### Music therapy table

<table>
<thead>
<tr>
<th></th>
<th>Author/date/location</th>
<th>Methodology/study type</th>
<th>Substantive focus</th>
<th>Participants</th>
<th>Outcomes/ measures</th>
<th>Follow up</th>
<th>Conclusion regarding effects of interventions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1</td>
<td>Bradt, Dileo, Grocke &amp; Magill (2011) USA, Australia, India</td>
<td>Systematic review</td>
<td>Examine effects of MT interventions and standard care with standard care alone, or standard care and other interventions for patients with cancer</td>
<td>30 controlled trials, (n=1891) diagnosed with any type of cancer. 17 trials used listening to pre-recorded music, 13 trials used MT interventions actively engaging participants</td>
<td>Primary outcomes - psychological symptoms e.g. depression, anxiety, anger, hopelessness, helplessness; and physical symptoms e.g. fatigue, nausea, pain. Secondary outcomes - physiological outcomes, social and spiritual support, communication, quality of life</td>
<td>N/A</td>
<td>*MT and music medicine interventions may have beneficial effect on anxiety, pain, mood, quality of life, heart rate, respiratory rate, and blood pressure in cancer patients</td>
</tr>
<tr>
<td>1.2</td>
<td>Bradt &amp; Dileo (2010) USA</td>
<td>Systematic review</td>
<td>Examine effects of MT interventions versus standard care with standard care alone or standard care combined with other therapies on psychological, physiological, and social responses in end-of-life care</td>
<td>5 controlled trials, (n=175) with diagnosis of advanced life-limiting illness and with life expectancy of less than two years. 1 study provided MT in in-home hospice care, 4 studies conducted MT in an inpatient hospice setting</td>
<td>Symptom relief (e.g. of nausea, fatigue, pain); psychological outcomes (anxiety, depression, fear); physiological outcomes (e.g. respiratory rate, heart rate); relationship and social support (e.g. family support, isolation); communication (e.g. verbalization, facial affect, gestures); quality of life; spirituality; and participant satisfaction</td>
<td>N/A</td>
<td>*Insufficient evidence of high quality to support effect of MT on quality of life of people in end-of-life care *No strong evidence for effect of MT on pain or anxiety *Insufficient data to examine effect of MT on other physical, psychological, or social outcomes</td>
</tr>
<tr>
<td>1.3</td>
<td>Maratos, Gold, Wang, &amp; Crawford (2008) UK, Norway</td>
<td>Systematic review</td>
<td>Examine effects of MT with standard care versus standard care alone for depression and compare effects of MT depression against other psychological or pharmacological therapies</td>
<td>5 controlled trials (4 randomised, 1 clinical control) each with small sample range of participants diagnosed with clinical depression (n=19-68)</td>
<td>Decrease in the symptoms of depression measured using a range of self-rating and clinician-rated scales</td>
<td>N/A</td>
<td>*MT accepted by people with depression and associated with improvements in mood; *Small number and low methodological quality of studies preclude confident assessment of effectiveness of MT with this population</td>
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<tr>
<td></td>
<td>Study Details</td>
<td>Intervention Details</td>
<td>Outcome Details</td>
<td>Summary</td>
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*Norway, Denmark* | Systematic review  
Review the effects of music therapy, or music therapy added to standard care, for individuals with autism spectrum disorders | 3 controlled trials – (n=24) mainly boys (aged 2-9 years); between 4-10 participants in each study; participants received therapy either at home, at school, or at an outpatient therapy centre | Non-standardised or standardised instruments, parent or teacher report, or school records re: communicative and social skills, social interaction, quality of social interaction, behavioural problems (e.g. stereotypic behaviour), attention and concentration, cognitive ability, hyperacusis (hypersensitivity to sound), activity level, quality of life in school and home environments, stress in family and adverse events | N/A  
*MT was superior to "placebo" therapy with respect to verbal and gestural communicative skills, but no clear effect on behavioural outcomes  
*included studies were encouraging, but of limited applicability to clinical practice |
| 1.5 | Gattino, dos Santos Riesgo, Longo, Loguercio Leite & Schuler Faccini (2011)  
*Brazil* | Randomised controlled trial  
Investigate the effects of Relational Music Therapy (RMT) in verbal, nonverbal and social communication of children with autism spectrum disorders (ASDs) | n=24 boys (7-12 years) randomly assigned to relational music therapy interventions plus clinical routine activities and just clinical routine activities (control group) | Brazilian version of the Childhood Autism Rating Scale (CARS-BR) evaluations conducted before and after implementation of MT and conventional treatment | No  
*results of the effects of RMT on communication skills of ASD children were inconclusive |
| 1.6 | Kim, Wigram & Gold (2008)  
*Denmark, Korea, Norway* | Randomised controlled single cross-over trial  
Investigate effects of improvisational MT on joint attention behaviours in pre-school children with autism | n=10; 3-5 year old boys-(5 verbal, 5 nonverbal) randomly assigned to 12 weekly 30 min improvisational MT sessions, compared with a control condition of 12 weekly 30 min play sessions with toys | Pervasive Developmental Disorder Behaviour Inventory-C (PDDBI) and the Early Social Communication Scales (ESCS) used as pre, in between, and post-treatment outcome measures | No  
*improvisational MT was more effective facilitating joint attention behaviours and non-verbal social communication skills in children than play  
*session analysis showed significantly lengthier events of eye contact and turn-taking in MT than play sessions |
| 1.7 | Horne-Thompson & Grocke (2008) *Australia* | Randomised controlled single trial with pre-test–post-test | Examine the effectiveness of a single MT session in reducing anxiety for terminally ill patients | n=25 (18 – 90 years) with end-stage terminal disease receiving inpatient hospice services; randomly assigned to experimental group (n =13), or control group (n = 12) | Edmonton Symptom Assessment System (ESAS) was completed by participants immediately before and after the intervention | No | *use of MT to manage anxiety in terminally ill patients supported*  
*insufficient evidence to determine that MT decreases heart rate in terminally ill patients* |
| 1.8 | Ledger & Baker (2007) *Australia* | Non-randomised longitudinal (1 year) repeated measures design with experimental and control groups | Investigate the long-term effects of group music therapy on agitation manifested by nursing home residents with Alzheimer’s disease | n=45; primary diagnosis of Alzheimer’s type dementia; n=26 received weekly group MT sessions (30–45 minutes) for at least 42 weeks within a year; n=19 received standard nursing home care | Agitation levels measured five times over one year using the Cohen-Mansfield Agitation Inventory (CMAI) | No | *MT participants showed short-term reductions in agitation*  
*no significant differences between the groups in the range, frequency, and severity of agitated behaviours over time* |
## Art therapy table

