

The Effectiveness of Expressive Arts Therapies :

A Review of
the Literature

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Psychotherapy & Counselling
Federation of Australia

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Suggested citation:

Dunphy, K., Mullane, S., and Jacobsson, M. (2013), *The effectiveness of expressive arts therapies: A review of the literature*. Melbourne: PACFA.

Acknowledgments:

The review was generously funded by an anonymous philanthropic body.

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Foreword

This document is a literature review of research into the effectiveness of expressive arts therapies, intended as a resource for counsellors and psychotherapists. It demonstrates the effectiveness of expressive arts therapies for a range of physical and psychological conditions.

The PACFA Research Committee recognises that it is important to counsellors and psychotherapists that they have access to recent research evidence that demonstrates the effectiveness of different therapeutic approaches, to assist them in their practice. This review is one of a series of reviews that has been commissioned by the PACFA Research Committee to support its Member Associations in their work. It was written on behalf of the PACFA Research Committee. However, this does not imply that PACFA or its Member Associations endorses any of the particular treatment approaches described.

The Committee endorses the American Psychological Association's definition of evidence-based practice as 'the integration of the best available research evidence with clinical expertise in the context of patient characteristics, culture and preferences'- although we refer to a client or consumer rather than 'patient' – and the Common Factors research that has shown the centrality of the therapeutic relationship to therapeutic effectiveness, and the relatively minimal relevance of specific techniques.

The Committee recognises that there is significant research evidence to indicate the effectiveness of counselling and psychotherapy and that different methods and approaches show broadly equivalent effectiveness. The strength of evidence for effectiveness of any specific counselling and psychotherapy intervention or approach is a function of the number, independence and quality of available effectiveness studies, and the quality of these studies is a function of study design, measurements used and the ecological validity (i.e. its approximation to real life conditions) of the research.

The Committee acknowledges that an absence of evidence for a particular counselling or psychotherapy intervention does not mean that it is ineffective or inappropriate. Rather, the evidence showing equivalence of effect for different counselling and psychotherapy interventions justifies a starting point assumption of effectiveness.

It should be noted that this review is necessarily limited in its scope and covers four of the main types of expressive arts therapies: music, visual art, dance-movement, and drama, which were investigated for evidence of outcomes. It examines the types of mental health issues that expressive art therapies are effective in treating.

The Committee is committed to supporting PACFA Member Associations and Registrants to develop research protocols that will help the profession to build the evidence-base to support the known effectiveness of counselling and psychotherapy. We hope that you will find this document, and others in this series, useful. We would welcome your feedback.

Dr Elizabeth Day
Chair of the PACFA Research Committee, 2013

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Abstract

This article presents a systematic review of literature about the effectiveness of expressive arts therapies. Research about five therapy modalities: music; visual art; dance-movement; drama and writing was investigated for evidence of outcomes. This review documents the modest literature within the inclusion criteria of systematic reviews and randomised controlled trials from Australian literature (2002-2012) and international literature (2007-2012). Only two Australian authored articles, both from the field of music therapy, fitted selection criteria. Recurring issues with methodology included predominantly small samples (n from 10-1891, but largely clustered between 15 and 40) and lack of inclusion of follow up or longitudinal data. Much of the research is inconclusive, but there are sufficient findings of quality to indicate benefits of expressive arts therapies. Effectiveness is indicated for physical and psychological conditions including asthma, dementia, coping with cancer, terminal illness, depression, schizophrenia, stress, anxiety, emotional eating and Autism Spectrum Disorder.

Keywords: expressive arts therapy, creative arts therapy, music therapy, art therapy, dance-movement therapy, drama therapy, psychodrama, writing therapy, systematic review, effectiveness.

Literature Review

Introduction

This article was commissioned by the Psychotherapy and Counselling Federation of Australia (PACFA) as part of a series of reviews investigating the effectiveness of psychotherapies in Australia. Definitions of key terms regarding expressive and creative arts therapies are provided first. Next, the article outlines search terms, data retrieval methods and literature sources. The research process, including strategies for determining the quality of evidence, is discussed. Four short summaries of the literature are provided: one each for music therapy; art therapy; dance-movement therapy and drama therapy. The exclusion of writing therapy from the analysis is explained. The article concludes with a discussion that brings together findings about the four modalities regarding the effectiveness for arts therapies overall. Issues arising with respect to methodology and outcomes are discussed. Recommendations for future arts therapy research are made; an extensive bibliography is provided; and four tables attached as Appendices provide information about all the studies that fitted the selection criteria.

Method

Definitions

The literature indicates a variety of terms used for similar activities, so definitions of terms relevant to arts therapies are explored here. The terms “expressive arts therapy” and “creative arts therapy” were found to be used interchangeably, referring to the overall practice of the arts applied as therapy. “Expressive arts therapy” is more common in European practice, while “creative arts therapy” is more frequently used in Australia. Both terms can also refer to a multi-modal approach wherein a therapist employs a range of art forms as an integral aspect of their practice.

