental group participated

in the group music therapy for 13 sessions over 7 weeks while continuing their standard treatment. The control group only received a standard treatment provided in the hospitals. The outcome measures include brain wave by electroencephalography, behavior by Nurses' Observation Scale for Inpatient Evaluation, and cognitive function by Mini-Mental State Examination. **RESULTS:** After participating in 13 sessions of the group music therapy, alpha waves measured from eight different sites were consistently present for the experimental group (p = .006-.045) than the control group, revealing that the participants in the music therapy may have experienced more joyful emotions throughout the sessions. The experimental group also showed improved cognitive function (F = 13.46, p = .001) and positive behavior (social competence, social interest & personal neatness) while their negative behaviors was significantly less than those of the control group (F = 24.04, p < .001). **CONCLUSION:** The group music therapy used in this study was an effective intervention for improving emotional relaxation, cognitive processing abilities along with positive behavioral changes in patients with chronic schizophrenia. Our results can be useful for establishing intervention strategies toward psychiatric rehabilitation for those who suffer from chronic mental illnesses.

Gold, C., Qvale, L.G., Ridder, H.M., & Stige, B. (2013). **Individual music therapy for agitation in dementia: An exploratory randomized controlled trial.** *Aging & Mental Health*, 17(6), 667-78.

PMID: 23621805

**ABSTRACT:** **OBJECTIVES:** Agitation in nursing home residents with dementia leads to increase in psychotropic medication, decrease in quality of life, and to patient distress and caregiver burden. Music therapy has previously been found effective in treatment of agitation in dementia care but studies have been methodologically insufficient. The aim of this study was to examine the effect of individual music therapy on agitation in persons with moderate/severe dementia living in nursing homes, and to explore its effect on psychotropic medication and quality of life. **METHOD:** In a crossover trial, 42 participants with dementia were randomized to a sequence of six weeks of individual music therapy and six weeks of standard

care. Outcome measures included agitation, quality of life and medication. **RESULTS:** Agitation disruptiveness increased during standard care and decreased during music therapy. The difference at -6.77 (95% CI (confidence interval): -12.71, -0.83) was significant ( $p = 0.027$ ), with a medium effect size (0.50). The prescription of psychotropic medication increased significantly more often during standard care than during music therapy ( $p = 0.02$ ). **CONCLUSION:** This study shows that six weeks of music therapy reduces agitation disruptiveness and prevents medication increases in people with dementia. The positive trends in relation to agitation frequency and quality of life call for further research with a larger sample.

Habron, J. (2013). **'A conversation without words' – Reflections on music therapy and dementia.** *Dementia*, 12(1), 3-6.  
PMID: 24336658  
*No abstract is available.*

Helmes, A., Mannheim, E.G., & Weis J. (2013). **[Dance/movement therapy in oncological rehabilitation].** *Forschende Komplementärmedizin [Research in Complementary Medicine]*, 20(1), 33-41. [Article in German]  
PMID: 23727761

**ABSTRACT:** **BACKGROUND:** Dance/movement therapy may be defined as a psychosocial and body-oriented art therapy, which uses dance for the expression of emotional and cognitive issues. Dance/movement therapy is an important intervention for cancer patients to enhance coping strategies. There are only few studies investigating dance therapy with cancer patients. **METHODS:** The present study investigates effects of dance/movement therapy ( $n = 115$ ) in the setting of inpatient rehabilitation based on a pre-post design with a control group as well as a follow-up three months later. Standardized questionnaires measuring quality of life, anxiety and depression, and self-concept (EORTC QLQ-C30, HADS, FSKN) were used. In addition, at the end of the inpatient rehabilitation program subjective expectations of the dance/movement therapy and the patients' subjective evaluation of the benefits of the intervention were measured by a new developed questionnaire. **RESULTS:** As process factors of dance/movement

therapy, expression of emotions, enhancement of self-esteem, development of the personality, vitality, getting inner balance, and getting in touch with the body have been identified. In terms of quality of life and psychological well-being, the results showed significant improvements with medium to large effect sizes. **CONCLUSIONS:** Even though those effects may not be attributed to the intervention alone, the analysis of the data and the patients' subjective statements help to reveal therapeutic factors and process characteristics of dance/movement therapy within inpatient rehabilitation.

Hwang, J.Y., Kim, J.A., Kim, S.K., Kim, Y.K., Lee, H.J., Lim, K.B., & Yoo, J. (2013). **The therapeutic effect of neurologic music therapy and speech language therapy in post-stroke aphasic patients.** *Annals of Rehabilitation Medicine*, 37(4), 556-62.  
PMID: 24020037

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3764351/pdf/arm-37-556.pdf>  
**ABSTRACT:** **OBJECTIVE:** To investigate the therapeutic effect of neurologic music therapy (NMT) and speech language therapy (SLT) through improvement of the aphasia quotient (AQ) in post-stroke aphasic patients. **METHODS:** Twenty-one post-stroke, nonfluent aphasia patients who had ischemic/hemorrhagic stroke on radiologic evaluation were divided into the NMT and SLT groups. They received NMT and SLT for 1 month. Language function was assessed by Korean version-Western Aphasia Battery before and after therapy. NMT consisted of therapeutic singing and melodic intonation therapy, and SLT consisted of language-oriented therapy. **RESULTS:** Significant improvements were revealed in AQ, repetition, and naming after therapy in the NMT group and improvements in repetition in the SLT group of chronic stroke patients ( $p < 0.05$ ). There were significant improvements in language ability in the NMT group of subacute stroke patients. However, there was no significant improvement in the SLT group of subacute stroke patients. **CONCLUSION:** We concluded that the two therapies are effective treatments in the chronic stage of stroke and NMT is effective in subacute post-stroke aphasic patients.

Jun, E.M., Kim, M.J., & Roh, Y.H. (2013). **The effect of music-movement therapy on physical and psychological states of stroke patients.** *Journal of Clinical Nursing*, 22(1-2), 22-31.

PMID: 22978325

**ABSTRACT:** AIMS AND OBJECTIVES: This study evaluated the effects of combined music-movement therapy on physical and psychological functioning of hospitalized stroke patients. **BACKGROUND:** Few studies have focused on music-movement therapy's effects on physical and psychological functioning of stroke patients. **DESIGN:** A quasi-experimental design with pre- and post-tests was used. **METHODS:** A convenience sample was used: patients hospitalized for stroke and within two weeks of the onset of stroke were randomized to either an experimental group (received music-movement therapy in their wheelchairs for 60 minutes three times per week for 8 weeks) or control group (received only routine treatment). The effect of music-movement therapy was assessed in terms of physical outcomes (range of motion, muscle strength and activities of daily living) and psychological outcomes (mood states, depression), measured in both groups pre-and post-test. **RESULTS:** The experimental group had significantly increased shoulder flexion and elbow joint flexion in physical function and improved mood state in psychological function, compared with the control group. **CONCLUSIONS:** Early rehabilitation of hospitalized stroke patients within two weeks of the onset of stroke was effective by using music-movement therapy. It improved their mood state and increased shoulder flexion and elbow joint flexion. **RELEVANCE TO CLINICAL PRACTICE:** The findings of this study suggest that rehabilitation for stroke patients should begin as early as possible, even during their hospitalization. Nursing practice should incorporate the concept of combining music and movements to improve stroke patients' physical and psychological states starting from the acute phase.

Kang, S.D., & Kim, M.K. (2013). **Effects of art therapy using color on purpose in life in patients with stroke and their caregivers.** *Yonsei Medical Journal*, 54(1), 15-20.

PMID: 23225793

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3521264/pdf/ymj-54-15.pdf>

**ABSTRACT:** **PURPOSE:** Patients with stroke suffer from physical disabilities, followed by mental

instability. Their caregivers also suffer from mental instability. The present study attempted to address the degree and the change of the level of Purpose in Life (PIL) in patients with stroke and caregivers by applying art therapy using colors. **MATERIALS AND METHODS:** Twenty-eight stroke patients with a good functional recovery or a moderate disability and their 28 caregivers were selected and evaluated. The period of the study between the stroke and color therapy was more than six months. Patients and caregivers were divided into the color therapy (28) and control groups (28). A questionnaire, which measures the level of PIL was conducted separately for patients and caregivers prior to the first session of color therapy (2 hours per week, total 16 sessions). The final examination was performed five months after the last color therapy session. **RESULTS:** There was significant difference between before and after color therapy when the level of PIL was measured both in patients and caregivers ( $p < 0.01$ ). These were the same between the color therapy group, compared with the control group ( $p < 0.01$ ). As color therapy progressed to the late phase, patients, and caregivers applied increasing number of colors and color intensity. **CONCLUSION:** These results prove that color therapy will improve PIL of the patients with post-stroke disability and caregivers. Furthermore, color therapy would be a useful adjuvant for improving the quality of life of the patients with stroke and their caregivers.

Pielech, M., Sieberg, C.B., & Simons, L.E. (2013). **Connecting parents of children with chronic pain through art therapy.** *Clinical Practice in Pediatric Psychology*, 1(3), 214-226.

PMID: 24563827

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3931442/pdf/nihms-552919.pdf>

**ABSTRACT:** **OBJECTIVES:** To help address the unique needs of parents of children with chronic pain, a four module, parent-only, group art therapy curriculum was designed and implemented within an interdisciplinary pain rehabilitation treatment program. We evaluated perceived satisfaction and helpfulness of the group intervention. **METHODS:** Fifty-three parents of children experiencing chronic pain enrolled in a day hospital interdisciplinary pain rehabilitation program participated. The voluntary parent art therapy group was offered one time per week for one hour. Participants completed a measure

of satisfaction, helpfulness, and perceived social support at the end of each group session. **RESULTS:** Parents enjoyed participating in the group, agreed that they would try art therapy again, and found it to be a helpful, supportive, and validating experience. **CONCLUSIONS:** Initial results are promising that group art therapy is an appropriate and helpful means of supporting parents of children with chronic pain during interdisciplinary pain rehabilitation.

Rastogi, R., Solanki, M.S., & Zafar, M. (2013). **Music as a therapy: Role in psychiatry.** *Asian Journal of Psychiatry*, 6(3), 193-9.

PMID: 23642975

**ABSTRACT:** Music is popularly believed to usher in bliss and serenity, and healing is considered its natural quality. It has an emotionally charging charisma of its own, that we all as listeners might have experienced at times. Music has been there with mankind since the beginning of history, but where does it stand as a therapy? Is there any evidence base? How this therapy came into being and how it has evolved, and what the old and current research says about its role in psychiatric disorders. This review tries to explore these questions and arrives at a conclusion that music certainly promises more than just entertainment, and evidence so far suggests music therapy can be beneficial in the treatment of psychiatric disorders, as a cost effective noninvasive adjunct to standard therapy in a variety of settings and patient groups, yet more validated scientific research is still required to establish it as a sole quantified therapy.

## 2012

Akanuma, K., Hatayama, Y., Meguro, K., Otera, M., & Yamaguchi, S. (2012). **Singing therapy can be effective for a patient with severe nonfluent aphasia.** *International Journal of Rehabilitation Research*, 35(1), 78-81.

PMID: 22274592

**ABSTRACT:** Patients with severe aphasia are rarely treated using speech therapy. We used music therapy to continue to treat a 79-year-old patient with chronic severe aphasia. Interventions 1, 2, and 3 were to practice singing a song that the patient knew, to practice singing a song with a therapist, and to practice saying a greeting using a song with lyrics, respectively. In addition, practice of uttering names of body parts was initiated using touch and rhythm. After intervention

1, the patient could sing spontaneously and repeat lyrics. After intervention 2, she could sing with the therapist, and sing spontaneously and repeat lyrics. After intervention 3, she could memorize words with meaning, say the words in context, and use them. The patient could utter the names of two body parts after therapy with touch and rhythm. These suggest that rehabilitation therapy can still be used in patients with severe cognitive impairment.

Arai, A., Fukui, H., & Toyoshima, K. (2012). **Efficacy of music therapy in treatment for the patients with Alzheimer's disease.** *International Journal of Alzheimer's Disease*, 2012, 531646.

PMID: 23056992

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3463939/pdf/IJAD2012-531646.pdf>

**ABSTRACT:** We report that music therapy is effective in the treatment of Alzheimer's disease. We found that the secretion of 17 $\beta$ -estradiol and testosterone, hormones that are supposed to have preventive effects on Alzheimer's disease, is significantly increased by music therapy. During the sessions, patients with Alzheimer's disease were allowed to listen to music and songs with verbal contact from the therapist. It was found that problematic behaviors such as poromania (fugue) had decreased. Music therapy has the potential as an alternative treatment for adverse hormone replacement therapy.

Arnold, K., Ay, E.S., Becker, T., Gühne, U., Riedel-Heller, S., & Weinmann, S. (2012). **[Arts therapies in severe mental illness: Are they effective?].** *Der Nervenarzt*, 83(7), 855-60. [Article in German].

PMID: 22733379

**ABSTRACT:** Arts therapies are widely used treatment strategies for people with severe mental illness. Generally, only a few randomized trials are available, however, the studies show that additional use of arts therapies reduces the appearance of negative symptoms among people with schizophrenia. The most significant evidence can be seen with music therapy. The treatment of severe depression has shown that additional music therapy improves depression. The S3 guidelines on psychosocial therapies in severe mental illness of the Germany Society for Psychiatry, Psychotherapy and Neurology (DGPPN) recommended arts therapies are with recommendation level B.

Aufderheide, D., Bouyea, E., Breiner, M.J., Gussak, D.E., & Tuomisto. (2012). **Creating an art therapy anger management protocol for male inmates through a collaborative relationship.** *International Journal of Offender Therapy and Comparative Criminology*, 56(7), 1124-43.

