

Evidence from the international literature

Author: Susan Bidwell, Population Health and Community Engagement

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Arts and medicine are both disciplines which deal with perennial issues in or of human experience – pain, suffering and mortality. ... Providing evidence of the intrinsic capacity of the arts in inducing beneficial clinical outcomes brings another dimension to the work of health practitioners. (Staricoff, 2006)

Summary

- There is increasing interest in the provision of participatory arts programmes in the community for people of all ages. They appear to be particularly beneficial for those who lack opportunities for meaningful contributions to society, particularly those who are isolated because of lack of social support, and mental or physical impairments.
- The benefits from arts programmes resonate strongly with the evidence-based "five ways to wellbeing" model of mental health: connect, take notice, keep learning, be active, give.
- There is evidence from both quantitative and qualitative studies that participating in creative
 arts can result in significant benefits to psychosocial health, including improved self-esteem,
 confidence, self-efficacy, improved social connections, and overall quality of life.
- There is also some, though limited, evidence that there may be improvements in physical health for some people who participate in singing or dance. Simply becoming totally engrossed in an appealing activity may also help people cope with physical pain.
- The key characteristic of successful arts programmes is that they allow participants to create something meaningful to them, and to explore, develop and extend their skills through incremental challenges that give them a sense of autonomy and fulfilment.
- Programmes for members of the general public can benefit people referred through health services. However, some groups of people may feel safer if they are in a programme with those who share similar life experiences.
- Quality of the learning experience does matter and is largely dependent on the ability of the
 tutors to inspire, guide, suggest, and encourage but avoid imposing their own ideas. However,
 there is little detail in the literature on the skill set that tutors should have, beyond their being
 expert in their own art form.
- Evaluation of arts programmes in health is challenging. The well-documented difficulties of
 evaluating community programmes are compounded in arts programmes by the differences in
 underlying philosophical viewpoints between the creative outcomes that are the focus of the
 arts, and the social outcomes more likely to be prioritised by health. Cooperation and
 constructive communication on these issues is necessary from the start.
- Evaluation methods are not well developed and although the problems are well documented, the few solutions that have been put forward are light on practical detail. In spite of these difficulties the UK in particular and some states of Australia commit significant amounts of public money to arts in health.
- Sustainability of arts programmes has been little discussed but is critical for attracting tutors of sufficient calibre, and ensuring that participants do not lose the gains made if the programme ends. A commitment to public funding is needed as those most in need are also those least likely to be able to pay to attend.

Introduction

Supporting the arts for the promotion of health and wellbeing is based on the idea that exposure to the arts, and particularly participation in creative activities is life enhancing and can assist greater wellbeing (S. Clift, 2011). A broad acceptance of the definition of health as being more than just the absence of disease or dysfunction (Stuckey et al 2010; Swindells et al 2013) has given impetus to whole-person approaches to creating and maintaining health (Stuckey & Nobel, 2010; Swindells et al., 2013). Emotional uplift and enhanced psychological wellbeing resulting in a positive impact on social, affective, and cognitive dimensions of mental health have been identified in a range of studies of community programmes where people have participated creatively in music, visual arts, dance, and drama (S. M. Clift & Hancox, 2001; Cohen et al., 2006; Eades & O'Connor, 2008; Greaves & Farbus, 2006; O'Shea & Ni Leime, 2012). Enhanced physical health from singing and dance has also been reported, such as a reduction in chronic respiratory symptoms, better coping with pain, improved posture and a reduced number of falls (Baptista et al., 2012; S. M. Clift & Hancox, 2001; Hui et al., 2009; Ojay & Ernst, 2000).

Increasing interest in the contribution of the arts to the wider dimensions of health is apparent in the growing number of studies and associated commentary in the international academic literature. Perspectives in Public Health (2013), Journal of Health Psychology (2008) Journal of Psychiatric and Mental Health Nursing (2007) and Journal of the Royal Society for the Promotion of Health (2006) have all issued special sections on the topic in the last few years, and in 2009, a new journal Arts in Health was launched. As evidence continues to emerge about the range of benefits that may derive from creative activities, public funding has become available in some areas to support programmes. This is most advanced in the UK where there are large organisations such as Arts Health and Wellbeing¹ as well as long-running university initiatives² promoting the arts in health. In Australia, Creative Connections of Vic Health aims to promote mental health and wellbeing through the arts³ and Arts and Health Australia works to advocates art and health in primary care, and supports research and evaluation of programmes. While New Zealand does not have the same level of comprehensive public programmes, the Mental Health Foundation promotes arts in health⁵ and there is a range of small programmes throughout the country, some of which are supported by DHBs.⁶