In contrast, the term “art therapy” (singular) generally refers only to visual art therapy, while “arts therapy” may refer to a range of different visual art forms. However, this definition is also problematic, as this term used in the plural also refers to the overall practice of arts as therapy, which might include visual, but also other, art forms.

PACFA provides the following description of expressive arts therapies:

All art forms offer avenues for inquiry into personal life meanings. Understandings can be gained through using the art form to represent and construct your own story, or by using forms already created, such as dramas, poems, paintings, novels or musical compositions. The purpose is always to create re-experiencing of selected aspects of your life so as to understand and

consider them as you make sense of them. Some approaches use single art forms, whilst others may invite you to use a number of ways of expressing what is important to you, including talking about your experiencing as you inquire into it (PACFA 2012).

While this describes a process that may be “therapeutic”, it does not specifically mention “therapy”. Therefore, the definition is lacking, as it does not fit one significant criteria of therapy, that both client and practitioner must both understand the process that they are engaged in as “therapy” in order for it to be so. This concept of therapy is better explicated in PACFA’s definition of counselling and psychotherapy: “Professional counsellors and psychotherapists work within *a clearly contracted* (italics review authors), principled relationship that enables individuals to obtain assistance in exploring and resolving issues of an interpersonal, intrapsychic, or personal nature” (PACFA, 2013).

For the purposes of this review, the definition provided by the Australian and New Zealand Arts Therapy Association (ANZATA) of “creative arts therapies” will be used to stand for both “creative” and “expressive arts therapies”.

Arts therapy or arts psychotherapy is a form of psychotherapy that uses creative modalities, including visual art-making, drama, and dance/movement to improve and inform physical, mental and emotional well-being. Arts therapy works by accessing imagination and creativity, which can generate new models of living, and contribute towards the development of a more integrated sense of self, with increased self-awareness and acceptance (ANZATA, 2012).

However, this definition, while more specific about the therapeutic process and more comprehensive, does not mention music therapy. An additional challenge in finding a definition that covers all the modalities is that music therapists do not consider their work as psychotherapeutic (D. Grocke, personal communication, October 26, 2012).

“Dance movement therapy” is the term currently used by the Australian professional association, but this modality also appears in the literature as “dance-movement psychotherapy” (UK) and “dance therapy” or “dance/movement therapy”, (primarily in the US but also other countries). While the terms “drama therapy” and “psychodrama” are sometimes used interchangeably, in this review “psychodrama” is categorised as a therapeutic process within the modality of “drama therapy”.

Key search terms

Key search terms were:

- expressive arts therapies; expressive art therapies; expressive arts therapy;
- creative arts therapy; creative arts therapies;
- music therapy, music and guided imagery;
- art therapy, art psychotherapy, arts therapy, arts therapies

- dance therapy, dance-movement therapy, dance psychotherapy, dance-movement psychotherapy;
- drama therapy, drama psychotherapy, psychodrama;
- expressive writing, including poetry therapy, and other forms of creative writing as therapy.

Scope

A comprehensive computer-assisted literature search was undertaken of databases and electronically accessible journal articles that documented outcomes of creative arts therapies. Databases searched were the Campbell Collaboration; Academic Search Complete; AMED Alternative Medicine; EBSCOHost; Expanded Academic ASAP; PubMed; PsycArticles; and PsycINFO. Also searched was the Cochrane Database of Systematic Reviews (CDSR), which, as part of the larger Cochrane Library, is a leading resource for systematic reviews and meta-analyses of world-wide, independent, evidence-based health and medical practice (www.cochrane.org). Hand-searches were also undertaken of specific peer-reviewed journals including the *American Dance Therapy Journal*; *Arts in Psychotherapy*; *Art Therapy Online*; *Australian and New Zealand Journal of Family Therapy*; *Australian Journal of Music Therapy*; and the *British Journal of Music Therapy*. Websites of relevant professional associations were also searched for references.

Inclusion and exclusion criteria for literature

This review investigated literature on five creative arts therapeutic modalities: music; art; dance-movement; drama and writing. This focussed on English-language literature published in Australia between 2002 and 2012 and internationally between 2007 and 2012. Only material available in electronic format was considered. The search prioritised systematic, or other, reviews of the literature and controlled trials, primarily those with fully randomised design. Studies that did not specifically identify a creative arts therapy modality were excluded, even if they involved arts participation that had a beneficial or therapeutic outcome.

Literature synthesis

In organising the synthesis of the studies, headings were selected to match those used by Evans, Turner and Trotter (2012), in their review of family and relationship therapy commissioned by PACFA. This was considered to assist comparability across PACFA's review series. These headings were: Author/date/location; Methodology/ study type; Substantive focus; Participants; Outcomes/ measures; Follow up; Conclusion regarding effects of therapy interventions.