PMID: 21862527

**ABSTRACT:** A training partnership was established with the Florida Department of Corrections in 2003, and over the ensuing years, art therapy graduate student interns from Florida State University's Graduate Art Therapy Program have been placed in local prisons at different times. Recently, the art therapy interns worked closely with the supervising psychologist in one prison to alleviate and redirect aggression by integrating cognitive-behavioral techniques with art therapy directives. The art therapy interns and the psychologist developed a curriculum using a combination of workbook exercises and art tasks to develop and increase the participants' anger management skills, the Art Therapy Anger Management Protocol. This article provides an overview of art therapy in prison, the cognitive-behavioral approach to anger management with prison inmates, and how art therapy was used to support this approach. Examples of completed art tasks designed to correspond with the workbook curriculum are presented. Overall, this article presents the successful collaboration between the psychologist and art therapists and demonstrates how they facilitated improvement in the participants' anger management skills through this program.

Baker, F.A., Elefant, C., Lagesen, S.K., Lotan, M., & Skeie, G.O. (2012). **The effect of group music therapy on mood, speech, and singing in individuals with Parkinson's disease: A feasibility study.** *Journal of Music Therapy*, 49(3), 278-302.

PMID: 23259231

**ABSTRACT:** **BACKGROUND:** Parkinson's disease (PD) is a progressive neurodegenerative disorder where patients exhibit impairments in speech production. Few studies have investigated the influence of music interventions on vocal abilities of individuals with PD. **OBJECTIVES:** To evaluate the influence of a group voice and singing intervention on speech, singing, and depressive symptoms in individuals with PD. **METHODS:** Ten patients diagnosed with PD participated in this one-group, repeated measures

design study. Participants received the sixty-minute intervention, in a small group setting once a week for 20 consecutive weeks. Speech and singing quality were acoustically analyzed using a KayPentax Multi-Dimensional Voice Program, voice ability using the Voice Handicap Index (VHI), and depressive symptoms using the Montgomery and Asberg Depression rating scale (MADRS). Measures were taken at baseline (Time 1), after 10 weeks of weekly sessions (Time 2), and after 20 weeks of weekly sessions (Time 3). **RESULTS:** Significant changes were observed for five of the six singing quality outcomes at Time 2 and 3, as well as voice range and the VHI physical subscale at Time 3. No significant changes were found for speaking quality or depressive symptom outcomes; however, there was an absence of decline on speaking quality outcomes over the intervention period. **CONCLUSIONS:** Significant improvements in singing quality and voice range, coupled with the absence of decline in speaking quality support group singing as a promising intervention for persons with PD. A two-group randomized control study is needed to determine whether the intervention contributes to maintenance of speaking quality in persons with PD.

Cudney, S., Kelly, C.G., & Weinert, C. (2012). **Use of creative arts as a complementary therapy by rural women coping with chronic illness.** *Journal of Holistic Nursing*, 30(1), 48-54.

PMID: 22024956

**ABSTRACT:** **PURPOSE:** To investigate the spontaneous use of creative arts as a complementary therapy by rural women in the Western United States who are coping with chronic illness. **DESIGN:** Women to Women Project was an 11-week research-based computer intervention that provided health education and support to rural women with chronic illnesses in an effort to help them better adapt to living with chronic conditions. **METHOD:** Through the use of text queries, messages posted to an unprompted, online support and health education forum were examined for references to the spontaneous use of creative arts and their influence as a complementary therapy for dealing with chronic illness. **FINDINGS:** In three identified themes-coping with pain, relaxation/quality of life, and giving back to others-participants strongly suggested that creative activity was an important strategy for coping with chronic

illness and that it contributed to reduced pain and increased overall well-being, regardless of whether it was the expression of a previously learned skill or a practice established after the onset of chronic illness. CONCLUSION: The use of creative arts and developing art-making interventions could significantly benefit rural individuals coping with chronic illness. Discovering methods of implementing creative arts interventions in rural populations warrants further study.

de Dreu, M.J., Kwakkel, G., Poppe, E., van der Wilk, A.S., & van Wegen, E.E. (2012). **Rehabilitation, exercise therapy, and music in patients with Parkinson's disease: A meta-analysis of the effects of music-based movement therapy on walking ability, balance, and quality of life.** *Parkinsonism & Related Disorders, 18 Suppl 1*, S114-9.

PMID: 22166406

ABSTRACT: Recent evidence suggests that music-based movement (MbM) therapy may be a promising intervention to improve gait and gait-related activities in Parkinson's disease (PD) patients, because it naturally combines cognitive movement strategies, cueing techniques, balance exercises and physical activity while focusing on the enjoyment of moving on music instead of the current mobility limitations of the patient. A meta-analysis of RCTs on the efficacy of MbM-therapy, including individual rhythmic music training and partnered dance classes, was performed. Identified studies (K = 6) were evaluated on methodological quality, and summary effect sizes (SES) were calculated. Studies were generally small (total N= 168). Significant homogeneous SESs were found for the Berg Balance Scale, Timed Up and Go test and stride length (SESs: 4.1, 2.2, 0.11; P-values <0.01; I(2) 0,0,7 percent, respectively). A sensitivity analysis on type of MbM-therapy (dance- or gait-related interventions) revealed a significant improvement in walking velocity for gait-related MbM-therapy, but not for dance-related MbM-therapy. No significant effects were found for UPDRS-motor score, Freezing of Gait and Quality of Life. Overall, MbM-therapy appears promising for the improvement of gait and gait-related activities in PD. Future studies should incorporate larger groups and focus on long-term compliance and follow-up.

Gask, L., & Makin, S. (2012). **'Getting back to normal': The added value of an art-based program in promoting 'recovery' for common but chronic mental health problems.** *Chronic Illness, 8(1)*, 64-75.

PMID: 21985790

ABSTRACT: OBJECTIVES. The aim of this project was to explore the added value of participation in an Arts on Prescription (AoP) program to aid the process of recovery in people with common but chronic mental health problems that have already undergone a psychological 'talking'-based therapy. METHODS. The study utilized qualitative in-depth interviews with 15 clients with persistent anxiety and depression who had attended an 'AoP' service and had previously received psychological therapy. RESULTS and discussion. Attending AoP aided the process of recovery, which was perceived by participants as 'returning to normality' through enjoying life again, returning to previous activities, setting goals and stopping dwelling on the past. Most were positive about the benefits they had previously gained from talking therapies. However, these alone were not perceived as having been sufficient to achieve recovery. The AoP offered some specific opportunities in this regard, mediated by the therapeutic and effect of absorption in an activity, the specific creative potential of art, and the social aspects of attending the program. CONCLUSIONS. For some people who experience persistent or relapsing common mental health problems, participation in an arts-based program provides 'added value' in aiding recovery in ways not facilitated by talking therapies alone.

Grant, B., Heim, D., Powers, J.S., & Rollins, J. (2012). **Music therapy to promote movement from isolation to community in homeless veterans.** *Tennessee Medicine: Journal of the Tennessee Medical Association, 105(1)*, 38-9.

PMID: 22359994

ABSTRACT: The U.S. Department of Veterans Affairs' Operation Stand Down has done much to address homeless needs among veterans. Gaining client trust is central to the effectiveness of the program. Music therapy has been found beneficial in moving individuals from isolation to community. We report our experience with participatory music therapy in Operation Stand Down and offer this as a legitimate intervention to enhance client participation.

Havlena, J., Krezinski, A.J., & Stafstrom, C.E. (2012). **Art therapy focus groups for children and adolescents with epilepsy.** *Epilepsy & Behavior*, 24(2), 227-33.

PMID: 22554978

**ABSTRACT:** Children with epilepsy are at risk for numerous psychological and social challenges. We hypothesized that art therapy focus groups would enhance the self-image of children and adolescents with epilepsy. Sixteen children with epilepsy, ages 7-18 years, were recruited from pediatric neurology clinics at the University of Wisconsin to participate in four art therapy sessions. Pre-group assessments included psychological screens (Piers-Harris Children's Self-Concept Scale; Childhood Attitude Toward Illness Scale; Impact of Childhood Neurologic Disability Scale) and art therapy instruments (Formal Elements Art Therapy Scale; Seizure Drawing Task; Levick Emotional and Cognitive Art Therapy Assessment). Developmental levels of drawings were significantly below age-expected standards. Following completion of focus groups, a repeat Childhood Attitude Toward Illness Scale showed no differences between pre- and post-test scores on any measure of this scale. However, subjects and parents were uniformly positive about their group experiences, suggesting a qualitative benefit from participation in art therapy focus groups.

Hayashida, N., Hiramatsu, K., Katayama, S., Koga, M., Kudo, T., Mori, S., Orita, M., Shinkawa, T., Takamura, N., & Togo, M. (2012). **Monitoring the autonomic nervous activity as the objective evaluation of music therapy for severely and multiply disabled children.** *The Tohoku Journal of Experimental Medicine*, 227(3), 185-9.

PMID: 22729251

**ABSTRACT:** Severely and multiply disabled children (SMDC) are frequently affected in more than one area of development, resulting in multiple disabilities. The aim of the study was to evaluate the efficacy of music therapy in SMDC using monitoring changes in the autonomic nervous system, by the frequency domain analysis of heart rate variability. We studied six patients with SMDC (three patients with cerebral palsy, one patient with posttraumatic syndrome after head injury, one patient with herpes encephalitis sequelae, and one patient with Lennox-Gastaut syndrome characterized by frequent seizures,

developmental delay and psychological and behavioral problems), aged 18-26 (mean  $22.5 \pm 3.5$ ). By frequency domain method using electrocardiography, we measured the high frequency (HF; with a frequency ranging from 0.15 to 0.4 Hz), which represents parasympathetic activity, the low frequency/high frequency ratio, which represents sympathetic activity between the sympathetic and parasympathetic activities, and heart rate. A music therapist performed therapy to all patients through the piano playing for 50 min. We monitored each study participant for 150 minutes before therapy, 50 minutes during therapy, and 10 minutes after therapy. Interestingly, four of 6 patients showed significantly lower HF components during music therapy than before therapy, suggesting that these four patients might react to music therapy through the suppression of parasympathetic nervous activities. Thus, music therapy can suppress parasympathetic nervous activities in some patients with SMDC. The monitoring changes in the autonomic nervous activities could be a powerful tool for the objective evaluation of music therapy in patients with SMDC.

Manchester, R.A. (2012). **Performing arts medicine-past, present, and future.** *Medical Problems of Performing Artists*, 27(2), 55-6.

PMID: 22739817

*No abstract is available.*

Raglio, A. (2012). **[The efficacy of music and music therapy in the neuromotor rehabilitation].** *Giornale Italiano di Medicina del Lavoro ed Ergonomia*, 34(1), 85-90. [Article in Italian].

PMID: 22697039

**ABSTRACT:** This article review includes the controlled and randomized controlled trials about the use of music and music therapy techniques in the neuromotor rehabilitation. The paper defines the music therapy and delineates the neuroscientific bases and rehabilitative potential of music and music therapy interventions. Significant results are present in the stroke and Parkinson's disease rehabilitation. The Author's conclusions suggest the need of more rigorous studies based on clear procedures and strong methodological research criteria.

Rylatt, P. (2012). **The benefits of creative therapy for people with dementia.** *Nursing Standard*, 26(33), 42-7.

PMID: 22616268

**ABSTRACT:** AIM: To evaluate the use of creative therapy, including dance, drama, music and movement, with people who have dementia attending one NHS organization that provides day treatment and inpatient services. **METHOD:** A one-day training package in the use of creative therapy in dementia care was commissioned from a dance movement psychotherapist. Creative therapy sessions, including dance, drama, music and movement activities were implemented over an eight-week period, a minimum of three times a week. Observational outcomes of creative self-expression, communication, pleasure and enjoyment, and general engagement were recorded. **FINDINGS:** Implementation of creative therapy resulted in improvements in creative self-expression, communication, pleasure and enjoyment, and general engagement in people with dementia. **CONCLUSION:** The evaluation has emphasized the positive effects of creative or artistic approaches on dementia care, and supports previous research on the use of such approaches in NHS dementia care services. Further research on the immediate and longer-term outcomes and benefits of creative therapy for people with dementia is recommended to support the routine availability of such therapy in dementia care.

Tomaino, C.M. (2012). **Effective music therapy techniques in the treatment of nonfluent aphasia.** *Annals of the New York Academy of Sciences*, 1252, 312-7.

PMID: 22524373

**ABSTRACT:** In music therapy for nonfluent aphasia patients who have difficulty producing meaningful words, phrases, and sentences, various benefits of singing have been identified: strengthened breathing and vocal ability, improved articulation and prosody of speech, and increased verbal and nonverbal communicative behaviors. This paper will introduce these various techniques used in clinical music therapy, and summarize findings based on our recent study to illustrate the strength of different techniques emphasizing rhythm, pitch, memory, and vocal/oral motor components dealing with different symptoms. The

efficacy of each component is enhanced or diminished by the choice of music and the way it is interactively delivered. This indicates that neural mechanisms underlying speech improvement vary greatly with available acoustic and social cues in aphasic brain.

## 2011

Altenmüller, E., Amengual, J., Camara, E., Grau, C., Juncadella, M., Marco-Pallares, J., Mohammadi, B., Montero, J., Münte, T.F., Rodriguez-Fornells, A., Rojo, N., Rubio, F., Schneider, S., & Veciana, M. (2011). **Music-supported therapy induces plasticity in the sensorimotor cortex in chronic stroke: A single-case study using multimodal imaging (fMRI-TMS).** *Brain Injury*, 25(7-8), 787-93.