Aim and methods

This document was requested by Dr Lynley Cook, Population Health and Community Engagement, Pegasus Health to provide a broad overview of the contribution that participation in the arts can make for individuals' health and wellbeing. The document aims to:

Provide a brief outline of theories that underpin the arts as a means to benefit health and wellbeing Give an overview of evidence from quantitative and qualitative studies from the past ten years Discuss the challenges of evaluating the outcomes from arts-based health promotion programmes

The information on which this document draws has been primarily derived from searches of the Medline and Web of Science databases, and references cited by retrieved papers. Selected studies

¹ See http://www.artshealthandwellbeing.org.uk/

² See for example, the Sydney de Haan Research Centre at Canterbury Christ Church University https://www.canterbury.ac.uk/Research/Centres/SDHR/Home.aspx) and Manchester Metropolitan University's Arts for Health https://www.artsforhealth.org/

See: http://www.vichealth.vic.gov.au/Publications/Social-connection/Creative-Connections.aspx

⁴ See http://www.artsandhealth.org/about-us.html

⁵ See http://www.mentalhealth.org.nz/newsletters/view/article/30/425/2012/

⁶ See the list given by Arts Access Aotearoa http://artsaccess.org.nz/creative-spaces-directory

are limited to those published in the last ten years that report on arts programmes in music, drama, dance or visual arts in community settings, including community mental health settings.

Arts in health also covers inpatient treatments by specialist art or music therapists and the provision of visual art and music to enhance the hospital environments. These are not discussed here as they are hospital-based rather than community programmes. Brief comment has also been made on the use of arts-based intervention as a direct mean to desired behaviour change, for example, dance programmes to promote physical activity in young people. Though these are clearly related to arts in health and may at times overlap, they tend not to allow individual creative development, which is a key factor in the benefits that arts programmes can bring to individuals.

Theoretical basis for the arts in health care

The biopsychosocial model of health first proposed by Engel (1977) considers the multiple factors of biological, psychological, and emotional variables that contribute to states of health or disease. Gick (2011) provides a good overview of the explanations that have been put forward for the mechanism of the mind-body interaction, particularly the various stress factors that affect the immune response. The biopsychosocial model of health has some overlap with the Maori models of health such as the Te Whare Tapa Wha. Thus experiences which support and raise psychological and emotional wellbeing may also improve physical health. In this respect, participation in the arts is receiving increasing attention for its health promoting potential.

Camic (2008) describes the arts as having "evolutionary utility". Dance, visual art, song, and drama developed as a way for humans to create feelings of mutuality between each other, facilitate the need for belonging, find and make meaning, as well as gaining physical competence through participating, creating, observing and responding to the world around them. It is surprising, notes this author, that considering the arts have been around for millennia, that they have been largely ignored as an intervention strategy in health care.

One of the important aspects of engaging in creative arts is that it provides an opportunity for continually mastering new skills and more difficult material. It therefore, fills both the aspects of experience considered essential for wellbeing: *hedonia* (enjoyment or pleasure) and *eudaimonia* (a sense of meaningfulness or engagement in life) (Berridge & Kringlebach, 2011). This feeling of meaning and engagement is emerging as a hitherto under-recognised but crucial component of health promotion and one which is able to "... lead to transformative health experiences and enhanced quality of life" (Kimiecik, 2011, p.769). While both hedonia and eudaimonia are generally agreed to be necessary for optimal mental health, eudaimonic wellbeing is more active, characterised by meaningful engagement and purpose and leads to personal growth. It is thought of as dynamic approach to living, rather than an achieved state, and does not preclude having negative emotions when they are a healthy response to difficult circumstances. In contrast to hedonic wellbeing (feeling happy, relaxed and away from problems), eudaimonic wellbeing requires activities that feel challenging and require some effort, suggesting that achievement in such activities enhances wellbeing by creating a feeling of striving for success, and developing competence as skills increase.

The theoretical basis for the arts as a benefit to psychosocial health is consistent with the "five ways to wellbeing" model of mental wellbeing. This evidence-based model developed in the UK (Government Office for Science, 2008) is endorsed in New Zealand by the Mental Health Foundation

⁷ See http://www.health.govt.nz/our-work/populations/maori-health/maori-health-models The biopsychosocial model however lacks the whanau (family) dimension that is important in Maori models of heath.

and has also been used to underpin the All Right campaign in Christchurch to promote wellbeing following the disruption and distress caused by the earthquakes. It encourages everyone in society to "connect, take notice, keep learning, be active, and give". It is easy to recognise how readily this resonates with the benefits from participation in the creative arts.