<table>
<thead>
<tr>
<th>2.</th>
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<tr>
<td>2.1</td>
<td>Ruddy &amp; Milnes (2009) UK</td>
<td>Systematic review</td>
<td>To review the effects of art therapy as an adjunctive treatment for schizophrenia compared with standard care and other psychosocial interventions</td>
<td>61 reports were identified of which 2 met the review inclusion criteria: total n=137 diagnosed with severe mental illness</td>
<td>*outcomes reported for short term (up to 12 weeks), medium term (13 - 26 weeks), and long term (more than 26 weeks) *included as primary outcomes: global state, one relapse, mental state and no clinically important change in general mental state</td>
<td>N/A</td>
<td>*sample sizes too small to draw meaningful results or certain conclusions *unclear if art therapy may improve mental state, social functioning, interpersonal relationships or quality of life and no data available for outcomes such as satisfaction with care *more research required to determine the value of art therapy in this population</td>
</tr>
<tr>
<td>2.2</td>
<td>Crawford, Killaspy, Barnes, Barrett, Byford, Clayton, Dinsmore, Floyd, Hoadley, Johnson, Kalaitzaki, King, Leurent, Maratos, O'Neill, Osborn, Patterson, Soteriou, Tyrer &amp; Waller (2012) UK</td>
<td>Randomised controlled trial</td>
<td>Examine effects of group Art Therapy interventions and standard care with standard care and other activities, and standard care alone for people with schizophrenia</td>
<td>*n=417 ≥18 years with clinical diagnosis of schizophrenia; *Art Therapy sessions weekly of 90 mins for 12mths; control activity groups involved group discussion</td>
<td>Primary outcomes included: *Global Assessment of Functioning Scale; *Positive and Negative Syndrome Scale; *medication records; *Euroqol EQ-5D (QoL); *version of Adult Service Use Inventory re cost data records</td>
<td>*Secondary outcomes assessed at 12 and 24 months; *comprised levels of group attendance, social function, satisfaction with care, mental wellbeing &amp; costs</td>
<td>*no improvements shown in people with established schizophrenia referred to group art therapy in terms of global functioning, mental health, or other health related outcomes</td>
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<tr>
<td>2.3</td>
<td>Beebe, Gelfand &amp; Bender (2010)</td>
<td>USA</td>
<td>Randomised controlled trial</td>
<td>Test an art therapy intervention in a randomized controlled trial for children with asthma</td>
<td>*22 children with asthma were randomized to an active art therapy or wait-list control group; *active art group comprised 60 min. art therapy sessions per week for 7 weeks</td>
<td>*measures taken at baseline, immediately after, and 6mths after final art therapy session; *included Formal Elements Art Therapy Scale applied to the Person Picking an Apple from a Tree assessment; the parent and child versions of the Paediatric Quality of Life Asthma Module, and the Beck Youth Inventories</td>
<td>*conducted at 6mths; active group maintained some positive changes relative to control group including drawing affect scores, the worry and quality of life scores, and the Beck anxiety score</td>
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<tr>
<td>2.4</td>
<td>Thyme, Sundin, Stahlberg, Lindstrom, Eklof &amp; Wiberg (2007)</td>
<td>Sweden</td>
<td>Randomised controlled trial</td>
<td>To compare short-term psychodynamic art therapy with short-term psychodynamic verbal therapy for depressed women</td>
<td>*n=39 women diagnosed with depression; n=18 received time-limited (60mins) art psychotherapy; n=21 received time-limited (45 mins) verbal psychotherapy</td>
<td>*Impact of Event Scale (IES); *Symptom Check List 90 (SCL-90); *Beck Depression Inventory (BDI); *Hamilton Rating Scale of Depression (HRSD)</td>
<td>*at 3mths</td>
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<tr>
<td>2.5</td>
<td>Svensk, Öster, Thyme, Magnusson, Sjödin, Eisemann, Åström &amp; Lindh (2009)</td>
<td>Sweden</td>
<td>Randomised controlled trial</td>
<td>Examine effects of an art therapy intervention program on coping resources in women with primary breast cancer</td>
<td>n=41 women, randomised to study group (n= 20) with art therapy for 1 week during postoperative radiotherapy or to control group (n= 21)</td>
<td>* CRI questionnaire to manage outcomes for coping resources and stress</td>
<td>No</td>
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</tbody>
</table>
## Dance-movement therapy table