PMID: 21561296

**ABSTRACT:** PRIMARY OBJECTIVE: Music-Supported Therapy (MST) has been developed recently in order to improve the use of the affected upper extremity after stroke. This study investigated the neuroplastic mechanisms underlying effectiveness in a patient with chronic stroke. **METHODS:** MST uses musical instruments, a midi piano and an electronic drum set emitting piano sounds, to re-train fine and gross movements of the paretic upper extremity. Data are presented from a patient with a chronic stroke (20 months post-stroke) with residual right-sided hemiparesis who took part in 20 MST sessions over the course of 4 weeks. **RESULTS:** Post-therapy, a marked improvement of movement quality, assessed by 3D movement analysis, was observed. Moreover, functional magnetic resonance imaging (fMRI) of a sequential hand movement revealed distinct therapy-related changes in the form of a reduction of excess contralateral and ipsilateral activations. This was accompanied by changes in cortical excitability evidenced by transcranial magnetic stimulation (TMS). Functional MRI in a music listening task suggests that one of the effects of MST is the task-dependent coupling of auditory and motor cortical areas. **CONCLUSIONS:** The MST appears to be a useful neurorehabilitation tool in patients with chronic stroke and leads to neural reorganization in the sensorimotor cortex.

Benveniste, S., Boespflug, S., Boulay, M., Jouvelot, P., & Rigaud, A.S. (2011). **A pilot usability study of MINWii, a music therapy game for demented patients.** *Technology and Health Care, 19*(4), 233-46. PMID: 21849735

ABSTRACT: MINWii is a music therapy game for the renarcissization of demented patients. It lets players improvise or play songs of their choice by pointing at a virtual keyboard with a Wiimote Pistol. We present the results of a three-month usability study we conducted with seven institutionalized patients suffering from mild to moderately severe Alzheimer's disease at the LUSAGE Living Lab in Paris. We demonstrate that MINWii is indeed usable by AD patients despite their motor and cognitive impairments: our results, which were largely computed automatically thanks to MINWii's extensive logging capabilities, show either an instant mastery or a clear learning effect depending on patients' cognitive abilities. Moreover, patients were overall very satisfied with the game and expressed a desire to repeat the experience: MINWii fosters positive interaction with the caregivers and elicits powerful reminiscence with even the most severely impaired patients. This study justifies future research to assess the lasting effects of playing MINWii on both quality of life and cognitive impairment in demented patients.

Driscoll, V., Gfeller, K., Kenworthy, M., & Van Voorst, T. (2011). **Music therapy for preschool cochlear implant recipients.** *Music Therapy Perspectives, 29*(1), 39-49.

PMID: 23904691

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3726054/pdf/nihms235375.pdf>

ABSTRACT: This paper provides research and clinical information relevant to music therapy for preschool children who use cochlear implants (CI). It consolidates information from various disciplinary sources regarding (a) cochlear implantation of young prelingually-deaf children (~age 2-5), (b) patterns of auditory and speech-language development, and (c) research regarding music perception of children with CIs. This information serves as a foundation for the final portion of the article, which describes typical music therapy goals and examples of interventions suitable for preschool children.

Gallagher, L.M. (2011). **The role of music therapy in palliative medicine and supportive care.** *Seminars in Oncology, 38*(3), 403-6.

PMID: 21600370

ABSTRACT: This paper is designed to provide an introduction to music therapy in the continuum of cancer care. The value and use of music therapy during diagnosis and treatment, palliation, hospice, actively dying, and bereavement have been well documented. The music therapy process will be identified, research will be shared, and the importance and role of music therapy in palliative medicine and supportive cancer care discussed. Music therapy is invaluable throughout the entire cancer treatment process.

Gooding, L.F. (2011). **The effect of a music therapy social skills training program on improving social competence in children and adolescents with social skills deficits.** *Journal of Music Therapy, 48*(4), 440-62.

PMID: 22506299

ABSTRACT: Three separate studies were conducted in school, residential and after-school care settings to test the effectiveness of a music therapy-based social skills intervention program on improving social competence in children and adolescents. A total of 45 children (n = 12; n = 13; n = 20) aged 6-17 years with social skills deficits participated in a group-based five session intervention program. The same curriculum, adapted to be age appropriate, was used at all 3 sites. Specific deficits within the social skills areas of peer relations and self-management skills were targeted. Active interventions like music performance, movement to music and improvisation were used. Cognitive-behavioral techniques like modeling, feedback, transfer training and problem solving were also incorporated. Data on social functioning were collected before, during, and after the music therapy intervention from participants, appropriate adult personnel and via behavioral observations. Results indicated that significant improvements in social functioning were found in (a) school participant pre and post self-ratings, (b) researcher pre and post ratings of school participants, (c) case manager's pre and post treatment ratings for the residential participants, (d) after-school care participants' pre and post self-ratings, and (e) behavioral observations at all three settings. Additional changes, although not significant,

were noted in teacher ratings, residential participant self- and peer ratings, and after-school case manager ratings. Results from these studies suggest that the music therapy intervention was effective in improving social competence in children and adolescents with social deficits. More research is warranted to provide additional guidance about the use of music therapy interventions to improve social functioning.

Gregersen, T., Liehr, P., McCaffrey, R., & Nishioka, R. (2011). **Garden walking and art therapy for depression in older adults: A pilot study.** *Research in Gerontological Nursing*, 4(4), 237-42.

PMID: 21323299

**ABSTRACT:** The purpose of this pilot study was to compare garden walking (either alone or guided) with art therapy in older adults with depression. Depression was measured using the Geriatric Depression Scale (GDS) and stories of sadness/joy. Prior to the intervention, 47 percent of participants had depression scores in the severe range and 53 percent in the mild range. At the end of the intervention, none of the participants had scores in the severe range, 89 percent had scores in the mild range, and 11 percent had scores in the normal range. Results of the GDS data using repeated measures analysis of variance indicated significant decreases in depression for all three groups from pretest to posttest. All participants, regardless of group assignment, had a lower percentage of negative-emotion word use and a higher percentage of positive-emotion word use over time. This study provides evidence for nurses wishing to guide older adults in safe, easy, and inexpensive ways to reduce depression.

Kalinić, D., & Mimica, N. (2011). **Art therapy may be beneficial for reducing stress-related behaviors in people with dementia: A case report.** *Psychiatria Danubina*, 23(1), 125-8.

PMID: 21448117

**ABSTRACT:** Communication with person with dementia (PWD) is becoming worse and worse during the course of illness, and at the end may be totally lost. Non-pharmacological interventions may be beneficial in increasing the behavioral disturbances which appears frequently during the progression of dementia, and combination of non-pharmacological

techniques and drugs is usually more efficacy than psychopharmacs alone. Mr. Zvonko, the PWD diagnosed with Alzheimer's disease of moderate stage, is presented in this case report. Although Mr. Zvonko was treated with antidementia drugs, the behavioral disturbances were present. The introduction of low doses of conventional antipsychotic was accompanied with extrapyramidal side-effects, and atypical antipsychotics were not used due to the FDA warning and non-willingness of caregiver and family to take that risk. After his individual and family status was evaluated, he was advised to attend the daily care center and to start with art therapy. Despite he was never drawing pictures before developing AD, everybody, including his wife who is also a caregiver, was surprised with his talent and creativity. While drawing the pictures he was calm and satisfied and his behavior in the daily care center, but also at home, became much more adequate. There was no need to add psychopharmacs for behavioral disturbances. In this case the art therapy was shown to be an excellent add-on non-pharmacological intervention, beneficial for reducing stress-related behaviors in PWD taking antidementia drugs.

Lawrence, G., Peisah, C., & Reutens, S. (2011). **Creative solutions for severe dementia with BPSD: A case of art therapy used in an inpatient and residential care setting.** *International Psychogeriatrics*, 23(6), 1011-3.

PMID: 21426619

**ABSTRACT:** Behavioral and psychological symptoms of dementia (BPSD) are common, distressing and compromise care. Their diverse etiology necessitates targeted, individualized treatment. We present a case of an 82-year-old with severe dementia and BPSD, and with limited response to a range of pharmacological and non-pharmacological treatments. Individualized art therapy was developed in an inpatient setting using felt material cut into shapes and coloring with stencils and pre-drawn line drawings utilizing preserved skills of coloring, while supporting frontal-executive and language deficits. The activity was replicable and carried over to the residential care setting and supported by family and professional carers.

Mahon, E.M., & Mahon, S.M. (2011). **Music therapy: A valuable adjunct in the oncology setting.** *Clinical Journal of Oncology Nursing, 15*(4), 353-6. PMID: 21810567

ABSTRACT: Music therapy is the supervised and therapeutic use of music by a credentialed therapist to promote positive clinical outcomes. It can be a valuable form of complementary medicine in the oncology setting to decrease patient stress and anxiety, relieve pain and nausea, provide distraction, alleviate depression, and promote the expression of feelings. The music therapist assesses the patient and consults other members of the multidisciplinary team to create a therapeutic treatment plan. Music therapists design music sessions based on patients' needs and their intended therapeutic goals. Patients can participate actively or passively in individual or group sessions. Only a credentialed music therapist can provide safe and beneficial music therapy interventions.

Reschke-Hernández, A.E. (2011). **History of music therapy treatment interventions for children with autism.** *Journal of Music Therapy, 48*(2), 169-207. PMID: 21938891

ABSTRACT: The purpose of this paper is to provide a systematic review of the history of music therapy research and treatment of children with autism. Understanding such history is important in order to improve clinical efficacy and inform future research. This paper includes a history of autism diagnosis, reviews strengths and limitations of music therapy practice with children with autism from 1940-2009, and suggests direction for future music therapy research and clinical practice with this population. Literature was limited to the English language and obtained with the following search terms: autism, autistic, (early) infantile autism, child, therapeutic music, musical therapy, and music therapy. Table of contents from music therapy journals were searched, and reference lists from obtained articles were perused for additional articles. This historical review focused primarily on journal articles, however, books and book chapters that appeared to hold particular historical significance were also included.

## 2010

Chang, A.B., Irons, J.Y., & Kenny, D.T. (2010). **Singing for children and adults with cystic fibrosis.** *The Cochrane Database of Systematic Reviews, (5)*, CD008036.

PMID: 20464761

ABSTRACT: BACKGROUND: Cystic fibrosis is a genetically inherited, life-threatening condition that affects major organs. The management of cystic fibrosis involves a multi-faceted daily treatment regimen that includes airway clearance physiotherapy, taking pancreatic enzymes and other medications. Previous studies identified that compliance with this intensive treatment especially among adolescents with cystic fibrosis is poor. Because of both the nature and consequences of the illness and the relentless demands of treatments, many individuals with cystic fibrosis are likely to have a poor quality of life. Anecdotal evidence suggests that singing may provide rigorous exercises for the whole respiratory system as well as a means for emotional expression, which may enhance quality of life. OBJECTIVES: To evaluate the effects of a singing intervention in addition to usual therapy on the quality of life, morbidity, respiratory muscle strength and pulmonary function of children and adults with cystic fibrosis. SEARCH STRATEGY: We searched the Group's Cystic Fibrosis Trials Register, the Cochrane Central Register of Controlled Trials, major allied complementary data bases, and clinical trial registers. Hand searching for relevant conference proceedings and journals was also carried out. Date of search of Trials Register: 02 September 2009. Date of additional searches: 17 September 2009. SELECTION CRITERIA: Randomized controlled trials in which singing (as an adjunctive intervention) is compared with either a sham intervention or no singing in people with cystic fibrosis. DATA COLLECTION AND ANALYSIS: No trials were found that met the selection criteria. MAIN RESULTS: No meta-analysis could be performed. AUTHORS' CONCLUSIONS: As no studies that met the criteria were found, this review is unable to support or refute the benefits of singing as a therapy for people with cystic fibrosis. Future randomized controlled trials are required to evaluate singing therapy for people with cystic fibrosis.

Fiorlli, M., Iaconelli, S., Kusch, I., Lena, F., Mirabella, G., & Modugno, N. (2010). **Active theater as a complementary therapy for Parkinson's disease rehabilitation: A pilot study.** *The Scientific World Journal*, 10, 2301-13.

PMID: 21103799

Available in full-text at: <http://downloads.hindawi.com/journals/tswj/2010/651594.pdf>

**ABSTRACT:** Most medical treatments of Parkinson's disease (PD) are aimed at the reduction of motor symptoms. However, even when motor improvements are evident, patients often report a deterioration of their daily lives. Thus, to achieve a global improvement in personal well-being, not only drugs, but also complementary therapies, such as physical exercise, occupational and speech therapy, and active music therapy, have been used. We hypothesized that theater could reduce clinical disability and improve the quality of life of PD patients (primary end points) more efficiently than other complementary therapies because (1) in order to impersonate a character, patients are forced to regain the control of their bodies; and (2) while being part of a group, patients have a high degree of social interaction. The need to regain the control of their bodies and their social functioning is very likely to deeply motivate patients. To assess this hypothesis, we ran a randomized, controlled, and single-blinded study that lasted 3 years, on 20 subjects affected by a moderate form of idiopathic PD, in stable treatment with L-dopa and L-dopa agonists, and without severe sensory deficits. Ten patients were randomly assigned to an active theater program (in which patients were required to participate), while the others underwent physiotherapy (control group), the most common nonpharmacological treatment for PD rehabilitation. Patients of both groups were evaluated at the beginning of each year, using five clinical rating scales (Unified Parkinson's Disease Rating Scale [UPDRS], Schwab and England Scale, Parkinson's Disease Quality of Life [PDQ39] Scale, Epworth Sleepiness Scale, and Hamilton Depression Rating Scale). The theater patients showed progressive improvements and, at the end of the third year, they showed significant improvements in all clinical scales. Conversely, the control patients did not exhibit significant ameliorations with time. Thus, the present study provides the first scientific evidence that active

theater, coupled with conventional medical treatments, represents a valid complementary therapeutic intervention for PD treatment.