Findings

This section includes a synthesis of the literature for four creative arts modalities: music,

art, dance-movement and drama therapies. No studies about any form of writing therapy fitted the inclusion criteria, so no information about this form of therapy is provided. Nevertheless, the practice of poetry therapy is well established in North America and Europe and takes place in a range of medical, allied health and education settings (Heimes, 2011). Nor were any multi-modal studies included. Despite professional interest in approaches that apply more than one art form, for example, as propounded by the training institution Melbourne Institute for Experiential and Creative Arts Therapies (MIECAT), no resources were found that discussed this practice, other than where more than one visual art form was involved.

Music therapy literature synthesis

Music therapy is an allied health profession and creative arts modality practiced throughout Australia and in more than 40 other countries (Australian Music Therapy Association, 2012). Professional associations were established in the UK in 1958, USA in 1971 and Australia in 1975 (Grocke, 2005). In music therapy, music is used by a professional who is both a “proficient musician” and “qualified therapist” within a therapeutic relationship to address physical, emotional, cognitive and social needs of individual clients (Australian Music Therapy Association, 2012). Music therapy is used to address an increasing range of client issues, including brain trauma, dementia and palliative care, and children with intellectual disabilities (Grocke, 2005). Its relative longevity compared to other modalities may explain why music therapy is one of the most researched mediums of the creative arts therapies. Music therapy had the strongest body of quantitative literature of all the modalities investigated.

Thirty-two studies on outcomes of music therapy were identified in this review, eight of which matched the selection criteria. These were four international systematic reviews of quantitative studies using randomised controlled trials, and four single controlled trial studies. One of the systematic reviews had one Australian contributing author and two of the single controlled trial studies were wholly undertaken by Australian researchers. The systematic reviews focussed on studies with population groups including cancer patients (Bradt, Dileo, Grocke & Magill, 2011); people in end of life care (Bradt & Dileo, 2010); adults with depression (Maratos, Gold, Wang & Crawford, 2008); and children with Autism Spectrum Disorder (Gold, Wigram & Elefant, 2006). In each case the findings suggested that whilst music therapy did no harm, there was insufficient data to confirm its positive effects for the population. These authors were consistent in their advocacy for music therapy research to incorporate more high quality studies using larger samples, more accurate tools for outcome assessments, more rigorous designs and long term trials.

The four single controlled studies provided information about the effectiveness of music therapy with: children with Autism Spectrum Disorder (Gattino, dos Santos Riesgo, Longo, Loguerico Leite & Faccini, 2011); (Kim, Wigram & Gold, 2008); palliative care (Horne-Thompson & Grocke, 2008); and Alzheimer’s type dementia (Ledger & Baker, 2007).

Gattino et al (2011) researched the application of Relational Music Therapy (RMT) with children who have Autism Spectrum Disorder. RMT was developed as a form of music therapy to help individuals develop their motor, communicative, social, cognitive and emotional capacities stimulated by interactions, between client and therapist in the therapeutic setting. These interactions can include singing, composing and playing musical games in an unstructured format. However, the study results were inconclusive, which those authors attribute to small sample size (n=24), use of an inadequate instrument to measure the outcomes, and difficulties caused by the physical setting for the music therapy interventions (p. 149-150). Kim et al (2008) undertook a RCT to examine the impact of improvisational music therapy on joint attention behaviours in pre-school children with autism. Results indicated that music therapy was more effective than play sessions in facilitating joint attention behaviours and non-verbal social communication skills in children.

The only wholly Australian authored research that could be included in this review were the following two studies. Horne-Thompson and Grocke (2008) examined the use of music therapy in palliative care settings, seeking specifically to address a gap in the literature of research governed by sufficient controls. They wished to determine if the use of music therapy would help reduce anxiety and its debilitating effects for palliative care patients. Results indicated that music therapy reduced patient anxiety when anxiety was measured by participant self-report, but not when lowered heart rate was the measure. Further investigation was recommended to justify financial investment of a music therapy approach. Ledger and Baker (2007) focussed on the use of music therapy to reduce, in frequency and intensity, agitation in older clients with dementia. The authors reported that, as there were no significant differences between the experimental and control groups over time, music therapy may only have immediate, rather than cumulative and long-term effects, on agitated behaviours. Music therapy interventions did however, have a positive influence on other client areas of functioning, including wandering, fidgeting, grabbing and verbally aggressive behaviour, suggesting that future research could investigate the modality's support for quality of life with this client group.

The studies included in this review indicate that the majority of high calibre quantitative research into music therapy is conducted outside Australia. Although some research indicates inconclusive results, these studies do confirm the positive impact music therapy can have on adults experiencing cancer, terminal illness, dementia and depression, and for children diagnosed with Autism Spectrum Disorder. These studies also confirm the need for further research that utilises larger sample sizes and long-term trials, in particular, to determine the efficacy of music therapy.