<table>
<thead>
<tr>
<th>3.</th>
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</thead>
</table>
| 3.1 | Bradt, Goodill, & Dileo (2011) USA | Systematic review | To compare effects of DMT in patients with cancer, with standard care with standard care alone or standard care and other interventions | Two studies: (n=68) females. All randomised and quasi-randomised controlled trials of dance/movement therapy interventions for improving psychological and physical outcomes in patients with cancer | - body image  
- quality of life (QoL)  
- fatigue  
- mood,  
- distress  
- mental health  
- shoulder range of motion or arm circumference | N/A | *no support for an effect of DMT on body image  
*one study suggests that DMT may have beneficial effect on quality of life of women with breast cancer  
*insufficient studies to determine conclusive effects of DMT on psychological and physical outcomes |
| 3.2 | Kiepe, Stöckigt & Keil (2012) USA, Scandinavia | Systematic review | To evaluate the effects of DMT for adults with physical and mental illnesses. | 11 randomised trials of which 6 included DMT (predominantly from USA and Scandinavia) were identified with mostly small samples. n=207 overall | Various psychological, physical and cognitive tests | N/A | *DMT seems beneficial for breast cancer, depression, Parkinson’s disease, diabetes and heart failure  
*DMT had a positive impact for patients with breast cancer, improving quality of life, shoulder range of motion and body image  
*psychological distress reduced in patients with depression |
<table>
<thead>
<tr>
<th>3.3</th>
<th>Mala, Karkou, &amp; Meekums (2012)</th>
<th>Scoping review</th>
<th>Evidence for effectiveness of DMT and related fields for treatment of depression</th>
<th>Nine studies: (n=40); six with randomized controlled trial design, three non-randomized design. One study met most criteria of quality</th>
<th>Depression measurements: BDI (Becks Depression Inventory), SCL-90.R (Symptom Check List-90-Revision), to assess psychological distress and interpersonal sensitivity. Liquid chromatography with electrochemical detection to measure the concentration of plasma, serotonin and dopamine in the individual</th>
<th>N/A</th>
<th><em>significantly increased plasma serotonin and decreased dopamine, and negative psychological symptoms of distress improved</em> <em>modulation of serotonin and dopamine production through the intervention might be a mechanism for reduction in depression</em> <em>conclusion about need for full systematic literature review and Cochrane Review protocol and procedures</em></th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4</td>
<td>Meekums, Karkou &amp; Nelson (2012)</td>
<td>Systematic review</td>
<td>Effects of DMT for depression, comparing DMT with other psychological interventions, pharmacological interventions, other physical interventions, comparing different forms of DM</td>
<td>All RCTs and trials with quasi-randomisation or systematic methods of allocation that have active involvement of participants in any form of DMT for depression</td>
<td><em>This review at the protocol stage and no further information is available</em></td>
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<tr>
<td>3.5</td>
<td>Xia &amp; Grant (2009)</td>
<td>Systematic review</td>
<td>To evaluate the effects of DMT for people with schizophrenia or schizophrenia-like illnesses compared with standard care and other interventions</td>
<td>All randomised controlled trials (RCTs) (n=45) comparing DMT and related approaches with standard care or other psychosocial interventions for schizophrenia. One single blind study of reasonable quality</td>
<td>- Positive and Negative Syndrome Scale (PANSS) - satisfaction score (Client’s Assessment of Treatment Scale score) - Manchester Short Assessment of Quality of Life score</td>
<td>N/A</td>
<td><em>data inconclusive because of small samples</em></td>
</tr>
</tbody>
</table>
### 3.6 Brauninger (2012) Spain