Fratianne, R.B., Super, D.M., Tan, X., & Yowler, C.J. (2010). **The efficacy of music therapy protocols for decreasing pain, anxiety, and muscle tension levels during burn dressing changes: A prospective randomized crossover trial.** *Journal of Burn Care & Research*, 31(4), 590-7.

PMID: 20498613

**ABSTRACT:** The purpose of this study was to explore the efficacy of two music therapy protocols on pain, anxiety, and muscle tension levels during dressing changes in burn patients. Twenty-nine inpatients participated in this prospective, crossover randomized controlled trial. On two consecutive days, patients were randomized to receive music therapy services either on the first or second day of the study. On control days, they received no music. On music days, patients practiced music-based imagery (MBI), a form of music-assisted relaxation with patient-specific mental imagery before and after dressing changes. Also, on music days during dressing changes, the patients engaged in music alternate engagement (MAE), which consisted of active participation in music making. The dependent variables were the patients' subjective ratings of their pain and anxiety levels and the research nurse's objective ratings of their muscle tension levels. Two sets of data were collected before, three sets during, and another two sets after dressing changes. The results showed significant decrease in pain levels before ( $P < .025$ ), during ( $P < .05$ ), and after ( $P < .025$ ) dressing changes on days the patients received music therapy in contrast to control days. Music therapy was also associated with a decrease in anxiety and muscle tension levels during the dressing changes ( $P < .05$ ) followed by a reduction in muscle tension levels after dressing changes ( $P < .025$ ). Music therapy significantly decreases the acute procedural pain, anxiety, and muscle tension levels associated with daily burn care.

Goodill, S.W. (2010). **The creative arts therapies: Making health care whole.** *Minnesota Medicine*, 93(7), 46-9.

PMID: 20701043

ABSTRACT: The creative arts therapies are six fields that combine artistic expression with psychotherapy to promote healing, wellness, and personal change. Although they are well-established fields, they are garnering renewed attention with the recent focus on health care and the arts. This article describes these fields and provides information about the training and professional standards of creative arts therapists and examples of how these therapies are being used in health care settings.

Herman-Sucharska, I., Jastrzebowska, G., Lipowska, M., Makarowski, R., Mirski, A., Pachalska, M., & Wilk, M. (2010). **Speech intelligibility in cerebral palsy children attending an art therapy program.** *Medical Science Monitor*, 16(5), CR222-31.

PMID: 20424549

ABSTRACT: BACKGROUND: Dysarthria is a common sequela of cerebral palsy (CP), directly affecting both the intelligibility of speech and the child's psycho-social adjustment. Speech therapy focused exclusively on the articulatory organs does not always help CP children to speak more intelligibly. The program of art therapy described here has proven to be helpful for these children. MATERIAL/METHODS: From among all the CP children enrolled in our art therapy program from 2005 to 2009, we selected a group of 14 boys and girls (average age 15.3) with severe dysarthria at baseline but no other language or cognitive disturbances. Our retrospective study was based on results from the Auditory Dysarthria Scale and neuropsychological tests for fluency, administered routinely over the four months of art therapy. RESULTS: All 14 children in the study group showed some degree of improvement after art therapy in all tested parameters. On the Auditory Dysarthria Scale, highly significant improvements were noted in overall intelligibility ( $p < 0.0001$ ), with significant improvement ( $p < 0.001$ ) in volume, tempo, and control of pauses. The least improvement was noted in the most purely motor parameters. All 14 children also exhibited significant improvement in fluency. CONCLUSIONS: Art therapy improves the intelligibility of speech in children with cerebral palsy, even when language functions are not as such the object of therapeutic intervention.

Kim, S.J. (2010). **Music therapy protocol development to enhance swallowing training for stroke patients with dysphagia.** *Journal of Music Therapy*, 47(2), 102-19.

PMID: 21141768

ABSTRACT: Considering the devastating condition of dysphagia, it is necessary to provide intensive therapeutic regimen based on interdisciplinary approach. In this aspect, music-enhanced swallowing protocol was developed through a pilot study. Then, the modified protocol from a pilot study was examined with eight stroke patients in a local hospital. The protocol was designed to improve oral motor control, laryngeal elevation, breathing, and swallowing functions. The dependent variables measured included reflex, respiration, and laryngeal functions using the Frenchay Dysarthria assessment. Results from the initial to the mid-evaluation showed that pitch in the laryngeal category were statistically significant after 6th sessions. After the twelfth session, when the final evaluation was compared with the initial assessment, additional categories revealed statistically significant changes. It is recommended that this study should be replicated with a control group and a larger sample using either FEES or video fluoroscopy for scientific data to further substantiate music therapy outcomes in stroke rehabilitation.

Oon, P.P. (2010). **Playing with Gladys: A case study integrating drama therapy with behavioral interventions for the treatment of selective mutism.** *Clinical Child Psychology and Psychiatry*, 15(2), 215-30.

PMID: 20194568

ABSTRACT: This case study examines an integrative approach combining drama therapy and the behavioral skill "shaping", as offered to Gladys, a 5-year-old girl diagnosed with selective mutism. This study found that shaping, when implemented in the context of play, with play as the primary reinforcer, elicited from Gladys vocalization and eventually speech within a very short time. Her vocalizations allowed her to enter dramatic play, which in turn propelled spontaneous speech. This article looks at how the three elements of drama therapy: the play space, role-playing, and dramatic projection brought about therapeutic changes for Gladys. Aside from spontaneous speech, Gladys also developed positive

self-esteem and a heightened sense of spontaneity. Subsequently, these two qualities helped her generalize her speech to new settings on her own. Gladys's newly harnessed spontaneity further helped her become more sociable and resilient. This study advances the possibility of integrating a behavioral skill with drama therapy for the therapeutic benefits of a child with an anxiety-related condition like selective mutism.

Protacio, J. (2010). **Patient-directed music therapy as an adjunct during burn wound care.** *Critical Care Nurse*, 30(2), 74-6.

PMID: 20360454

Full-text is available at: <http://ccn.aacnjournals.org/content/30/2/74.full.pdf>

No abstract is available.

## 2009

Forsblom, A., Laitinen, S., Särkämö, T., & Tervaniemi, M. (2009). **Therapeutic role of music listening in stroke rehabilitation.** *Annals of the New York Academy of Sciences*, 1169, 426-30.

PMID: 19673818

ABSTRACT: We performed two parallel interview studies of stroke patients (n= 20) and professional nurses (n= 5) to gain more insight into the therapeutic role of music listening in stroke rehabilitation. Results suggest that music listening can be used to relax, improve mood, and provide both physical and mental activation during the early stages of recovery from stroke. Thus, music listening could provide a useful clinical tool in stroke rehabilitation.

Gold, C., Kim, J., & Wigram, T. (2009). **Emotional, motivational, and interpersonal responsiveness of children with autism in improvisational music therapy.** *Autism*, 13(4), 389-409.

PMID: 19535468

ABSTRACT: Through behavioral analysis, this study investigated the social-motivational aspects of musical interaction between the child and the therapist in improvisational music therapy by measuring emotional, motivational and interpersonal responsiveness in children with autism during joint engagement episodes. The randomized controlled study (n = 10) employed a single subject comparison design in two different conditions, improvisational music therapy

and toy play sessions, and DVD analysis of sessions. Improvisational music therapy produced markedly more and longer events of 'joy', 'emotional synchronicity' and 'initiation of engagement' behaviors in the children than toy play sessions. In response to the therapist's interpersonal demands, 'compliant (positive) responses' were observed more in music therapy than in toy play sessions, and 'no responses' were twice as frequent in toy play sessions as in music therapy. The results of this exploratory study found significant evidence supporting the value of music therapy in promoting social, emotional and motivational development in children with autism.

Kelly, N.A. (2009). **The use of visual art for stress relief: A case report of newly diagnosed multiple sclerosis.** *Explore: The Journal of Science and Healing*, 5(3), 167-70.

PMID: 19409363

No abstract is available.

Marchina, S., Norton, A., Schlaug, G., & Zipse, L. (2009). **Melodic intonation therapy: Shared insights on how it is done and why it might help.** *Annals of the New York Academy of Sciences*, 1169, 431-6.

PMID: 19673819

Available in full-text at: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2780359/pdf/nihms-159324.pdf>

ABSTRACT: For more than 100 years, clinicians have noted that patients with nonfluent aphasia are capable of singing words that they cannot speak. Thus, the use of melody and rhythm has long been recommended for improving aphasic patients' fluency, but it was not until 1973 that a music-based treatment [Melodic Intonation Therapy (MIT)] was developed. Our ongoing investigation of MIT's efficacy has provided valuable insight into this therapy's effect on language recovery. Here we share those observations, our additions to the protocol that aim to enhance MIT's benefit, and the rationale that supports them.

Martinez, J. (2009). **Is music therapy?** *Nephrology Nursing Journal*, 36(3), 329-30.

PMID: 19588702

ABSTRACT: Music therapy as a method of intervention may enhance the quality of life of patients on dialysis by reducing anxiety, depression, and other

psychosocial responses as a result of hemodialysis. This article presents a study that experimented with music therapy during dialysis sessions in order to improve the treatments and allow patients the opportunity to participate in their healthcare program.

Young-Mason, J. (2009). **Music and dance bring hope to those with Parkinson disease.** *Clinical Nurse Specialist (CNS)*, 23(2), 113-4.

PMID: 19225290

*No abstract is available.*

## 2008

Cidambi, I., Dermatis, H., Galanter, M., Ross, S., Roth, S., Weinstein, J., & Ziedonis, D. (2008). **Music therapy: A novel motivational approach for dually diagnosed patients.** *Journal of Addictive Diseases*, 27(1), 41-53.

PMID: 18551887

ABSTRACT: Co-occurring mental illness and addiction is very common and results in worse treatment outcomes compared to singly diagnosed addicted individuals. Integrated treatment for co-occurring disorders is associated with better treatment outcomes; however there is a wide range of what is included in integrated treatment. Due to patient and staff interests, integrated treatment often includes complementary and alternative therapies, including music and art therapy. There is a need to study how these approaches effect treatment engagement, retention, and outcome. This study was a prospective naturalistic non-randomized pilot study without a control group that sought to evaluate how participation in a music therapy program affected treatment outcomes for individuals with co-occurring mental illness and addiction. In summary, music therapy appears to be a novel motivational tool in a severely impaired inpatient sample of patients with co-occurring disorders. Future studies of music therapy in integrated co-occurring disorder setting should include a control group.

Clark, D.L., Gordon, A.J., & Mays, K.L. (2008). **Treating addiction with tunes: A systematic review of music therapy for the treatment of patients with addictions.** *Substance Abuse*, 29(4), 51-9.

PMID: 19042198

ABSTRACT: Music therapy is the use of musical

interventions in a therapeutic setting to accomplish health-related goals. Descriptions of music therapy exist in the peer-reviewed literature and indicate potential use of music therapy in treatment of patients with addiction disorders. This systematic review describes and compares the types of music therapy demonstrated in the literature and evaluates the evidence that music therapy improves outcomes of patients with addictions. A search and critical review of all the existing published literature on music therapy for the treatment of addictions was conducted using online databases and secondary search strategies. Few studies quantitatively assess the use of music therapy in the treatment of patients with addictions. Music listening provided by music therapists is commonly studied. Music therapy sessions reported were additive, not independent, treatment modalities. In the literature, no consensus exists regarding of the efficacy of music therapy as treatment for patients with addictions.

Stoukides, J. (2008). **Creative and sensory therapies enhance the lives of people with Alzheimers.** *Medicine and Health, Rhode Island*, 91(5), 154.

PMID: 18549047

*No abstract is available.*

## 2007

Cech, D., Rahlin, M., Rheault, W., & Stoecker, J. (2007). **Use of music during physical therapy intervention for an infant with Erb's palsy: A single-subject design.** *Physiotherapy Theory and Practice*, 23(2), 105-17.

PMID: 17530540

ABSTRACT: Evidence supporting the use of music during pediatric physical therapy intervention is limited. The purpose of this single-subject design was to evaluate the effects of music on patient progress, the amount of crying during therapy, and parent satisfaction with physical therapy services. The subject was an infant girl with Erb's palsy who participated in this study from age 8 months to age 20 months. An A-B-A withdrawal single-subject design was used. The patient's progress was assessed by using the T.I.M.E. The amount of crying was documented in the Crying Log. A parent satisfaction questionnaire was administered three times over the course of the

study. The subject's progress in the music intervention period increased on three of five primary subtests of the T.I.M.E. The amount of crying decreased and parent satisfaction increased when music was played during therapy. Music may be used by pediatric physical therapists to decrease the patient's crying, increase parent satisfaction, and possibly to increase the child's rate of progress. Further research conducted with a group of infants and toddlers may help generalize these findings to a wider patient population.

Chau, T., Eaton, C., Hamdani, Y., Lamont, A., Schweltnus, H., & Tam, C. (2007). **Movement-to-music computer technology: A developmental play experience for children with severe physical disabilities.** *Occupational Therapy International*, 14(2), 99-112.