Art therapy literature synthesis

Art therapy, a modality that uses visual arts as the therapeutic intervention, emerged in the 1940s in Europe as a form of psychotherapy (Hogan, 2001). This modality was established

in Australia between the 1950s and the 1990s by a group of local and international artists, psychiatrists, psychologists and educators. Several of these practitioners undertook training in the UK and USA before returning to Australia (Westwood & Linell, 2011). The Australian and New Zealand Arts Therapy Association (ANZATA), founded in 1987, and the Australian Creative Arts Therapies Association (ACATA), founded in 1998, are peak bodies for art therapy in Australasia. Arts therapies are traditionally based on psychoanalytic or psychodynamic principles, and most arts therapists utilise varied evidence based theoretical frameworks in their work. These traditions include depth analytic, humanistic, behavioural, systemic, and integrative approaches. Arts psychotherapy can be employed as both a therapeutic and diagnostic tool (ANZATA, 2013).

Twelve articles that examined the effectiveness of art therapy were identified, five of which met the inclusion criteria. One of these was a systematic review, and the others, randomised controlled trials conducted in Europe, the UK and the USA. No Australian studies that met the inclusion criteria were identified.

One study examining arts therapy for mental illness had inconclusive results. Ruddy and Milne's (2009) systematic review of RCTs of art therapy as an adjunct treatment for schizophrenia and other mental illnesses found only two studies that met their inclusion criteria. The small sample sizes of these studies (total n=137) precluded conclusive findings. Another study investigating the effects and cost effectiveness of group art therapy for people with established schizophrenia was conducted by Crawford et al. (2012). No improvements were identified in outcome measures testing global functioning, mental health, or other health related outcomes, with low attendance identified as impacting on this result.

Three RCT studies indicate support for the effectiveness of art therapy for health issues: asthma; depression; and coping with breast cancer. Beebe, Gelfand and Bender (2010) measured the effectiveness of art therapy with 22 children suffering chronic asthma. Results were significant, showing that a program of art therapy lowered anxiety and improved quality of life and self-concept, with benefits persisting six months after treatment. The study conducted by Thyme et al. (2007) comparing short-term psychodynamic art therapy with psychodynamic verbal therapy for women with depression found that participants in both groups reported fewer depressive and stress-related symptoms at the conclusion of the trial and again at follow up. Svensk et al. (2009) reported an overall increase in coping resources among women with breast cancer after an art therapy intervention. Therefore, of the five art therapy studies reviewed, three indicate support for the benefits of art therapy for health concerns: asthma; depression; and coping with breast cancer. The inconclusive results and no improvements from the other two studies may be largely attributable to methodological limitations.

Recommendations for further and improved research were made by Slayton, D'Archer and Kaplan after their review of 35 studies on the efficacy of art therapy (2011). These authors

found a small body of quantifiable data indicating that art therapy is an effective treatment for people across a spectrum of ages, with a variety of symptoms and disorders. Gilroy (2006) recommends mixed qualitative and quantitative designs to explore aspects of the therapeutic process, stating that "...interventions that involve relationships and social interaction need accompanying qualitative data that document therapeutic processes and include user views about their experience of what has been important and effective" (p. 114).

Dance-movement therapy literature synthesis

Dance-movement therapy (DMT) began as a formal psycho-therapeutic practice in the United States in the 1940s (Bartenieff, 1972). Professional associations were established in the US in 1966, the UK in 1982 and in Australia in 1994. The American Dance Therapy Association (ADTA, 2012) defines dance-movement therapy as "the psychotherapeutic use of movement to further the emotional, cognitive, physical and social integration of the individual...based on the empirically supported premise that the body, mind and spirit are interconnected" (ADTA, 2012). Dance-movement therapists in Australia work with clients across the lifespan to address a range of issues of psychological and physical origin including depression, anxiety, trauma, relationship and adjustment issues, dementia, disability and behavioural problems (Dance-Movement Therapy Association of Australia, (DTAA), 2012).

This review identified twenty-six studies on outcomes of dance-movement therapy, eight of which matched the selection criteria. Five were reviews and three, controlled trials, two of which had a fully randomised design. No articles written by Australians or published in Australia could be included.

One systematic review published in the Cochrane Review (Xia & Grant, 2009) is the first on DMT to be included in that database. While Xia and Grant's (2009) article regarding the effectiveness of dance therapy for schizophrenia indicates inconclusive results from a single study, its inclusion in the Cochrane Review does pave the way for further research. Meekums, Karkou and Nelson's (2012) review on the effects of DMT for depression is at the protocol stage for Cochrane review, and findings are as yet unavailable. These authors recommended that a full Cochrane review be undertaken regarding DMT and depression, after a scoping review of nine studies indicated the value of deeper investigation. Bradt, Goodill and Dileo's (2011) review on the potential of DMT for people who have cancer also had an inconclusive result. Psychological and physical outcomes of DMT could not be confirmed because only two studies were found. One of those studies, did however, suggest that DMT may have a beneficial effect on the quality of life of women with breast cancer. Kiepe, Stöckigt and Keil (2012) documented beneficial results from eleven trials on the effects of DMT for adults with a range of physical and mental illnesses.