The arts are a way of connecting with others; participating in a meaningful group activity with likeminded people has additional social benefits in reducing isolation and building networks of friends. Having social contacts and taking part in activities outside the home are known to be factors that help protect against physical and mental decline as people age (Hammerman-Rozenberg et al., 2005; Harris & Thoresen, 2005; Robb et al., 2008). Reduced institutionalisation, increased survival and higher cognitive function have all been associated with having more social contacts and therefore more social support (Yeh & Liu, 2003). The same factors also apply to people of any age group with chronic illnesses or disability who have fewer opportunities to participate in society (Camic, 2008; Lipe et al., 2012) Attending an arts programme, however, is not merely a substitute for a social "gettogether" for those who lack networks of friends and social support. Purposeful engagement and development of creativity is a critical factor and cannot be achieved just by bringing people into one place where they can socialise.

Studies of arts programmes

There have been many studies evaluating arts programmes, a range of which are presented below. Note that these are representative examples, rather than a comprehensive examination of the literature available. Individual studies that included a range of different arts programmes are presented first, followed by those that focused specifically on one branch of the arts. A short section then outlines health promotion programmes that used a branch of the arts as a vehicle to pursue their objectives and shows how they are different from those that focus on creativity through the arts. Issues relating to evaluation of arts in health programmes are discussed, and a summary of the main points from the international literature are summarised in the concluding comments.

Studies of general arts programmes

The Bealtaine festival celebrates and promotes the involvement of older people in the arts throughout Ireland and has a focus on inclusiveness of the less financially well-off. O'Shea and Ni Leime (2012) examined the effect of the Bealtaine month-long festival among older people, noting that in Ireland there has been little support for arts programmes, and most older people have not had prior experiences of participating in the arts. The festival has multiple events in different settings across the country throughout the month of May. It covers all forms of the arts including literature, storytelling, film and photography as well as painting, music, theatre and dance. Although occurring only in May, many of the programmes are ongoing throughout the year, though there are also a range of events that are specific to the festival time. An evaluation of the impact of the festival was conducted using a mixed methods approach. Postal questionnaires were sent to all festival events organisers, and a different questionnaire to randomly selected retirement associations throughout Ireland for distribution to their members. Questions were asked about participation and impact of Bealtaine on social engagement, quality of life, and wellbeing. The quantitative data from these surveys was complemented with 26 face-to-face interviews with older participants on their experiences of the festival. Results from 435 organisers and 253 participants showed that both organisers and older people were overwhelmingly positive about the personal and social gains from participating in

Bealtaine. The festival was found to facilitate self-expression (particularly in dance, art and creative writing) and to improve confidence, independence, and to allow people to develop hitherto unexplored talents. A high proportion of respondents (86%) agreed that participating in Bealtaine had improved their quality of life, commenting on physical, psychological and social benefits, and 95% agreed that they had extended their social networks and benefitted from meeting others with similar interests from elsewhere in the country. The study concluded that the festival had a clearly positive impact on the quality of life of around 20% of the older people in Ireland in terms of social capital and provided additional confirmation that creativity in older age has the potential to enrich both individuals and society. However, they noted that this view has not been recognised in terms of public funding that would allow more older people to benefit. They called for more public funding to be made available for arts programmes and for more complex intervention studies to explore the mechanisms whereby creative programmes enhance the health and wellbeing of older people.

An interesting report on arts participation of women in their eighties, drew from the larger Australian Longitudinal Study of Women's Health, a cohort of women born between 1921 and 1926 (Liddle et al., 2012). Data were available for 5058 women who were surveyed in 2005 and again in 2008. Participation in painting pictures or playing a musical instrument was considered in relation to changes in social activity, social support, health status and quality of life between the two time points. Measures used included instrumental activities of daily living (IADL), the SF36 Quality of Life questionnaire and self-reported monthly participation in social activities and social support from family and friends. Of the 5560 women, 7.9% (n=437) had continued participation in painting or playing music, 3.5% (n=192) had stopped participating, 3.4% (n=1987) had started participating; 76.3% had not participated at either survey. In comparison with those who continued participation, those who had stopped participating experienced a statistically significant greater decline in social activity, IADL, and SF36 mental health and were more likely to have been treated for osteoarthritis. Those who had started participation since 2005 experienced a significant increase in social activity compared with those who were non-participants in either activity. A greater decline in IADL for the non-participation group just failed to reach statistical significance. Decline in SF36 mental health was a highly statistically significant factor in stopping participation. The study concluded that there is a strong relationship between participation and improved emotional wellbeing, but noted that it could not determine whether the improvement was a result of participation or of other factors. Higher education levels were associated with a greater likelihood of the women participating in the arts, suggesting that those who had greater familiarity with formal learning environments from their earlier life may have more readily continued or started participating in the arts.