PMID: 17623382

ABSTRACT: Children with severe physical disabilities often lack the physical skills to explore their environment independently, and to play with toys or musical instruments. The movement-to-music (MTM) system is an affordable computer system that allows children with limited movements to play and create music. The present study explored parents' experiences of using the MTM system with their children. A qualitative methodology employing in-depth interview techniques was used with six mothers and their children. The themes extracted from the data were organized under two main concepts of the International Classification of Functioning, Disability, and Health (ICF) (WHO, 2001) framework. The results showed that the MTM expanded horizons for the child along the ICF health dimensions and the MTM had a positive impact on ICF environmental determinants of health. The small sample size should be noted as a limitation of this study. Further research should be carried out with a larger sample of children with restricted mobility to obtain a better understanding of the impact of MTM technology on children's psychosocial development.

Crawford, M.J., & Patterson, S. (2007). **Arts therapies for people with schizophrenia: An emerging evidence base.** *Evidence-based Mental Health*, 10(3), 69-70.

PMID: 17652554

*No abstract is available.*

Gussak, D. (2007). **The effectiveness of art therapy in reducing depression in prison populations.** *International Journal of Offender Therapy and Comparative Criminology*, 51(4), 444-60.

PMID: 17652148

ABSTRACT: Major obstacles block the effectiveness of therapy in prison. Many inmates have an inherent mistrust for verbal disclosure. Rigid defenses exist for basic survival. Despite these defenses, there has been support for art therapy as a valuable tool. Unfortunately, there has been little research to measure the effectiveness of art therapy in prison. Two quantitative studies were initiated in a North Florida prison to measure the effectiveness of art therapy with inmates, specifically in decreasing depressive symptoms. This article will present a pilot and follow-up study. The methods, including the Formal Elements Art Therapy Scale (FEATS) and the Beck Depression Inventory-Short Form, will be delineated. What was revealed was that although the FEATS proved more effective as a measurement tool for the pilot than for the follow-up study, ultimately, the results reflected a significant decrease in depressive symptoms in those inmates who participated in the program.

Walworth, D.D. (2007). **The use of music therapy within the SCERTS model for children with autism spectrum disorder.** *Journal of Music Therapy*, 44(1):2-22.

PMID: 17419661

ABSTRACT: The SCERTS model is a new, comprehensive curriculum designed to assess and identify treatment goals and objectives within a multidisciplinary team of clinicians and educators for children with autism spectrum disorders (ASD). This model is an ongoing assessment tool with resulting goals and objectives derived there from. Because music therapy offers a unique interaction setting for children with ASD to elicit communication skills, music therapists will need to be an integral part of the multidisciplinary assessment team using the SCERTS model which is projected to become the primary nationwide curriculum for children with ASD. The purpose of this paper is to assist music therapists in transitioning to this model by providing an overview and explanation of the SCERTS model and by identifying how music therapists are currently providing clinical services incorporated in the SCERTS Model for children with

ASD. In order to formulate comprehensive transitional suggestions, a national survey of music therapists working with clients at risk or diagnosed with ASD was conducted to: (a) identify the areas of SCERTS assessment model that music therapists are currently addressing within their written goals for clients with ASD, (b) identify current music therapy activities that address various SCERTS goals and objectives, and (c) provide demographic information about settings, length, and tools used in music therapy interventions for clients with ASD.

## 2006

Aldridge, D., & Kern, P. (2006). **Using embedded music therapy interventions to support outdoor play of young children with autism in an inclusive community-based child care program.** *Journal of Music Therapy, 43*(4), 270-94.

PMID: 17348756

ABSTRACT: For young children with autism enrolled in community-based inclusive child care programs, outdoor play can be a major challenge. The aim of this music therapy intervention was to improve peer interactions and meaningful play on the playground for four boys with autism by adding an outdoor music center and using original songs composed for each participant. A collaborative approach was used to support the implementation of the intervention by the children's teachers, engaging classroom peers as formal and informal helpers. The effects of the interventions were examined using a multiple baseline design with four conditions replicated across the four children. The results indicate that the musical adaptation of the playground itself did not improve social interactions of children with autism significantly, but it facilitated their play and involvement with peers by attraction to the sound and opportunity to use the instruments. The song interventions produced desirable peer interaction outcomes, and the collaborative consultative approach enabled teachers to implement interventions successfully in ongoing playground routines. In addition, peer-mediated strategies increased peer interactions and meaningful play on the playground.

Bard, C., Peretz, I., & Racette, A. (2006). **Making non-fluent aphasics speak: Sing along!** *Brain, 129*(Pt 10), 2571-84.

PMID: 16959816

ABSTRACT: A classic observation in neurology is that aphasics can sing words they cannot pronounce otherwise. To further assess this claim, we investigated the production of sung and spoken utterances in eight brain-damaged patients suffering from a variety of speech disorders as a consequence of a left-hemisphere lesion. In Experiment 1, the patients were tested in the repetition and recall of words and notes of familiar material. Lyrics of familiar songs, as well as words of proverbs and prayers, were not better pronounced in singing than in speaking. Notes were better produced than words. In Experiment 2, the aphasic patients repeated and recalled lyrics from novel songs. Again, they did not produce more words in singing than in speaking. In Experiment 3, when allowed to sing or speak along with an auditory model while learning novel songs, aphasics repeated and recalled more words when singing than when speaking. Reduced speed or shadowing cannot account for this advantage of singing along over speaking in unison. The results suggest that singing in synchrony with an auditory model — choral singing — is more effective than choral speech, at least in French, in improving word intelligibility because choral singing may entrain more than one auditory-vocal interface. Thus, choral singing appears to be an effective means of speech therapy.

Franko, D.L., Frisch, M.J., & Herzog, D.B. (2006). **Arts-based therapies in the treatment of eating disorders.** *Eating Disorders, 14*(2), 131-42.

PMID: 16777810

ABSTRACT: Arts-based therapies are increasingly being employed, in conjunction with empirically valid traditional therapies, in the residential treatment of eating disorders. A systematic database search of arts-based therapies in the treatment of eating disorders was conducted. In addition, program staff at 22 residential eating disorder treatment programs were contacted to provide information regarding arts-based therapy utilization rates. Of the 19 programs that participated in this study, all incorporate arts-based therapies on at least a weekly basis in the treatment of eating disorders. However, while published narrative reflections on arts-based therapies and eating disorders imply a generally positive outcome, no known, empirically valid studies exist on this experiential form of therapy within the area of eating disorders.

Robarts, J. (2006). **Music therapy with sexually abused children.** *Clinical Child Psychology and Psychiatry, 11*(2), 249-69.

PMID: 17086688

ABSTRACT: Music is part of everyday life, and is generally regarded as therapeutic. There is increasing interdisciplinary interest in innate human musicality and the link between music and the emotions. Innate musicality is evident in the dynamic forms of emotional expression that both regulate and cultivate the foundations of meaning in human communication (intersubjectivity). This article discusses music therapy, drawing from interdisciplinary perspectives, and illustrated by case material of individual music therapy with a sexually abused child. Where the growth of mind and meaning is devastated at its core by early relational trauma, music, when used with clinical perception, may reach and work constructively with damaged children in an evolving, musically mediated therapeutic relationship.

## 2005

Aktas, G., & Ogce, F. (2005). **Dance as a therapy for cancer prevention.** *Asian Pacific Journal of Cancer Prevention, 6*(3), 408-11.

PMID: 16236009

ABSTRACT: Even though the field of medicine has developed tremendously, the wide variety of cancer is still among chronic and life threatening disease today. Therefore, the specialists constantly research and try every possible way to find cure or preventive ways to stop its further development. For this reason, studies concerning the chronic disease such as cancer have been spread to many different fields. In this regard, many other alternative ways besides medicine, are used in prevention of cancer. Nutritional therapy, herbal therapy, sportive activities, art therapy, music therapy, dance therapy, imagery, yoga and acupuncture can be given as examples. Among these, dance/movement therapy which deals with individuals' physical, emotional, cognitive as well as social integration is widely used as a popular form of physical activity. The physical benefits of dance therapy as exercise are well documented. Studies have shown that physical activity is known to increase special neurotransmitter substances in the brain (endorphins),

which create a state of well-being. And total body movement such as dance enhances the functions of other body systems, such as circulatory, respiratory, skeletal, and muscular systems. Regarding its unique connection to the field of medicine, many researches have been undertaken on the effects of dance/movement therapy in special settings with physical problems such as amputations, traumatic brain injury, and stroke, chronic illnesses such as anorexia, bulimia, cancer, Alzheimer's disease, cystic fibrosis, heart disease, diabetes, asthma, AIDS, and arthritis. Today dance/movement therapy is a well-recognized form of complementary therapy used in hospitals as well as at the comprehensive clinical cancer centers.

Bien, M.B. (2005). **Art therapy as emotional and spiritual medicine for Native Americans living with HIV/AIDS.** *Journal of Psychoactive Drugs, 37*(3), 281-92.

PMID: 16295011

ABSTRACT: This article describes the intricate challenges of bringing mental health services to isolated, guarded urban HIV-positive Native Americans suffering from chronic trauma-related illnesses and imbalances, depression, anxiety, substance abuse, thought disorders, and trauma-based characterological disorders. It explores the integration of art therapy, Bowen Family Systems Therapy and in-home therapy in the Family & Child Guidance Clinic's attempt to provide support to a population that has profound distrust for "services and treatment," and no historical context for psychotherapy. Changing the paradigm of thought is essential to providing services that respect culture and history as well as addressing current presenting issues. Art therapy and in-home therapy support those community members who are flooded emotionally, but have difficulty speaking about their internal processes.

Danhauer, S.C., & Kemper, K.J. (2005). **Music as therapy.** *Southern Medical Journal, 98*(3), 282-8.

PMID: 15813154

ABSTRACT: Music is widely used to enhance well-being, reduce stress, and distract patients from unpleasant symptoms. Although there are wide variations in individual preferences, music appears to exert direct physiologic effects through the autonomic nervous system. It also has indirect effects by modifying

caregiver behavior. Music effectively reduces anxiety and improves mood for medical and surgical patients, for patients in intensive care units and patients undergoing procedures, and for children as well as adults. Music is a low-cost intervention that often reduces surgical, procedural, acute, and chronic pain. Music also improves the quality of life for patients receiving palliative care, enhancing a sense of comfort and relaxation. Providing music to caregivers may be a cost-effective and enjoyable strategy to improve empathy, compassion, and relationship-centered care while not increasing errors or interfering with technical aspects of care.

Lawrence, M., & Wigram, T. (2005). **Music therapy as a tool for assessing hand use and communicativeness in children with Rett Syndrome.** *Brain & Development, 27 Suppl 1*, S95-S96.

PMID: 16182499

**ABSTRACT:** A six-year-old girl with Rett syndrome was assessed in a multi-disciplinary specialist therapy clinic and aspects of her responsiveness and developmental potential were found in the music therapy assessment. Functional hand use, eye-referencing, motivated and intentional communication were observed and reported through video analysis of a 30 min session of music therapy employing improvisational methods. Absent or reduced hand clapping/plucking, interactive turn-taking, primary and secondary inter-subjectivity, and vocalisation with appropriate emotional expression were evident. Stable truncal positioning and occasional gentle restraint of either hand improved both spontaneous and prompted activity.

## 2004

Aldridge, D., & Schmid, W. (2004). **Active music therapy in the treatment of multiple sclerosis patients: A matched control study.** *Journal of Music Therapy, 41*(3), 225-40.

PMID: 15327343

**ABSTRACT:** Twenty multiple sclerosis patients (14 female, 6 male) were involved in the study, their ages ranging from 29 to 47 years. Ten participants formed the therapy group, and 10 the control group. The groups were comparable on the standard neurological classification scheme Expanded Disability Status Scale (EDSS). Exclusion criteria were pregnancy

and mental disorders requiring medication. Measurements were taken before therapy began (T1), and subsequently every three months (T2-T4). This battery included indicators of clinical depression and anxiety (Beck Depression Inventory and Hospital Anxiety and Depression Scale), a self-acceptance scale (SESA) and a life quality assessment (Hamburg Quality of Life Questionnaire in Multiple Sclerosis). In addition, data were collected on cognitive (MSFC) and functional (EDSS) parameters. Patients in the therapy group received three blocks of music therapy in single sessions over the course of the one year project (8 to 10 sessions respectively). The music therapy approach used for this study is based on the Nordoff Robbins approach (Nordoff & Robbins, 1977). There was no significant difference between the music therapy treatment group and the control group. However, the effect size statistics comparing both groups show a medium effect size on the scales measuring self-esteem ( $d = 0.5423$ ,  $r = .026$ ), depression HAD-D ( $d = 0.63$ ,  $r = 0.310$ ) and anxiety HAD-A ( $d = 0.63$ ,  $r = 0.310$ ). Significant improvements were found for the therapy group over time (T1-T4) in the scale values of self-esteem, depression, and anxiety. Given the stigmatizing effect of a chronic degenerative disease, the positive benefits of music therapy point to a realm of aesthetic considerations in assessing clinical improvement.

Pratt, R.R. (2004). **Art, dance, and music therapy.** *Physical Medicine and Rehabilitation Clinics of North America, 15*(4), 827-41, vi-vii.

PMID: 15458755

**ABSTRACT:** Art, dance, and music therapy are a significant part of complementary medicine in the twenty-first century. These creative arts therapies contribute to all areas of health care and are present in treatments for most psychologic and physiologic illnesses. Although the current body of solid research is small compared with that of more traditional medical specialties, the arts therapies are now validating their research through more controlled experimental and descriptive studies. The arts therapies also contribute significantly to the humanization and comfort of modern health care institutions by relieving stress, anxiety, and pain of patients and caregivers. Arts therapies will greatly expand their role in the health care practices of this country in the twenty-first century.