In the single studies documented, Brauninger (2012) reported that DMT appeared effective in improving stress management and reducing psychological distress. Further, it appeared

that DMT seemed effective even after a short period of treatment (ten weeks) and that effects lasted over time. Meekums, Vaverniece, Majore-Dusele and Rasnacs (2012) found similar reductions in psychological distress in the DMT treatment group for obese women with emotional eating. This study also indicated other positive outcomes for this population including decreased body image distress, increased self-esteem and reduced emotional eating. DMT was also indicated as an option for treating dementia, having small positive effects on cognition and self-care abilities, despite no effects being indicated for memory (Hokkanen et al., 2008).

These reviews confirm that DMT can be an effective therapeutic intervention for people with conditions including schizophrenia, cancer, depression, stress, emotional eating and dementia. They also indicate that most DMT studies to date have had small sample sizes and yielded inconclusive results. However, dance-movement therapy is practiced around the world with a range of clients and conditions far broader than this list would indicate, pointing to significant opportunities for further high quality research.

Drama therapy literature synthesis

Drama therapy is relatively new as a psychotherapeutic profession and academic discipline. although it draws from ancient ritual practices (Jones, 1996). It developed in the 1970s from theoretical foundations including theatre, psychology, psychotherapy, anthropology, and play. A major influence is the concept of psychodrama developed by Jacob Moreno in the 1920s and 30s as a method of group therapy based on encounter and enactment (Moreno, 1946). Professional associations were established in the UK in 1977 and the USA in 1979. The only related professional association in the Australian region is the Australian and Aotearoa New Zealand Psychodrama Association that was established in 1980.

Drama therapy is defined as 'the intentional use of drama and/or theater processes to achieve therapeutic goals' (National Association for Drama Therapy (USA) (NADT) 2012). The NADT purport that behaviour change, skill building, emotional and physical integration, and personal growth can be achieved through drama therapy in prevention, intervention, and treatment settings (2012). Drama therapists work in a wide variety of contexts: schools; mental health; general health social care settings; prisons and the voluntary sector. Clients include children with autism, older people with dementia, adolescents who self-harm, people with histories of sexual and/or physical abuse, those suffering from a mental illness and women with post-natal depression (British Association of Drama Therapists (BADth), 2012).

This review identified eight studies on the outcomes of drama therapy, four of which matched the selection criteria. One of these was a systematic review and three were randomised controlled trials. A further systematic review commissioned by the British Association of Dramatherapists was discussed in a journal article (Dokter & Winn, 2009) but its findings could not be located on-line. No relevant articles published in Australia were found.

Ruddy and Dent-Brown's (2007) systematic review of drama therapy and psychodrama for inpatients with schizophrenia reported five studies. The reviewers deemed all of these to be inadequately documented, with no conclusive findings about the harms or benefits of drama therapy for this client group. However, the review did include two studies relevant for this project, two randomised controlled trials with Turkish school students who had high aggression levels (Karataş & Gökçakan, 2009a and 2009b). Findings of the first study indicated significant effects, with group-based psychodrama appearing to reduce total aggression, anger, hostility, and indirect aggression scores. No effect was found on verbal or physical aggression scores. However, the second study indicated that an alternate cognitive-behavioural approach was more effective than psychodrama in decreasing total aggression, physical aggression, and anger. These effects were still measureable at a sixteen week follow-up.

The final study examined for this modality evaluated the two- and three-year outcomes of targeted school-based drama group therapy (DGT) in reducing behavioural symptoms, as compared to the teaching of maths and English (McArdle et al. 2011). This indicated that DGT can contribute to a rapid reduction in teacher-observed behavioural symptoms and that this effect is still evident after a year. The study concluded that school-based small-group interventions with different content are likely to share some effective components.

In summary, these results indicate the potential for drama therapy to contribute to reduction of behavioural issues for school students, but there is no evidence of effectiveness for other populations. More research into outcomes for the wide range of population groups and issues with which drama therapists work is indicated.

Discussion

This article reports a literature review about the effectiveness of creative arts therapies, particularly as indicated in research from Australia. The most significant and somewhat disappointing finding was that almost no literature from Australia was found that could be included in the review. Only two studies from Australia fitted selection criteria, both of which were from music therapy. These both had inconclusive results about the effectiveness of music therapy: to address anxiety and its debilitating effects in palliative care settings (Horne-Thompson & Grocke, 2008) and long term reduction of agitation for older clients with dementia (Ledger & Baker, 2007). However, Ledger and Baker (2007) report a positive influence on other client areas of functioning, suggesting that future research could investigate music therapy's support for quality of life with this client group. All included studies about other creative arts therapies were from other countries. The geographic origin of other research was very diverse. Most studies were undertaken in the USA and UK, but others came from Norway, Denmark, Sweden, Spain, Turkey, Latvia, Korea and Brazil.