Swindells et al (2013) considered the eudaimonic theory of psychological wellbeing in relation to qualitative data gathered from the Invest to Save initiative, a three year arts and health research programme run by Manchester University to investigate the impact of creative activity on public health. The participants in the study were attending one of four different arts projects – three for older adults, and one for adults with depression. Results from the quantitative survey of 104 participants showed that they experienced a significant increase in eudaimonic wellbeing according to the Ryffs Scale of Wellbeing (Ryff, 1989). This study then drew from 21 participant interviews to develop an understanding of the reasons behind this improvement. It explored the constructs of autonomy and which are known to be associated with the eudaimonic approach. A dominant theme was that participants were eager to engage in activities that would provide a sense of purpose to lives that were otherwise characterised by isolation and monotony. Most felt that former opportunities for meaningful engagement were closed to them because of physical, mental, or sensory impairment, and sometimes also because of economic difficulty. The arts programme was more than "just something to do" with their time; they spoke about the ability to develop their own potential, improve latent skills, and looked forward to increasing and extending their engagement in the arts. It appeared that the role of the tutors was important in using their expertise to advise and guide, but also stand back and allow participants the autonomy to make their own decisions in shaping their works. Other

positive aspects reported were the cognitive challenges and mental stimulation involved in participation, the ability to looking at things in a new way, meeting different people with new ideas, being able to express themselves freely, and being absorbed in an activity which stopped them focusing on their illness, or even overcame their physical pain. The authors concluded from their findings that arts participation has a wide appeal and with skilled facilitation can be highly inclusive, accommodate participants with many different needs, and offer the kind of experience that provide opportunities for eudaimonic wellbeing through autonomous engagement, creative expression and personal growth. They noted that they had not examined how experiences might differ according to the different art forms – singing for example, is likely to be a very different experience from sculpture or digital photography and that more research into this area would be valuable.

Greaves and Farbus (2006) reported on a mixed methods evaluation of a complex intervention for social isolation in older people that was run by the Upstream Healthy Living Centre in England. UpStream assists people from their 50s onwards living within the Mid Devon Primary Care Trust area who are without serious mental or physical health problems but who have time on their hands, limited social contacts, and who would enjoy the opportunity to share their interests, skills or enthusiasms with others. Trained mentors facilitate a personally tailored programme of creative and/or social activities for each individual that is designed to promote psychological wellbeing and self-esteem. Creative activities cover a wide range from painting, creative writing, singing, guilting, and cookery, but there are non-creative groups such as also a range of exercise groups and book clubs. UpStream arranges some activities, while they also refer people to existing community activities. In addition, participants are encouraged to maintain their own groups if they wish, with mentors assisting with venues, transport and providers. A mixed methods evaluation of UpStream was carried out. Semistructured interviews were held with a purposive sample of participants as well as health professionals who had referred patients to UpStream. In addition, a quantitative survey was carried out to assess psychosocial health using the SF12, the Geriatric Depression Scale, and an adapted form of the MOS social support survey. All those who had been referred to UpStream were invited to participate in the survey, with follow-up surveys at six months and one year after first contact with UpStream. Qualitative results showed a range of psychological benefits similar to those reported in other studies, particularly improvements in overall wellbeing, confidence and self-efficacy, social contacts, reduced depression and loneliness, increased sense of self-worth. There were also physical benefits report including better sleep, increased physical activity, more energy, fewer health visits and less use of medication. There were 172 survey responses from 229 eligible participants at baseline, with 72 from 136 eligible at six months, and 51 from 93 eligible at the one year follow up. The six month follow up showed statistically significant increases in SF12 mental health scores, and reduction in depressive mood. At the one year follow up the improvements in depression scores were maintained, and SF12 combined scores on both mental and physical components improved significantly over baseline, but mental health scores did not improve. The apparent conflict between this lack of improvement and the positive results for depression scores is discussed. Social support improved significantly over baseline at both time points. The authors noted that the lack of a control group and the high attrition rate (71%) between baseline and the one year follow up were limitations of the study. Reasons for leaving the UpStream programme and therefore no longer being eligible to participate in the follow were apparently related primarily to failing health as many of the participants had poor mental and physical health at baseline.

Music programmes

There have been a number of studies that have focused on the effects of belonging to a singing group or choir. A study by Clift & Hancox (2001) that surveyed 91 members of a university choral society found that 93% of respondents believed that singing in the choir made their mood more positive, 89% reported feeling happier, 71% reported that singing improved their mental wellbeing, and more than 75% reported that it made them calmer and more relaxed. A substantial number of respondents also believed that participating in the choir had improved their respiratory function and posture and that they had gained social benefits through new contacts and friendships.