## 2003

LaPorte, K.M., Melo, L., Stanley, S., & Zeltzer, B.B. (2003). **Arts therapies promote wellness in elders.** *Behavioral Healthcare Tomorrow*, 12(2), 7-12.  
PMID: 12698737  
*No abstract is available.*

## 2002

Hussey, D.L., Laing, S.J., & Layman, D.L. (2002). **Music therapy assessment for severely emotionally disturbed children: A pilot study.** *Journal of Music Therapy*, 39(3), 164-87.  
PMID: 12220199

ABSTRACT: The purpose of this study was to pilot a music therapy assessment instrument for severely emotionally disturbed children. The subjects in this pilot were 20 children, 13 male and female, at a residential treatment center in Cleveland, Ohio. After conducting an extensive literature review, the authors developed a music therapy assessment instrument measuring 4 relevant domains: behavioral/social functioning, emotional responsiveness, language/communication abilities, and music skills. Responses were coded into three categories: defensive/withdrawn, target behavior, and disruptive/intrusive. Results demonstrated that subjects displayed significantly more behaviors in the disruptive/intrusive domain. High inter-rater reliability scores of 91.5 percent for percent agreement and .808 for Cohen's kappa were achieved utilizing this assessment instrument.

## 2001

Brien-Elliott, K., & Kennelly, J. (2001). **The role of music therapy in paediatric rehabilitation.** *Paediatric Rehabilitation*, 4(3), 137-43.  
PMID: 11831565

ABSTRACT: Meeting the needs of the child in rehabilitation requires an interdisciplinary approach, whereby a variety of health care professionals are called upon to work together in planning and coordinating each patient's program. The Registered music therapist is one of the allied health professionals who plays an integral role in this team approach. Music therapy is a recognized allied health profession, which is becoming acknowledged in the expanding world of health care as a therapy able to meet the expansive needs of the patient in rehabilitation. This article will present a literature review which advocates the role of music therapy in rehabilitation, with particular focus on the needs of the paediatric patient. Case vignettes

will be used as further evidence to support the role of music therapy in this context, together with considerations for future research.

Brunelli, S., Formisano, R., Matteis, M., Penta, F., Vinicola, V., & Weckel, J.W. (2001). **Active music therapy in the rehabilitation of severe brain injured patients during coma recovery.** *Annali dell'Istituto Superiore di Sanità*, 37(4), 627-30.  
PMID: 12046234

ABSTRACT: Active improvised music therapy may offer an adjuvant from of treatment in the early rehabilitation of severe brain-injured patients. Active music therapy consists of musical improvisation between patient and therapist by singing or by playing different musical instruments, according to the vital functions, the neurological conditions and the motor abilities of the patients. We studied 34 severe brain-injured patients with a mean coma duration of 52 days +/- 37.21 and a mean interval from coma onset to the beginning of rehabilitation of 154 days on average. Our preliminary results show a significant improvement of the collaboration of the severe brain-injured patients and a reduction of undesired behaviors such as inertia (reduced psychomotor initiative) or psychomotor agitation.

Cabrera, I.N., Lee, M.H., Ma, Y.C., & Nagler, J. (2001). **Impact of music therapy on the communication skills of toddlers with pervasive developmental disorder.** *Annals of the New York Academy of Sciences*, 930, 445-7.  
PMID: 11458864  
*No abstract is available.*

Covington, H. (2001). **Therapeutic music for patients with psychiatric disorders.** *Holistic Nursing Practice*, 15(2), 59-69.  
PMID: 12119920

ABSTRACT: Many patients with psychiatric disorders struggle with poor skills in coping, communication, socialization, and self-expression that may result in dysfunctional behavioral, cognitive, and emotional responses. Therapeutic music offers a noninvasive approach to strengthen these skills and effect behavior change. At a regional inpatient psychiatric hospital in Colorado, a program of therapeutic music was developed using Rogers' theory of unitary human beings as the theoretical framework. This article describes the approach used to strengthen coping skills in communication, socialization, and self-expression. Suggestions are made for developing a program of music with similar patient populations.

Frańczuk, B., Jastrzebowska, G., Macqueen, B.D., Neldon, K., Pachalska, M., & Perzanowski, Z. (2001). **The impact of art therapy on the intelligibility of speech in children with cerebral palsy.** *Ortopedia, Traumatologia, Rehabilitacja*, 3(4), 508-18.

PMID: 17984907

**ABSTRACT:** Background. Children with cerebral palsy (CP) frequently have dysarthria, which reduces the intelligibility of their speech and can seriously impede their psycho-social adjustment. Traditional “bottom-up” rehabilitation oriented directly on the articulatory apparatus is not always successful in helping these children to speak intelligibly. The authors have developed a program of art therapy with elements of logopedic therapy to model and stimulate perception and expression, including linguistic performance, which has proven in clinical to be a helpful “top-down” approach to helping these children to speak more early. Material and methods. Out of the population of CP children treated in the Cracow Rehabilitation Center’s Art Therapy Workshop in the period 1994-2001, we identified 14 children, 9 boys and 5 girls, average age 15,3, who showed severe dysarthria at admission without other language or cognitive disturbances. Our retrospective study was based on recorder results from the Auditory Dysarthria Scale and standard neuropsychological tests for fluency of speech, administered routinely once each month during the 4-month art therapy program. Results. All the children in the study group showed some degree of improvement after art therapy in all tested parameters. On the Auditory Dysarthria Scale, the largest improvements were noted in overall intelligibility ( $p < 0,0001$ ); less improvement, though still statistically significant ( $p < 0,001$ ) took place in respect to volume, tempo, and control of pauses. The least improvement was noted in the pronunciation of vowels and consonants (the most purely motor of the measured parameters). All the children also exhibited significant improvement in fluency of speech. Conclusions. Art therapy with elements of logopedic therapy improves the ability of children with cerebral palsy to engage in purposeful behavior, including speech and language functions, especially intelligibility.

Haneishi, E. (2001). **Effects of a music therapy voice protocol on speech intelligibility, vocal**

**acoustic measures, and mood of individuals with Parkinson’s disease.** *Journal of Music Therapy*, 38(4), 273-90.

PMID: 11796078

**ABSTRACT:** This study examined the effects of a Music Therapy Voice Protocol (MTVP) on speech intelligibility, vocal intensity, maximum vocal range, maximum duration of sustained vowel phonation, vocal fundamental frequency, vocal fundamental frequency variability, and mood of individuals with Parkinson’s disease. Four female patients, who demonstrated voice and speech problems, served as their own controls and participated in baseline assessment (study pretest), a series of MTVP sessions involving vocal and singing exercises, and final evaluation (study post-test). In study pre and posttests, data for speech intelligibility and all acoustic variables were collected. Statistically significant increases were found in speech intelligibility, as rated by caregivers, and in vocal intensity from study pretest to posttest as the results of paired samples t-tests. In addition, before and after each MTVP session (session pre and posttests), self-rated mood scores and selected acoustic variables were collected. No significant differences were found in any of the variables from the session pretests to posttests, across the entire treatment period, or their interactions as the results of two-way ANOVAs with repeated measures. Although not significant, the mean of mood scores in session posttests ( $M = 8.69$ ) was higher than that in session pretests ( $M = 7.93$ ).

Kydd, P. (2001). **Using music therapy to help a client with Alzheimer’s disease adapt to long-term care.** *American Journal of Alzheimer’s Disease and Other Dementias*, 16(2), 103-8.

PMID: 11302070

**ABSTRACT:** The purpose of this case study is to illustrate how music therapy can be used to help the elderly successfully adjust to living in a long-term care (LTC) facility. LTC residents, particularly those with Alzheimer’s disease or related dementia, may exhibit behaviors such as depression, withdrawal, anxiety, emotional lability, confusion, and memory difficulties, frequently related to the disorder, but often exacerbated by difficulty in adjustment to the change in lifestyle. The subject of this case study demonstrated these symptoms. Music therapy helped him adjust to life in a LTC setting by improving his quality of life and enhancing his relationships with

those around him. As chronicled in this study, music therapy may facilitate a resident's adjustment to life in a LTC facility. N.B. Names and identifying information have been changed to protect privacy.

Petterson, M. (2001). **Music for healing: The creative arts program at the Ireland Cancer Center.** *Alternative Therapies in Health and Medicine*, 7(1), 88-9.

PMID: 11191046

*No abstract is available.*

Sugiyama, Y., & Yasuhara, A. (2001). **Music therapy for children with Rett syndrome.** *Brain & Development*, 23 Suppl 1, S82-4.

PMID: 11738847

**ABSTRACT:** The Rett syndrome is good reactivity for sound and music. We enforced active music therapy (MT) individual session to patients with Rett syndrome. The patients were 4, 5 and 6-year-old. The active music therapy and individual session of 30 min/week were performed. It was recorded in video and description, and using the original evaluation list, six items of fact. On largest problem that is hand operation with purpose in childhood of Rett syndrome, we recorded the longest duration and frequency of hand grasping time in one session. There was the improvement of 35.0 percent of listening music, 33.3 percent play music, 13.3 percent singing music, 11.7 percent minute motion, 11.7 percent language, and 20.0 percent personal relation and sociality. The longest duration of hand grasping time was improved from 2 to 12 s in case 2 and from 7 to 80 s in case 3. Grasp frequency which showed the volition rapidly increased from 3 to 41 times, though the elongation for the duration of grasping was little for case 2. Rett syndrome is the disease in which the psychomotor performance regresses with the age, but the aspect that surely developed in the session could be evaluated. Rett syndrome has the ability understanding the music, and music therapy is suitable for them.

## 2000

Brotons, M., & Koger, S.M. (2000). **The impact of music therapy on language functioning in dementia.** *Journal of Music Therapy*, 37(3), 183-95.

PMID: 10990596

**ABSTRACT:** Dementias, such as Alzheimer's disease, include a progressive deterioration of language

functioning. While some researchers have reported an increase in patients' self-expression following music therapy, it is not clear whether these changes specifically reflect improved language skills or whether simple interpersonal interaction with a therapist could account for the improvement. In this study, the effects of music therapy were compared to conversational sessions on language functioning in dementia patients. Participants were selected according to the following criteria: (a) residing in a facility specializing in Alzheimer's and related disorders; (b) possessing sufficient verbal ability to answer simple questions and to comply with requests to speak, participate, or sit down; and (c) attaining the written consent of the patient's guardian or representative. All participants had been in music therapy twice per week for at least three months prior to the study onset. One week prior to the beginning of the study, subjects were assessed for cognitive functioning using the Mini-Mental State Examination, and language ability via the Western Aphasia Battery (WAB). A within-subjects design was used, with order of condition (music or group conversation first) counter-balanced between participants. Subjects participated in groups of 2 to 4, twice per week for 20-30 minutes for a total of 8 sessions (4 music therapy and 4 conversation sessions or vice-versa), and were re-tested on the WAB at the end of each 2 week (4 session) interval. Results from 20 participants revealed that music therapy significantly improved performance on both speech content and fluency dimensions of the spontaneous speech subscale of the WAB ( $p = .01$ ). While the difference in overall Aphasia Quotient (AQ) for music and conversation sessions (mean AQ = 76 vs. 70, respectively) did not reach statistical significance, data were only available for 10 participants (5 per condition). Hopefully, these findings will stimulate additional research on the use of music therapy interventions with demented patients, as it may offer a noninvasive mechanism to enhance communication between victims and their caregivers.

Sidorenko, V.N. (2000). **Effects of the Medical Resonance Therapy Music in the complex treatment of epileptic patients.** *Integrative Physiological and Behavioral Science*, 35(3), 212-7.

PMID: 11286374

**ABSTRACT:** The purpose of the study was to evaluate the effectiveness of Medical Resonance Therapy Music (MRT-Music) as a psycho-physio-

logical method for the treatment of epilepsy in severe epileptic patients, whose attacks persevered despite comprehensive drug treatments. Under investigation were frequency and severity of epileptic attacks, the subjective state, the dynamics of the inter-paroxysmal symptoms and the individual parameters of the functional asymmetry of the brain (IPFA). Frequency and severity of the paroxysms changed positively in 80 percent of the cases: frequency of attacks were reduced by 75 percent and many attacks manifested in the form of abortive variants. The paroxysmal component, the degree of amnesia and the polymorphism of the attacks were reduced. Such positive changes were 4 times less frequent in the control group. Changes in subjective state were 90 percent positive: the patients felt more healthy, were calmer, had a better mood and fewer ups and downs in mood, released tension, and reduced unrest, wrath, and irritation. The evaluation of the Minnesota Multiphasic Personality Inventory (MMPI) showed clear improvements in the inter-paroxysmal clinical picture, particularly in those parameters that characterize the general degree of sickness, psychasthenic and paranoid traits, hypochondria, aggression and depressive states. Similar positive changes in the control group were observed two times less frequently. The changes of the IPFA-values were positive in 73.3 percent of the patients (27.8 percent in controls), had differently directed shiftings, were dependent on the initial level, and were determined by the location of the epileptic focus.

## 1999

Chlan, L., & Snyder, M. (1999). **Music therapy.** *Annual Review of Nursing Research*, 17, 3-25.

PMID: 10418651

ABSTRACT: Nurses have used music as an intervention for many years. A sizeable number of investigations to determine the efficacy of music in managing pain, in decreasing anxiety and aggressive behaviors, and in improving performance and well-being have been conducted by nurses and other health professionals. Nursing and non-nursing research reports published between the years 1980-1997 were reviewed. Great variation existed in the type of musical selection used, the dose of the intervention (number of sessions and length exposure), the populations studied, and the methodologies used. Overall, music was found to be effective in producing positive outcomes.