Three factors can potentially provide some insight for this dearth of Australian literature that fitted selection criteria. The first is the relatively emergent nature of research in these creative arts therapies internationally. For example, dance-movement therapy research only appeared in the Cochrane Review for the first time in 2009. The strongest body of literature is emerging from the USA and UK, where these professions have been longest established. A second and related factor is the dearth of university-based courses for these modalities in Australia. While music therapy has been established at the University of Melbourne since 1975, and is taught in three other Australian institutions, there are only two university-based programs for visual arts therapy; one course that includes a drama therapy subject and no dance-movement or drama therapy training courses across the whole of Australia. Without the scaffolding of a university environment, the potential for a research culture to develop is very limited.

A third factor in this absence of controlled studies may be the strong valuing of qualitative research in arts therapy fields. The current review began with a relatively narrow focus on quantitative literature as requested by PACFA. These parameters were reduced even further when the scale of the search task into five areas of unrelated literature became apparent. In the end, only systematic reviews and randomised controlled trials were included in the final selection. While this approach made the task of searching for material much more defined, it did preclude the growing body of qualitative literature being generated by creative arts therapists in Australia and other countries. Research advancing and informing arts therapy fields is predominantly qualitative, reflecting the post-modern arts-based inquiry paradigm in which it is nested, and the perspective that the arts contributes multiple ways of knowing and researching lived experience (see for example, Heron & Reason, 1997; Hervey, 2000; Liamputton & Rumbold, 2008; McNiff, 2004). In music therapy this may be a relatively new development, as Australian music therapist Shoemark, writing in 2006, welcomes a growing trend towards qualitative approaches to music therapy research (Shoemark, 2006).

Conversely, there is also an impetus amongst therapists from a range of countries for research that utilises quantitative methods. German researcher Brauning, for example, sought to address the “widespread prejudice in the field” (2012, p.449,) that quantitative methods cannot measure the effectiveness of DMT by undertaking a study using this approach to investigate the modality’s effectiveness for stress management. Brauning’s (2012) work also responds to the recognised challenge for creative arts therapists to evaluate and validate their practice with evidence that is acceptable in medical model settings (Gilroy, 2006; Heimes, 2011). Researchers who prioritise quantitative research likely recognise that databases such as the Cochrane, that as yet only includes quantitative studies, form the basis for evidence-based decision-making in the health field. A review about a new area of research that is published in the Cochrane database, regardless of its conclusiveness about effectiveness, is a strong starting point for further funded research. Funded research is an essential pre-condition for a strong evidence base because it

facilitates larger scale and longer term data collection. This no doubt was PACFA's impetus in focussing this literature search on quantitative research.

Another significant finding was the lack of clarity of understandings about what constitutes arts therapy. This issue was addressed by the criteria for the review, ie. that studies were excluded if they did not specifically identify a creative arts therapy modality, even if they involved arts participation that had a beneficial or therapeutic outcome. In this decision, the authors were informed by a definition used in the Cochrane Library, that music therapy, for example, "requires the implementation of a music intervention by a trained music therapist, the presence of a therapeutic process, and the use of personally tailored music experiences" (Bradt, Dileo, Grocke & Magill, 2011, p. 2). The relationship between client and therapist is considered to be one of the major vehicles of change in arts therapy, as with standard psychotherapy practice (Clarkson, 1996; Lett, 2001). While beneficial and even therapeutic experiences may be facilitated by professionals who are not trained therapists, this cannot be considered therapy. This specific understanding of arts therapy was not ubiquitous in the literature. While some researchers had a clear conception of arts therapy as a specific professional practice, others discussed an application of the arts for some perceived benefit as therapy. In some cases, modalities were discussed differently within the same article, for example, 'creative drama' and 'drama therapy', as if these two were interchangeable. Studies in which this occurred were also excluded. This factor contributed to the exclusion of all studies about writing as therapy.

A methodological challenge was that the majority of the studies in all modalities, even those included in the final selection, had small sample sizes and generally lacked follow-up or any longitudinal dimension. This indicates an important area for development of arts therapy research.

Conclusion

This article reports a literature review on the effectiveness of creative or expressive arts therapies. Modalities investigated were music therapy, art therapy, dance-movement therapy, drama therapy and writing therapy. Inclusion criteria for literature were systematic reviews and randomised controlled trials published in electronically available resources, in Australia over the past ten years, and internationally over the past five. A total of 25 articles were reviewed (music therapy 8, art therapy 5, dance-movement therapy 8, and drama therapy 4). These were drawn from a sample of 78 studies that used quantitative methodologies to examine outcomes (music therapy 32, art therapy 12, dance-movement therapy 26, drama therapy 8), from a larger initial pool of 281 articles. No studies for any kind of writing therapy were included in the final selection, as none were found that fitted the search criteria. Only two Australian studies, about music therapy, met the selection criteria and were included. Methodological weaknesses in all modalities, particularly the small sample sizes and lack of follow-up or longitudinal research, indicate directions for future research.