**Type of trial:** Randomised control trial  
**Objectives:** Effect of a DMT group intervention on stress management improvement and stress reduction  
**Participants:** Twelve DMT groups (n=97) and nine wait-listed control groups (n=65) were recruited  
**Primary outcomes:** Stress management [Stressverarbeitungsfragebogen/SVF 120], psychopathology and overall distress (Brief Symptom Inventory/BSI)  
**Results:** Yes, after 6 mths  
*DMT group treatment is more effective to improve stress management and reduce psychological distress than non-treatment  
*DMT effects last over time  
*study contradicts the widespread prejudice in the field that quantitative methods cannot measure DMT’s effect.

### 3.7 Hokkanen, Rantala, Remes, Harkonen, Viramo & Winblad (2008) Finland

**Type of trial:** Randomised, controlled trial  
**Objectives:** Behavioral and cognitive problems in dementia  
**Participants:** n=29 patients of a dementia nursing home. 14 had Alzheimer’s disease, 7 had vascular dementia, 7 had undefined types of dementia  
**Primary outcomes:** Mini-Mental State Examination (MMSE); the Word List saving score; Clock Drawing Test; the Cookie Theft picture description task; Nurses’ Observation Scale for Geriatric Patients  
**Results:** Yes, after four weeks  
*DMT offers option in treating dementia, having effects on cognition and self-care abilities  
*small changes but some improvements seen in task of visuo-spatial ability and planning (Clock Drawing Test)  
*no effect found in memory (Word list delayed recall)