Cohen, S.O., & Walco, G.A. (1999). **Dance/Movement therapy for children and adolescents with cancer.** *Cancer Practice*, 7(1), 34-42.

PMID: 9893002

ABSTRACT: PURPOSE: Dance/movement therapy is introduced as a holistic approach to children's health issues, incorporating an array of medical, psychological, social, and spiritual issues. OVERVIEW: Dance/movement therapy, with its unique emphasis on nonverbal communication in assessment and treatment, is presented as an innovative therapeutic approach to address the comprehensive needs of children and adolescents with cancer. Dance/movement therapy assessment and intervention strategies are discussed in the context of cognitive, emotional, and social developmental processes, as well as models of stress and psychological adjustment in pediatric cancer. CLINICAL IMPLICATIONS: The inclusion of dance/movement therapy as part of the interdisciplinary team addressing the psychosocial needs of children and adolescents with cancer facilitates greater integration of factors related to coping. By its very nature, this modality offers constructs that promote holistic approaches to cancer care.

Foxglove, T. (1999). **Music therapy for people with life-limiting illness.** *Nursing Times*, 95(18), 52-4.

PMID: 10373911

*No abstract is available.*

Glover, N.M. (1999). **Play therapy and art therapy for substance abuse clients who have a history of incest victimization.** *Journal of Substance Abuse Treatment*, 16(4), 281-7.

PMID: 10349600

ABSTRACT: This article discusses the use of play therapy and art therapy treatment techniques for persons in substance abuse treatment who have a history of incest victimization. While substance abuse treatment focuses on substance abuse, neglecting to address issues related to past incest contact may increase the potential for relapse. This population displays unique characteristics that may prevent them from participating in, or benefitting from, traditional treatment modalities (which are highly dependent upon the verbal interactions between clients and therapists). Play therapy and art therapy are discussed in terms of history, rationale, and benefits to clients.

## 1998

Schumacher, K. (1998). [**Musical dialogue: Music therapy in social contact disorder and communication difficulties**]. *Wiener Medizinische Wochenschrift*, 148(6), 155-8. [Article in German]  
PMID: 9757510

ABSTRACT: Musical dialogue is a way of leading people incapable of speech out of their isolation and difficulty of expression and of helping early emotionally disturbed people to get in contact with their feelings. Video excerpts of therapy sessions with three autistic children show how basic capabilities for interpersonal dialogue are made possible through music therapy.

## 1997

Hoffmann, P., & Müller-Busch, H.C. (1997). [**Active music therapy for chronic pain: A prospective study**]. *Der Schmerz*, 11(2), 91-100. [Article in German]  
PMID: 12799825

ABSTRACT: There are only few publications about the effect of music therapy on pain relief. The intention of this prospective study is to demonstrate the influence of the Nordoff/Robbins method of active music therapy in a group of 12 patients with fibromyalgia, myofascial pain syndromes and polyarthritis on pain reduction, life quality and coping. The clinical parameters of each patient were related to the observations in the audio- and video-documented music therapy settings and to the self-reported changes in pain intensity and pain behavior. There was a significant reduction of pain intensity and pain-related disability in the music group compared to a control group, but no change in the depression and anxiety score. The influence of music therapy could be even better demonstrated in the systematic analysis of the single cases by individual profiles. Active music therapy affects especially the communicative and emotional dimension of chronic pain. Psychophysiological and psychodynamic models are presented to explain the effectiveness of music therapy on pain reduction. Clinical studies on music therapy as well as on other "art therapies" should relate the analysis of clinical parameters to the descriptive-phenomenological documentation of the therapeutic process to demonstrate systematically the influence of music and art in the individual case.

## 1995

Baldwin, S., & Purdie, H. (1995). **Models of music therapy intervention in stroke rehabilitation**. *International Journal of Rehabilitation Research*, 18(4), 341-50.  
PMID: 8748055

*No abstract is available.*

Dromey, C., Perez, K.S., Ramig L.O., Samandari, R., & Smith, M.E. (1995). **Intensive voice treatment in Parkinson disease: Laryngostroboscopic findings**. *Journal of Voice: Official Journal of the Voice Foundation*, 9(4), 453-9.  
PMID: 8574314

ABSTRACT: As part of ongoing research to investigate and document the efficacy of intensive voice therapy to improve functional communication in patients with idiopathic Parkinson disease, 45 patients were enrolled in a controlled, randomized, prospective study. Pre- to post-treatment comparisons are presented here on 22 of those patients who underwent laryngeal imaging examination. Of the 22 patients, 13 patients received intensive therapy aimed at increasing vocal and respiratory effort (VR), whereas nine received intensive therapy aimed at increasing respiratory effort (R) only. All patients had a pretreatment evaluation that included two (but sometimes only one) voice recordings and an otolaryngologic examination with laryngostroboscopy. At the completion of 4 weeks of therapy (16 sessions), two voice recordings were made, and laryngostroboscopy was again performed. The pre- and post-therapy video laryngostroboscopy tapes were then randomized and rated by four judges. Raters' findings were then compared with vocal intensity measured before and after therapy. The VR therapy group showed improvements on laryngostroboscopic variables: less glottal incompetence and no significant change in supraglottal hyperfunction after therapy. No differences were observed in the R-only group. The mean intensity increase in the VR therapy group was 12.5 dB, compared with a decrease of 1.9 dB in the R-only group. These findings suggest that in patients with Parkinson disease, intensive therapy focusing on phonatory effort improves adduction of the vocal folds as assessed by laryngostroboscopy. Differences in laryngeal function in these patients observed with fiberoptic laryngoscopy and rigid telescopic laryngoscopy are discussed.

1994

Aldridge, D. (1994). **Alzheimer's disease: Rhythm, timing, and music as therapy.** *Biomedicine & Pharmacotherapy*, 48(7), 275-81.

PMID: 7858157

ABSTRACT: Active music-making provides a form of therapy for the Alzheimer's patient which may stimulate cognitive activities such that areas subject to progressive failure are maintained. Anecdotal evidence suggests that quality of life of Alzheimer's patients is significantly improved with music therapy, accompanied by the overall social benefits of acceptance and sense of belonging gained by communicating with others. Music therapy, when based on clear treatment objectives can reduce the individual prescription of tranquilizing medication, reduce the use of hypnotics and help overall goals of rehabilitation. Mood improvement and self-expression, the stimulation of speech and organization of mental processes; and sensory stimulation and motor integration are promoted. Given that the rate of deterioration in Alzheimer's disease is not predictable, a series of single case experimental designs would generate valuable empirical data concerning treatment outcome and promote basic research into the timing functions required for the co-ordination of cognition, physiology, motor ability and the integrity of behavior.

Radtke, P. (1994). [Art and rehabilitation]. *Die Rehabilitation*, 33(2), 61-3. [Article in German]

PMID: 8052734

ABSTRACT: The therapeutic benefit of art therapy in rehabilitation differs from that of art in general in that the creative activity is viewed as a vehicle of remediation in the one case while, in the other, art is an end in itself. In the arts, being disabled may be brought to bear as a quality of the creative processes involved. In no other field have integration and equality of disabled people been realized more fully than in the artistic-cultural domain, while artistic achievements of disabled people, in turn, hold the potential for lasting impact on public awareness generally. Creation of a center to provide professional training opportunities for persons with disabilities in the performing arts would be desirable. A national umbrella organization of groups and individuals active in the field of creativity, EUCREA-Deutschland is planning to step up its efforts in drawing attention to the importance of arts and culture for disabled people.

1993

Batt, P. (1993). **Art therapy: A unique alternative for healing.** *Leadership in Health Services*, 2(1), 21-3.

PMID: 10124278

ABSTRACT: This article focuses on three aspects of art therapy. By defining the parameters of the field and outlining its possibilities in treatment, the author discusses the populations who can benefit from art therapy and why. The implications of introducing an art-therapy program to a health care facility are also discussed, as are ways of minimizing problems and promoting support among staff.

Carrigan, J. (1993). **Painting therapy: A Swiss experience for people with mental retardation.** *American Journal of Art Therapy*, 32(2), 53-7.

PMID: 10130004

No abstract is available.

Hawkins, N. (1993). **A new outlook for rehabilitation: Creative art therapy.** *Caring*, 12(11), 80, 82, 84.

PMID: 10130215

ABSTRACT: Each year illness, accidents, and age leave thousands of people homebound and feeling as though their lives are over. Within each person, however, is the seed of creativity that, when nurtured through creative art therapy, can bloom to vastly improve the quality of health and life, regardless of the individual's physical limitations.

Heal, M., & O'Hara, J. (1993). **The music therapy of an anorectic mentally handicapped adult.** *The British Journal of Medical Psychology*, 66(Pt 1), 33-41.

PMID: 8485076

ABSTRACT: Where words fail, music may be a medium through which to explore one's inner world and experiences. Psychodynamic approaches have helped us to understand what it means to be handicapped (e.g. Sinason, 1992). The subtleties of diagnosing anorexia nervosa have recently been recognized in this group (e.g. Cottrell & Crisp, 1984). Music therapy has been used with clients of normal intelligence who have eating disorders (Nolan, 1989; Sloboda, 1993; Smeijsters & van den Hurk 1993). This article illustrates the music therapy of a woman with Down's syndrome (IQ = 50) and anorexia nervosa. It describes her management and progress in music therapy in relation to her external world and anorectic behaviors.

Hines-Martin, V.P., & Ising, M. (1993). **Use of art therapy with post-traumatic stress disordered veteran clients.** *Journal of Psychosocial Nursing and Mental Health Services*, 31(9), 29-36.

PMID: 8229911

ABSTRACT: The post-traumatic stress disordered veteran client may exhibit a cluster of problematic behaviors that are integral to current maladaptive coping patterns. These coping patterns can be successfully addressed through a multidisciplinary therapeutic approach that emphasizes client-controlled expression of emotions and client-focused step-by-step behavior modification. Art therapy and nursing, in a collaborative approach, can facilitate individual and group interventions that promote expression of feelings, congruency between experience and self-concept, and feelings of effectiveness in behavioral change.

Magill-Levreault, L. (1993). **Music therapy in pain and symptom management.** *Journal of Palliative Care*, 9(4), 42-8.

PMID: 8133409

ABSTRACT: The use of music therapy in pain and symptom management in the care of patients with long-term and life-threatening illnesses can be an effective non-pharmacologic approach to help ameliorate pain and suffering. By altering affective, cognitive, and sensory processes, music may decrease pain perception by distraction, change in mood, increased control, use of prior skills, and relaxation. This article reviews the background of the use of music therapy in pain management, explores a theoretical framework, and describes methods and techniques. Three case studies are provided to demonstrate the work.

## 1992

Bowers, J.J. (1992). **Therapy through art. Facilitating treatment of sexual abuse.** *Journal of Psychosocial Nursing and Mental Health Services*, 30(6), 15-24.

PMID: 1613683

ABSTRACT: Infants and preverbal children encode memory through visual and sensorimotor channels, and there is evidence that at times of intense stress and terror, the cognitive memory system may be bypassed in all age groups. Art therapy offers visual and sensorimotor media that may more easily al-

low repressed traumatic memories to surface. Art therapy is often used with children and adolescents to overcome resistance, build trust, reduce tension, and stimulate memory. It may also be useful in working with adults, because the repression occurred at a much earlier developmental stage, the adult may also have a child's concept of the traumatic event.

Evers, S. (1992). **Music therapy in the treatment of autistic children. Medico-sociological data from the Federal Republic of Germany.** *Acta Paedopsychiatrica*, 55(3), 157-8.

PMID: 1414349

ABSTRACT: Related to the theoretical research on the use of music therapy in the treatment of autistic children there was made a postal survey about the attitude towards and the application of music therapy. The data of established paediatricians and paediatric institutions in FRG show that music therapy is already accepted in the treatment of autistic children. The implications of these medico-sociological data are discussed.

Lehtonen, K., & Shaughnessy, M.F. (1992). **Projective drawings as an aid to music therapy.** *Acta Paedopsychiatrica*, 55(4), 231-3.

PMID: 1492554

ABSTRACT: Music therapy is becoming an increasingly prevalent method for assisting in the mental health needs of a variety of different conditions. However, other tangential aids can greatly facilitate the music therapy process. The use of projectives techniques to assist in the process of music therapy and to assess the growth and development of clients is described.

## 1991

Bielańska, A., Budzyna-Dawidowski, P., & Cechnicki, A. (1991). **Drama therapy as a means of rehabilitation for schizophrenic patients: Our impressions.** *American Journal of Psychotherapy*, 45(4), 566-75.

PMID: 1781487

ABSTRACT: The authors describe the development of drama therapy and its place in the system of psychosocial treatment of schizophrenic patients. Organizational and therapeutic elements are illustrated

with the help of work done by a group of 12 patients on an adaptation of Shakespeare's Hamlet. The aim of this form of outpatient treatment is to use the acting technique in order to make it easier for patients to improve their understanding of themselves — their feelings, motivations and behaviors — and also of other people. The participation of a professional director and the general attractiveness of this type of therapy are considered to play an important role in motivating those patients who would not benefit from traditional psychotherapy. In this form of group psychotherapy verbalization of feelings and problems are structured by the role; thus creating a safe atmosphere and greater motivation to participate. The purpose of our work is to make the roles and the play a constructive aspect of the patient's functioning. This is only possible by uniting what for a schizophrenic patient is characteristically separate, namely, internal experience with external expression. Clinical effects are documented by two case vignettes.

Pavlicevic, M. (1991). **Music therapy in Scotland: An introduction.** *Health Bulletin*, 49(3), 191-5; discussion 199.