Overall, despite many inconclusive studies, the effectiveness of creative arts therapies for a range of conditions is indicated. For music therapy, these are adults experiencing cancer, terminal illness, dementia and depression, and children diagnosed with Autism Spectrum Disorder. For arts therapy these are mental illness, asthma, depression and coping with breast cancer. For dance-movement therapy these are schizophrenia, cancer, depression, stress, emotional eating and dementia. Drama therapy has been documented to reduce behavioural issues for school students. However, all of these modalities are practiced around the world with a range of clients and conditions far broader than these results would indicate, pointing to significant opportunities for further research.

Three factors provide insight into the dearth of quantitative studies from Australia: the nascence of research in these fields internationally; the paucity of university courses, and therefore research culture, in Australia; and the strong valuing of qualitative research in arts therapy fields. A significant challenge identified in the literature was the lack of clarity of understandings about what constitutes arts therapy. Many studies discussed arts therapy and benefits from arts participation as if they were interchangeable, when accepted definitions of arts therapy clearly distinguish this from other forms of beneficial arts engagement.

Issues for the field of creative arts therapy in Australia include the lack of research being generated, and the inconclusive nature of those research results. It is evident that more high quality research efforts are required. The authors recommend that further literature reviews also include qualitative research in order that all of the evidence for effectiveness of creative arts therapies be considered.

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Music therapy table

1.	Author/date/location	Methodology/study type	Substantive focus	Participants	Outcomes/ measures	Follow up	Conclusion regarding effects of interventions
1.1	Bradt, Dileo, Grocke & Magill (2011) <i>USA, Australia, India</i>	Systematic review	Examine effects of MT interventions and standard care with standard care alone, or standard care and other interventions for patients with cancer	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	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	N/A	*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
1.2	Bradt & Dileo (2010) <i>USA</i>	Systematic review	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	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	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	N/A	*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
1.3	Maratos, Gold, Wang, & Crawford (2008) <i>UK, Norway</i>	Systematic review	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	5 controlled trials (4 randomised, 1 clinical control) each with small sample range of participants diagnosed with clinical depression (n=19-68)	Decrease in the symptoms of depression measured using a range of self-rating and clinician-rated scales	N/A	*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

1.4	Gold, Wigram & Elefant (2006) <i>Norway, Denmark</i>	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) <i>Brazil</i>	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) <i>Denmark, Korea, Norway</i>	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) <i>Australia</i>	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) <i>Australia</i>	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
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Art therapy table

2.	Author/date/ location	Methodology/ study type	Substantive focus	Participants	Outcomes/ measures	Follow up	Conclusion regarding effects of interventions
2.1	Ruddy & Milnes (2009) <i>UK</i>	Systematic review	To review the effects of art therapy as an adjunctive treatment for schizophrenia compared with standard care and other psychosocial interventions	61 reports were identified of which 2 met the review inclusion criteria: total n=137 diagnosed with severe mental illness	*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	N/A	*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
2.2	Crawford, Killaspy, Barnes, Barrett, Byford, Clayton, Dinsmore, Floyd, Hoadley, Johnson, Kalaitzaki, King, Leurent, Maratos, O'Neill, Osborn, Patterson, Soteriou, Tyrer & Waller (2012) <i>UK</i>	Randomised controlled trial	Examine effects of group Art Therapy interventions and standard care with standard care and other activities , and standard care alone for people with schizophrenia	*n=417 ≥18years with clinical diagnosis of schizophrenia; *Art Therapy sessions weekly of 90 mins for 12mths; control activity groups involved group discussion	Primary outcomes included: *Global Assessment of Functioning Scale; *Positive and Negative Syndrome Scale; *Medication records; *Euroqol EQ-5 D (QoL); *version of Adult Service Use Inventory re cost data records	*Secondary outcomes assessed at 12 and 24 months; *comprised levels of group attendance, social function, satisfaction with care, mental wellbeing & costs	*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