### 3.8 Meekums, Vaverniece, Majore-Dusele & Rasnacs (2012) UK, Latvia

**Type of trial:** Partly randomised trial  
**Objectives:** The effectiveness of DMT in obese women with emotional eating who were trying to lose weight  
**Participants:** Women recruited from a commercial weight loss programme: n=24 in the DMT treatment group, n=28 in exercise control and n=27 in non-exercise control  
**Primary outcomes:** Battery of tests for psychological distress, body image distress, self-esteem and emotional eating  
**Results:** No  
*DMT group showed statistically decreased psychological distress, decreased body image distress, and increased self-esteem compared to controls  
*emotional eating reduced in DMT and exercise groups.
## Drama therapy table

<table>
<thead>
<tr>
<th>4.</th>
<th>Study Name/Authors; Year of Publication, Country</th>
<th>Methodology/study type</th>
<th>Substantive focus</th>
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<tr>
<td>4.1</td>
<td>Ruddy &amp; Dent-Brown (2007) UK</td>
<td>Systematic review</td>
<td>All randomised controlled trials that compared drama therapy, psychodrama and related approaches with standard care or other psychosocial interventions for schizophrenia. Three relevant studies: one used drama therapy, two used psychodrama.</td>
<td>Psychiatric inpatients experiencing schizophrenia. Total n= 210</td>
<td>Rating scales (Psychotic Inpatient Profile, Ward Atmosphere Scale, FIRO-B, Psychiatric Outpatient Mood Scales); nurses observation scale for inpatient evaluation-30°; Scale of Schizophrenic Symptoms, Weschler Adult Intelligence Scale, Becker’s genetic analysis of the Rorschach, Draw-a-person Body Image Scale, Venables rating scale for activity withdrawal; Global assessment of illness, rating of improvement, quantitative features of performance on Rorschach tests) outcome- rating scales</td>
<td>N/A</td>
<td>*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</td>
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<tr>
<td>4.2</td>
<td>Karataş &amp; Gökçakan (2009a) Turkey</td>
<td>Randomised control trial, including experiment-control, pre-test and post test and follow up</td>
<td>To examine the effect of group-based psychodrama therapy on the level aggression in adolescents</td>
<td>23 students with high aggression scores: experimental group n=11, control group n= 12</td>
<td>34-item Aggression Scale (Buss &amp; Warren, 2000)</td>
<td>Yes, after 16 weeks</td>
<td>*group-based psychodrama reduced total aggression, anger, hostility, and indirect aggression scores *no effect on verbal or physical aggression scores *effect still measureable 16 weeks after therapy</td>
</tr>
</tbody>
</table>
4.3 Karataş & Gökçakan (2009b)  
*Turkey*  
Randomised control trial: quasi-experimental, pre-post and follow up study with two experiments and one control group.  
To investigate whether cognitive-behavioural group practices and psychodrama decrease adolescent aggression  
36 students with highest aggression levels randomly divided into three groups; experimental and control groups. n=12 for each condition  
Aggression Scale (Buss & Warren, 2000)  
Yes, after 16 weeks  
*psychodrama approach effective in decreasing all aggression scores except verbal physical aggression  
*cognitive-behavioural approach more effective in decreasing total aggression, physical aggression, and anger than psychodrama  
*effects of group practices evident after 16 weeks

4.4 McArdle, Young, Quibell, Moseley, Johnson & LeCouteur (2011)  
*UK*  
Randomised control trial  
To evaluate the 2- and 3-year outcome of targeted school-based drama group therapy (DGT) in reducing behavioural symptoms as compared to teaching maths and English.  
Children in mainstream schools at risk of emotional and behavioral problems  
Teacher-observed behavioural symptoms; self-, parent- and teacher-ratings of adjustment of symptomatic boys and girls  
Yes, after 1, 2 and 3 years.  
*rapid decline in teacher-observed behavioural symptoms following DGT after one year, symptom rates after both interventions converged and remained low  
*DGT rapidly effective in reducing symptoms despite differing content, school-based small-group interventions likely to share some effective components