PMID: 1917454

*No abstract is available.*

## 1990

Adams, M., & Oldfield, A. (1990). **The effects of music therapy on a group of profoundly mentally handicapped adults.** *Journal of Mental Deficiency Research*, 34(Pt 2), 107-25.

PMID: 2342091

**ABSTRACT:** An investigation of the effects of music therapy on profoundly mentally handicapped adults is reported. The therapy was directed at achieving specific objectives for individuals and the study compared the efficacy of music therapy and play activities in achieving these objectives. Four subjects out of the 12 included in the therapy groups were studied intensively. All subjects received both treatments in a reversal design with 20 weekly sessions of each treatment. Videotapes of the treatment sessions were analyzed using a time-sampling method to record the occurrence of behavior indicating the achievement of the individual treatment objectives. Staff behavior in the treatment sessions was also

observed to investigate the role of staff attention in mediating the treatment effects. The observations of staff behavior showed that, overall, there was less individual attention given during music therapy than in play sessions, that there was a much greater role differentiation among the staff present in the music therapy groups and that individual clients in the groups received markedly unequal amounts of staff attention. For all four subjects studied in detail, some differences in behavior were shown between the treatments and most, but not all, of these differences indicated greater effectiveness of music therapy. For one subject showing higher performance in play sessions than in music therapy, this could be attributed to a higher level of staff attention for this subject. The differences in favor of music therapy could not be accounted for in this way. It is concluded that music therapy is a useful treatment approach with profoundly handicapped people.



## Quick Looks

### *Online Resources Related to Arts as Therapy*

Creative or expressive arts therapy is the use art, dance, music, drama, and creative writing in a therapeutic setting to address emotional, cognitive, or physical disabilities. For more information about the use of the arts as therapy we recommend the following resources:

#### **American Art Therapy Association (AATA)**

Phone: 888/290-0878, 703/548-5860

Email: [info@artherapy.org](mailto:info@artherapy.org).

2015 AATA Art Therapy Locator: [www.americanart-therapyassociation.org/upload/LOCATOR2.15.11.pdf](http://www.americanart-therapyassociation.org/upload/LOCATOR2.15.11.pdf).

Find an Art Therapist: [www.find-a-therapist.com/directory?cat=artther](http://www.find-a-therapist.com/directory?cat=artther).

[www.americanarttherapyassociation.org](http://www.americanarttherapyassociation.org).

**American Dance Therapy Association (ADTA)**

Phone: 410/997-4040

Email: [info@adta.org](mailto:info@adta.org).

Find a Dance/Movement Therapist: [www.adta.org/Find\\_a\\_DMT](http://www.adta.org/Find_a_DMT).  
[www.adta.org](http://www.adta.org).

**American Journal of Dance Therapy**

[www.adta.org/AJDT](http://www.adta.org/AJDT).

[www.springer.com/psychology/journal/10465](http://www.springer.com/psychology/journal/10465).

**American Music Therapy Association (AMTA)**

Phone: 301/589-3300

Find a Music Therapist: [www.musictherapy.org/about/find](http://www.musictherapy.org/about/find).

[www.musictherapy.org](http://www.musictherapy.org).

**American Society of Group Psychotherapy and Psychodrama (ASGPP)**

Phone: 609/737-8500

Email: [asgpp@asgpp.org](mailto:asgpp@asgpp.org).

[www.asgpp.org](http://www.asgpp.org).

**Art Therapy: Journal of the American Art Therapy Association**

Phone: 888/290-0878, 703/548-5860

Email: [info@arttherapy.org](mailto:info@arttherapy.org).

[www.arttherapy.org/aata-publications.html](http://www.arttherapy.org/aata-publications.html).

**Directory of Creative Aging Programs in America (formerly The Arts and Aging National Resource Directory)**

National Center on Creative Aging (NCCA) maintains the Directory with funding by the National Endowment for the Arts, MetLife Foundation, and The Michelson Foundation. The Directory features arts programs serving older people and includes intergenerational activities in urban, suburban, and rural communities in a variety of settings such as community centers, senior centers, assisted living, adult day care, arts institutions, and libraries.

Phone: 202/895-9456

Email: [info@creativeaging.org](mailto:info@creativeaging.org).

[www.creativeaging.org/programs-people/cad](http://www.creativeaging.org/programs-people/cad).

**International Expressive Arts Therapy Association**

Phone: 415/522-8959

Email: [info@ieata.org](mailto:info@ieata.org).

[www.ieata.org](http://www.ieata.org).

**Journal of Music Therapy**

Phone: 301/589-3300

Contact: [www.musictherapy.org/contact](http://www.musictherapy.org/contact).

[www.musictherapy.org/research/pubs/#The\\_Journal\\_of\\_Music\\_Therapy](http://www.musictherapy.org/research/pubs/#The_Journal_of_Music_Therapy).

**National Arts and Disability Center (NADC)**

[www.semel.ucla.edu/nadc](http://www.semel.ucla.edu/nadc).

**National Association for Poetry Therapy (NAPT)**

Email: [naptadmin@poetrytherapy.org](mailto:naptadmin@poetrytherapy.org).

[www.poetrytherapy.org](http://www.poetrytherapy.org).

**National Coalition of Creative Arts Therapies Associations**

Contact: <http://www.nccata.org/#!/contact/con8>.

[www.nccata.org](http://www.nccata.org).

**National Institute of Arts and Disabilities (NIAD)**

Phone: 510/620-0290

Email: [admin@niadart.org](mailto:admin@niadart.org).

[www.niadart.org](http://www.niadart.org).

**North American Drama Therapy Association (NADTA)**

Toll Free: 888/416-7167

Contact: <http://www.nadta.org/contact-us.html>.

Find a Drama Therapist: [www.nadta.org/what-is-drama-therapy/find-a-drama-therapist.html](http://www.nadta.org/what-is-drama-therapy/find-a-drama-therapist.html).

[www.nadta.org](http://www.nadta.org).

**SHAPE American (formerly the American Alliance for Health, Physical Education, Recreation, and Dance)**

Toll Free: 800/213-7193, 703/476-3400 (V)

Contact: [www.shapeamerica.org/about/contactus.cfm](http://www.shapeamerica.org/about/contactus.cfm).

Dance: [www.shapeamerica.org/exploreDance.cfm](http://www.shapeamerica.org/exploreDance.cfm).

[www.shapeamerica.org](http://www.shapeamerica.org).

**VSA (formerly Very Special Arts)**

VSA is an International Organization on Arts and Disability

Phone: 202/416-8727

Email: [vsainfo@kennedy-center.org](mailto:vsainfo@kennedy-center.org).

VSA Affiliates: [www.vsarts.org/education/vsa/affiliates](http://www.vsarts.org/education/vsa/affiliates).

VSA Programs: [www.vsarts.org/education/vsa/programs](http://www.vsarts.org/education/vsa/programs).

[www.vsarts.org/education/vsa](http://www.vsarts.org/education/vsa).

## *Search Terms for the Arts as Therapy*

- 📖 Access to Health Care
- 📖 Acquired Immunodeficiency Syndrome (AIDS)
- 📖 Activities of Daily Living (ADLs)
- 📖 Adjustment
- 📖 Adolescent(s)
- 📖 Aging
- 📖 Alcoholism
- 📖 Alternative Medicine
- 📖 Alzheimer's Disease
- 📖 Anxiety/Disorders
- 📖 Aphasia
- 📖 Art/Activities/Education/Expression/Therapy
- 📖 Artists
- 📖 Asperger Syndrome
- 📖 Asthma
- 📖 Attention Deficit Hyperactivity Disorder(s)
- 📖 Attitudes toward Disabilities
- 📖 Autism Spectrum Disorder
- 📖 Behavior
- 📖 Behavior Change/Disorders/Modification  
Therapy
- 📖 Bibliotherapy
- 📖 Body Image/Movement
- 📖 Brain Injuries
- 📖 Bullying
- 📖 Cancer
- 📖 Cardiac Disorders
- 📖 Caregivers
- 📖 Case Studies
- 📖 Cerebral Palsy
- 📖 Chemotherapy
- 📖 Child/Abuse/Development
- 📖 Children
- 📖 Chronic Disease/Illness
- 📖 Class Activities
- 📖 Cognition
- 📖 Cognitive Ability/Development
- 📖 Coma
- 📖 Combined Modality Therapy
- 📖 Communication/Interpersonal/Nonverbal/Skills  
Verbal
- 📖 Conflict Resolution
- 📖 Congenital Disorders
- 📖 Coping
- 📖 Counseling/Techniques
- 📖 Creative Arts
- 📖 Creativity
- 📖 Crisis Intervention
- 📖 Cultural Differences/Diversity/Influences
- 📖 Dance/Education/Therapy
- 📖 Deafness
- 📖 Dementia/Therapy
- 📖 Depression
- 📖 Developmental Disabilities
- 📖 Diabetes
- 📖 Disasters
- 📖 Down Syndrome
- 📖 Drama/Therapy
- 📖 Eating Disorders
- 📖 Education/Elementary/Secondary/Higher
- 📖 Elderly
- 📖 Emotional/Development/Disturbances/Issues  
Response
- 📖 Epidemiology
- 📖 Ethnic Diversity
- 📖 Evaluation/Methods/Techniques
- 📖 Evidence Based Practice
- 📖 Exercise
- 📖 Expressive Arts
- 📖 Family Conflict/Counseling/Involvement  
Violence
- 📖 Fine Arts
- 📖 Foreign Countries
- 📖 Freehand Drawing
- 📖 Functional Evaluation
- 📖 Gait Disorders
- 📖 Gender Differences
- 📖 Genetic Disorders
- 📖 Geriatric Rehabilitation
- 📖 Grief
- 📖 Group/Behavior/Counseling/Intervention  
Therapy
- 📖 Hospices
- 📖 Hospitals
- 📖 Hyperactivity
- 📖 Independent Living
- 📖 Intellectual Disabilities
- 📖 Intervention
- 📖 Language Disorders
- 📖 Learning Disabilities

## *Search Terms for Arts as Therapy continued ...*

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|---|---|
| <ul style="list-style-type: none"> <li>📖 Measures</li> <li>📖 Medical/Intervention/Research/Treatment</li> <li>📖 Mental Disorders/Health</li> <li>📖 Military Personnel</li> <li>📖 Movement/Therapy</li> <li>📖 Mozart Effect</li> <li>📖 Multiple Disabilities</li> <li>📖 Multiple Sclerosis</li> <li>📖 Music/Activities/Education/Therapy</li> <li>📖 Mutism/Therapy</li> <li>📖 Neurological Disorders/Impairments</li> <li>📖 Non-Pharmacological Intervention</li> <li>📖 Nursing/Homes</li> <li>📖 Obesity</li> <li>📖 Occupational Therapy</li> <li>📖 Outcomes</li> <li>📖 Pain/Management</li> <li>📖 Painting</li> <li>📖 Paraplegia</li> <li>📖 Parkinson Disease</li> <li>📖 Participation</li> <li>📖 Persons with Disabilities</li> <li>📖 Pervasive Developmental Disorders</li> <li>📖 Physical Disabilities</li> <li>📖 Physical Education/Health/Therapy</li> <li>📖 Play/Methods/Therapy</li> <li>📖 Poetry</li> <li>📖 Post-Traumatic Stress Disorder</li> <li>📖 Prevention</li> <li>📖 Program Development/Effectiveness/Evaluation</li> <li>📖 Psychiatric Disabilities</li> <li>📖 Psychiatry</li> <li>📖 Psychodrama</li> <li>📖 Psychology</li> <li>📖 Psychosocial Factors/Interventions</li> <li>📖 Psychotherapy</li> <li>📖 Quadriplegia</li> <li>📖 Qualitative Analysis</li> <li>📖 Quality Of Life</li> <li>📖 Randomized Controlled Trials (RCTs)</li> <li>📖 Rehabilitation/Methods/Research</li> <li>📖 Relaxation Training</li> <li>📖 Research/Methodology</li> <li>📖 Respite Care</li> <li>📖 Role Playing</li> </ul> | <ul style="list-style-type: none"> <li>📖 Rural/Services</li> <li>📖 Schizophrenia</li> <li>📖 Schools</li> <li>📖 Sculpture</li> <li>📖 Self-Concept/Esteem/Expression</li> <li>📖 Sensory Experience</li> <li>📖 Service Delivery</li> <li>📖 Severe Disabilities</li> <li>📖 Sexual Abuse/Identity</li> <li>📖 Singing</li> <li>📖 Skill Development</li> <li>📖 Social Cognition/Development/Integration<br/>Isolation/Relationships/Skills/Support</li> <li>📖 Songwriting</li> <li>📖 Special Needs Students</li> <li>📖 Speech Impairments/Therapy</li> <li>📖 Spinal Cord Injuries (SCI)</li> <li>📖 Stimulation</li> <li>📖 Story Telling</li> <li>📖 Stroke</li> <li>📖 Studio Art</li> <li>📖 Substance Abuse</li> <li>📖 Support Groups</li> <li>📖 Symbolism</li> <li>📖 Symptoms</li> <li>📖 Teaching Methods</li> <li>📖 Terminal Illness</li> <li>📖 Theater Arts</li> <li>📖 Therapeutic Recreation</li> <li>📖 Therapists</li> <li>📖 Therapy</li> <li>📖 Traumatic Brain Injury (TBI)</li> <li>📖 Verbal</li> <li>📖 Veterans</li> <li>📖 Voice Disorders/Therapy/Training</li> <li>📖 Well-Being</li> <li>📖 Workshops</li> <li>📖 Writing</li> <li>📖 Youth</li> </ul> |
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