In another study of older people, Creech et al (2013) reported on the quantitative results from a study of 500 people, of whom 398 participated in a variety musical groups (both choral and instrumental) and a comparison group of 102 people who took part in other group activities such as book groups, language groups and social clubs. As well as questions on demographics, musical experience, and the place of music in their lives, participants completed the CASP-12 measure of quality of life and the Basic Psychological Needs Scale. These instruments respectively measure the dimensions of control, autonomy, self-realisation, pleasure, competence, and relatedness. Participants were surveyed at two points: at the start of the research project and again nine months later. Compared to those taking part in the other activities group, music participants showed statistically significant differences on the 12-point CASP scale (p= .0001), pleasure (p= .0001), relatedness (p=.002) and overall (p=.01). The authors concluded that their results suggested that compared to the comparison group, those actively engaged in making music showed higher levels of subjective wellbeing ... underpinned by a sense of purpose, feeling in control and receiving affirmation through positive social relationships that accord individuals respect and status (Creech et al 2013, p. 40).

The Sounds Lively! choirs were introduced by the Isle of Wight Healthcare NHS Trust in 2002 for older people who were receiving community healthcare (Eades & O'Connor, 2008). Fifty nine people who attended between 2002 and 2005 completed a survey evaluating the programme. Reported benefits included enhanced mood (73%), social benefits (64%), and increased confidence and selfesteem (35%). To the question, "does singing affect your health?" 81% responded yes, including 20% who reported physical improvements in breathing, posture and exercise. Another study by Cohen et al (2006) using a quasi-experimental design recruited 166 older adults from the Washington DC area and assigned them to either an intervention (group singing in a professionally conducted chorale for 30 weeks) or to a comparison group which continued with any usual activities. The intervention group reported using fewer over-the-counter medicines and had a decrease in falls whereas both these measures showed an increase over the previous twelve months in the comparison group. Compared to the comparison group, those who had participated in the intervention had improved self-rated health, fewer doctor visits, improved morale, and were less lonely. The sustained involvement in a high quality arts programme with the accompanying increase in social interaction was found to have resulted in a true health- promoting and preventive effect and to have reduced the risk factors for needing long-term care.

A local Christchurch study (Bidwell et al., 2012) examined the experiences of older adults who joined one of four "Rockers of Ages" choirs set up by the MUSE Community Trust in four areas of the city that had been badly damaged in the 2010 and 2011 earthquakes. The aim of the initiative was modest – to provide an enjoyable activity in a non-threatening environment that would lift people's spirits. One year after the choirs' inception, a mixed methods evaluation was carried out to support an application for a further year's funding for the tutors. Choir attendees were surveyed to assess the benefits they had gained from and the relative importance they participants placed on the music and social components of the choir respectively. From an estimated 85 choir members, 69 surveys

⁸ Note that the activity groups were ongoing not established as part of the research project.

(81.2%) were returned. The evaluation showed a very high level of enjoyment both of the singing (mean rating 4.6 and a scale of 5) and social contact (mean rating 4.4). Though it was clear that the singing was the primary attraction, the social contact was an additional benefit that increased the overall benefit. No respondent rated the social experience as the most important, but nearly half of them indicated that it was the "total package" that they rated the most highly. A range of positive changes was attributed by participants to their membership of the choirs including reduced isolation, an increase in overall wellbeing, reduced stress and gaining new friends. To add more depth to understanding the experience, a convenience sample of fifteen volunteers from the choirs were interviewed about their personal experiences. Analysis of the data showed that the choirs were providing an increase in both hedonic and eudaimonic wellbeing for the interviewees. Themes of spontaneous happiness and emotional uplift were mentioned many times, as well as the excitement and challenge of mastering new styles of music and songs in other languages which they would not previously have imagined they could accomplish. Benefits mentioned included improved confidence, sense of self-worth, reduction in stress and anxiety, and the restoration and healing they had found in the choirs after the difficult times of the earthquake and its aftermath as well as other life issues such as dealing with the death or terminal illness of a spouse or close friend. The enhanced networks of friends was also mentioned, some of which had extended to shared transport and other activities outside the choir. It was also clear that the role of the tutors was critical to the success of the initiative. They appeared to be skilled at engaging participants at all levels of ability so that the music was within reach of novice singers but still provided enough stimulation and challenge for the more adept, and to have created a friendly and caring environment where participants felt happy and safe. The short-term funding for the tutors, however, made the long term survival of the initiative uncertain.