2.3	Beebe, Gelfand & Bender (2010) <i>USA</i>	Randomised controlled trial	Test an art therapy intervention in a randomized controlled trial for children with asthma	*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	*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	*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	*encouraging initial data about how emotional health of chronically ill children may be improved using art therapy interventions *score changes from baseline to completion of art therapy indicated: improved problem-solving and affect drawing scores; improved worry, communication, and total quality of life scores; and improved Beck anxiety and self-concept scores in the active group relative to the control group
2.4	Thyme, Sundin, Stahlberg, Lindstrom, Eklof & Wiberg (2007) <i>Sweden</i>	Randomised controlled trial	To compare short-term psychodynamic art therapy with short – term psychodynamic verbal therapy for depressed women	*n=39 women diagnosed with depression; n=18 received time-limited (60mins) art psychotherapy; n=21 received time-limited (45 mins) verbal psychotherapy	*Impact of Event Scale (IES); *Symptom Check List 90 (SCL-90); *Beck Depression Inventory (BDI); *Hamilton Rating Scale of Depression (HRSD)	*at 3mths	*participants reported fewer depressive symptoms at termination of psychotherapy compared to initial level, and even fewer symptoms at 3-month follow-up *average participants in both groups had minimal depressive symptoms and stress-related symptoms *short-term psychodynamic art therapy may be valuable treatment for depressed women
2.5	Svensk, Öster, Thyme, Magnusson, Sjödin, Eisemann, Åström & Lindh (2009) <i>Sweden</i>	Randomised controlled trial	Examine effects of an art therapy intervention program on coping resources in women with primary breast cancer	n=41 women, randomised to study group (n= 20) with art therapy for 1 week during postoperative radiotherapy or to control group (n= 21)	* CRI questionnaire to manage outcomes for coping resources and stress	No	*overall increase in coping resources among women with breast cancer after art therapy intervention *significant differences between the study and control groups in the social domain

Dance-movement therapy table

3.	Authors/ date/ location	Methodology/ study type	Substantive focus	Participants	Outcomes/ measures	Follow up	Conclusion regarding intervention effects
3.1	Bradt, Goodill, & Dileo (2011) <i>USA</i>	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) <i>USA, Scandinavia</i>	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
3.3	Mala, Karkou, & Meekums (2012) <i>UK</i>	Scoping review	Evidence for effectiveness of DMT and related fields for treatment of depression	Nine studies: (n=40); six with randomized controlled trial design, three non-randomized design. One study met most criteria of quality	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	N/A	*significantly increased plasma serotonin and decreased dopamine, and negative psychological symptoms of distress improved *modulation of serotonin and dopamine production through the intervention might be a mechanism for reduction in depression *conclusion about need for full systematic literature review and Cochrane Review protocol and procedures

3.4	Meekums, Karkou & Nelson (2012) <i>UK</i>	Systematic review	Effects of DMT for depression, comparing DMT with other psychological interventions, pharmacological interventions, other physical interventions, comparing different forms of DM	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	<i>This review at the protocol stage and no further information is available</i>		
3.5	Xia & Grant (2009) <i>UK</i>	Systematic review	To evaluate the effects of DMT for people with schizophrenia or schizophrenia-like illnesses compared with standard care and other interventions	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	*Positive and Negative Syndrome Scale (PANSS) *Satisfaction score (Client's Assessment of Treatment Scale score) *Manchester Short Assessment of Quality of Life score	N/A	*data inconclusive because of small samples

3.6	Brauninger (2012) <i>Spain</i>	Randomised control trial	Effect of a DMT group intervention on stress management improvement and stress reduction	Twelve DMT groups (n=97) and nine wait-listed control groups (n=65) were recruited	Stress management [Stressverarbeitungsfragebogen/SVF 120], psychopathology and overall distress (Brief Symptom Inventory/BSI)	Yes, after 6 months	*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) <i>Finland</i>	Randomised, controlled trial	Behavioral and cognitive problems in dementia	n=29 patients of a dementia nursing home. 14 had Alzheimer's disease, 7 had vascular dementia, 7 had undefined types of dementia	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	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) <i>UK, Latvia</i>	Partly randomised trial	The effectiveness of DMT in obese women with emotional eating who were trying to lose weight	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	Battery of tests for psychological distress, body image distress, self-esteem and emotional eating	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

4.	Study Name/ Authors; Year of Publication, Country	Methodology/ study type	Substantive focus	Participants	Outcomes/ measures	Follow up	Conclusion regarding effects
4.1	Ruddy & Dent- Brown (2007) <i>UK</i>	Systematic review	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.	Psychiatric inpatients experiencing schizophrenia. Total n= 210	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	N/A	*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
4.2	Karataş & Gökçakan (2009a) <i>Turkey</i>	Randomised control trial, including experiment-control, pre-test and post test and follow up	To examine the effect of group-based psychodrama therapy on the level aggression in adolescents	23 students with high aggression scores: experimental group n=11, control group n= 12)	34-item Aggression Scale (Buss & Warren, 2000)	Yes, after 16 weeks	*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

4.3	Karataş & Gökçakan (2009b) <i>Turkey</i>	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	<p>*psychodrama approach effective in decreasing all aggression scores except verbal physical aggression</p> <p>*cognitive-behavioural approach more effective in decreasing total aggression, physical aggression, and anger than psychodrama</p> <p>*effects of group practices evident after 16 weeks</p>
4.4	McArdle, Young, Quibell, Moseley, Johnson & LeCouteur (2011) <i>UK</i>	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.	<p>*rapid decline in teacher-observed behavioural symptoms following DGT after one year, symptom rates after both interventions converged and remained low</p> <p>*DGT rapidly effective in reducing symptoms despite differing content, school-based small-group interventions likely to share some effective components</p>