A study with good intentions involving children in the Sing-Up children's choirs, however, did not achieve its intended aim (Hampshire & Matthijsse, 2010). SingUp was a UK government funded initiative for primary school aged children that aimed to "give every child the chance to sing, with opportunities to develop their singing and performance skills" (p. 709). The research reported in this article focuses on three such choirs in one region (SingUp Dales). Participant observation, questionnaires and interviewing were all used to determine the impact on children's social and emotional wellbeing at three time points: baseline, eight months, and 16 months. The questionnaires and the interviews covered dimensions of young people's social capital: social networks and sociability, trust and reciprocity, their sense of belonging, attitudes, aspirations, self-esteem and use of online social networking. There were 41 children at baseline and a control group of 51 with a similar socio-economic profile. This study found that most children enjoyed the singing and that participating with friends and making new friends were a strongly positive experience. Increased selfconfidence, feelings of pride and achievement, and new aspirations were also reported. Parents also reported delight in their children's achievements. Less positively, however, the choirs had a high turnover, and although there were 38 children at the follow up evaluation, only four of the original children remained. Some children left because they felt disconnected from friends who did not share the same interest and thought the choirs were 'uncool', but overall, the greatest contributor to turnover was the range of other activities and the hectic schedules many children had. Starting high school was associated with discontinuing membership because of extra activities, and the choirs being seen as "too babyish". It also appeared that some of the children felt 'alienated' from the type of music chosen, which did not include "songs we like" (p. 712). The authors suggest that this may have been because the study did not, as originally intended, involve the children in choosing or writing their own music. While the high turnover was partly responsible, it seemed likely that the failure of the tutors to move outside their own musical taste and incorporate music that resonated with the children was also a key factor.

Visual arts

Hacking et al (2008) reported outcomes from a survey of 44 female and 18 male participants who attended new art projects in various locations in England using data derived from self-completed questionnaires on entry to the project (early 2006) and six months later. Measures used were the Individual Empowerment Assessment (IEA), the mental health CORE (Clinical Outcomes in Routine Evaluation) measure and a specially developed social inclusion measure. The arts programmes were open to members of the general public, but the study itself was limited to those with mental health needs who had been referred by GPs or community mental health services. Participants had selfdescribed mental health conditions; 60% with depression and/or anxiety, and the remainder a range of other difficulties such as bipolar, schizophrenia, and obsessive and stress-related disorders. Forty percent of the original 88 participants were either employed in paid work or involved in volunteering. At the six month follow up, there had been a statistically significant improvement compared to time at entry in overall empowerment (p=0.01), particularly in self-efficacy (p<0.001). Overall CORE scores also decreased significantly (0.03) with significant reductions in the subscales for symptoms, and improvements in risk and wellbeing. Overall social inclusion also showed statistically significant improvements in all three aspects - social isolation, social relations and social acceptance. The finer details of the results and methodological limitations are discussed in detail in the article, with the authors drawing attention in particular to the fact that people with more severe mental health symptoms experienced greater improvements than those whose symptoms were less severe. The authors concluded that arts projects improve empowerment for people with mental health difficulties, and are a promising approach for improving mental health symptoms and social inclusion.

A previous study by the same group of researchers (Spandler et al., 2007) reported on a series of qualitative case studies from participatory arts provision for people with range of mental health needs ranging from difficult life circumstances and isolation, to those with severe long-term needs. Thirty four participants across six of the projects were interviewed in depth. The results were consistent with those reported above: participation provided a sense of purpose, development of latent talent, and an improvement in motivation, engagement and personal aspirations in the rest of their lives. Participants also reported they learnt to focus on art and it helped them cope with distress, reduced harmful thoughts and behaviour, and gave them a sense of freedom and control through their art. They also spoke of requests to display their work or to teach others that allowed them to develop a new identity as someone with artistic ability, rather than being defined by their negative experiences. An interesting aspect of this study was that participants enjoyed the projects having a mental health focus rather than being "mainstream", as they found it safer and more supportive to learn and develop skills alongside others with whom they had a common bond.

A qualitative study from Northern Ireland (Heenan, 2006) examined the experience of people with mental health issues who had participated in a community-based art programme run by a voluntary sector organisation. Although the module was entitled "art as therapy", it was run in the community by an art teacher rather than an art therapist, with the primary aim not being the quality of the work produced, but the value to the participants of being engaged in creating it. The programme ran for ten hours a week for ten weeks and participants were referred through a doctor or psychiatrist. Two focus groups of ten, and ten in-depth interviews were conducted with participants to explore their experiences and perceptions of the service. The three major themes that resulted from the analysis were the benefit in self-esteem gained by the participants, their feeling of empowerment, and the "safe space" that the art therapy venue provided. While the participants spoke about the many benefits they had gained from being involved, they were frustrated and let down when the study concluded and they were on their own, most having to resort to medication. The authors comment that "socially oriented art for health projects" (p. 189) are much more accessible and versatile than clinically based art therapy and need to be given more attention by policy makers.

Dance, drama, and movement-based creative expression

A one-month long intervention recruited 124 independently living older adults into one of three groups: theatre arts, visual arts, and a control group with no intervention (Noice et al., 2004). The aim of the project was to enhance cognitive and affective functioning and quality of life issues important for maintaining independent living. Participants were assessed using validated tests for word recall, listening span, problem solving, psychological wellbeing and self-esteem scales before and after the intervention. The theatre group participated in exercises designed to have them become engrossed in the drama and to experience situation-specific roles in acting that required them to assume a different cognitive and affective demeanour. The visual arts group intervention involved critiquing, discussing and interpreting different types of art media. Results showed that the theatre group had significantly greater improvements compared to the other groups on problem solving and word recall, and on all three cognitive measures in comparison to the control group. They also had greater psychological wellbeing after the intervention compared with both other groups. Moreover, when the theatre arts group were tested at four month post-intervention, the improvements had been maintained. The authors suggested that it may have been the fact that the theatre group participated in something entirely new and that was performed in front of others that may have been responsible for the improvement. They did not comment on what appeared to be a limitation of the comparison, that is, that the difference in the creative/non-creative nature of the two intervention groups, which may have made a difference, given the strong emphasis on the benefits of creativity in the literature discussed above.

A small, non-randomised study looked at the effects of participation in yoga, dance, or a combination of both for 18 palliative care patients (Selman et al., 2012). The dance in this study was a specialised programme The Lebed Method (TLM)⁹, a holistic therapy which, as well as aiming to improve physical symptoms and body image, also works to facilitate self-expression and incorporates aspects of music and drama. The authors noted that their study was the first to evaluate TLM in a palliative care context and one of the first to evaluate yoga. The courses ran for six weeks, with before and after testing used to assess physical, psychological, and emotional concerns. Because many of the patients attended more than one course, each pair of before/after tests was considered separately even if they were from the same individual. Both the dance and the yoga and the combination of both showed statistical significance in reduced number of concerns at course end. However, only the combination of both was significant in improved overall wellbeing. A point of particular interest was that although the concerns reported prior to participating were primarily physical, psycho-spiritual and social benefits were more often reported to be the most important benefits of participating. Qualitative data further supported the quantitative results with patients reporting social benefits, the relaxing nature of the classes and improvements in mobility and breathing. The authors noted a range of limitations in the study and called for further research into both these complementary therapies for palliative care patients.

Tango dancing was compared to mindfulness meditation and a waiting list control group in a six-week study by Pinniger et al (2012). Participants in the two intervention groups (tango n=28; meditation n=21) took part in 1.5 hours each week of the respective activities. Participants were volunteers covering a wide age range, who were recruited through newspaper advertisements and had selfreported problems with depression and/or anxiety. All (including 29 controls) completed life satisfaction, self-esteem, and mindfulness measures prior to the start of the study and at completion. After controlling for baseline depression scores there was a statistically significant improvement in depression in both intervention groups compared to controls (tango p=0.010; meditation p=0.025) and

⁹ See http://www.lebedmethod.co.uk/

a statistically significant reduction in stress for participants in both interventions compared to pre-test, but only for the tango group compared to the waiting list controls. There were non-statistically significant improvements in the tango group for anxiety, satisfaction with life, and mindfulness compared to baseline, however, self-esteem improved more through meditation than tango. The authors commented that dynamic physical activities may be more effective than static activities for reducing psychological stress. Moreover, nearly all the waiting list control participants chose to take up tango rather than meditation at the end of the study, suggesting the greater popular appeal, and therefore potentially a greater chance of adherence. Though both intervention groups had an activity which enabled them to learn new skills, the authors did not take appear to take into account the comparison of two programmes of a widely different nature, which may have affected the results, particularly with the lack of uptake of the meditation component. A further limitation was the number of the participants (n=21) who declined to participate following randomisation, with 13 of these declining the meditation intervention. A further ten participants did not complete the programme, so that the final analysis was based on a total of only 66 out of the original 97 who were randomised.

Arts in the service of health promotion

The arts have also been used widely in health promotion, particularly with children. Many of these programmes do provide engagement in developing new skills, and report positive gains in participants' self-esteem and mental wellbeing. However, the objective of these programmes is usually to improve behavioural and social outcomes, (for example greater participation in physical activity) rather than encouraging participants to become involved in the arts for their own sake. A few studies are presented to illustrate the approach and its difference from the studies outlined above.

A rapid review of the literature from 2004 onwards looked at the effect of participating in creative activities on the health and wellbeing of children and young people (Bungay & Vella-Burrows, 2013). Twenty studies of community-based arts programmes for young people aged 11-18 years were included. Twelve studies used drama, performance art or theatre, with four of visual arts, three of dance and one of music and were evaluated in a variety of methodological approaches. Objectives of the programmes variously covered information and knowledge building, better access to physical activity, increasing social activity, and promoting healthy lifestyles. No synthesis of evidence was possible because of wide variety of measures used and overall heterogeneous nature of the research methods. While the studies reported that drama, in particular, was an effective means of educating young people about sexual health and nutrition, none of the studies was able to report changed behaviour, and some studies had a high drop-out rate. The strongest result from this review was in the area of mental health and emotional well-being. Increased confidence, self-esteem, sense of achievement, empowerment, social skills and positive attitudes. In spite of a general lack of methodological rigour in the included studies, the authors felt able to conclude that the evidence supported creative activities as a useful health-promoting strategy because of their potential to address young people's sense of self-worth and develop life skills.

Arts programmes have been used in a variety of other interventions with young people. Rapp-Paglicci et al (2011) reported on the Prodigy intervention with at-risk youth where cultural arts — visual, performing, musical media and theatre arts were used as a medium to build social skills, anger management and problem solving among at-risk youth. The programme ran over eight weeks with participants attending three hours each week. In the study sample, participants (n=108) were aged between 15 and 18 years and were evenly balanced between boys and girls. Most of them had had prior contact with the youth justice system. A variety of standardised mental health instruments were used as a pre-test/post-test to measure change in symptomatology and academic performance results were obtained from the participants' schools. There was no control group. Results showed

statistically significant reductions in mental health symptoms compared to baseline in internalised behaviour, aggressive behaviour, externalising behaviour and improved academic self-efficacy. Improvements in academic performance were not statistically significant but there were positive trends in maths, English, reading, attendance and referrals. The authors noted that the eight week programme may be too short a time to have an effect on academic performance and further studies with a longer intervention and follow up times would be desirable. They noted the limitations in study design with no randomisation permitted by the funders, and the potential for bias as the programme completers whose data was analysed were more likely to have been more motivated than noncompleters, none of whom had the post-test follow up. Apart from noting that the classes were taught by "master artists from the community ... extensively trained in learning styles, youth development and skill building" (p. 312) there was no detail given of the participants' response to the various forms of the arts or any exploration of the mechanism by which the arts contributed to the outcomes reported.

Another study in Canada was designed for youth development and promotion of healthy behaviours and increased wellbeing among disadvantaged youth using hip hop dancing (Beaulac et al., 2010). The study had a high drop-out rate, and some participants commented on their disappointment at not being able to have any input into the dance choreography.

Even more tentatively related to creativity and personal development were a number of studies of dance programmes with young people to improve their participation in physical exercise (Hogg et al., 2012; Huang et al., 2012; Jago et al., 2012). Similarly two studies with older adults (Hui et al., 2009; Studenski et al., 2010) also used dance for improving physical activity, balance and overall general health. Both studies ran for three months and used a before and after design. These studies found a number of statistically significant improvements in physical function at the end of the intervention but improvements in psychological health were limited. Additionally the study by Studenski et al (2010) was small, had no control group, and almost a third of the original participants did not complete the intervention.

Intervention lacked any creative component. While participation in physical exercise clearly has substantial benefits, they are not the primary objective of the arts.

Worth mentioning briefly too, is the use of creative arts with indigenous groups to convey health promotion messages. Gray et al (2010) outline the benefits of working with Native American communities to facilitate the development of health promotion messages through the means of traditional arts (for example, storytelling) so that they are "structurally relevant to Native Americans" (p. 189). In another study along the same lines Davis et al (2004) involved community leaders to assist in developing health promotion materials for Aboriginal people in West Australia that drew on traditional arts. Both these approaches tap into the appeal of the arts as a conduit for health promotion. While clearly entirely legitimate in their own right, they lack the most appealing aspect of the arts in health, namely, the opportunity to explore and enhance one's own creative potential. It is this factor which appears to be the most promising in improving wellbeing because it provides both enjoyment as well as a sense of autonomy, meaning and purpose to the participants.

Evaluation of arts programmes

There is a lot we do not and cannot empirically know that is nevertheless an integral part of the wellbeing experienced by the participants.... Participatory arts, as distinct from art therapy, does not focus directly on a health outcome; it aims to produce work of artistic quality through a mode of engagement that may also have beneficial social outcomes that can indirectly impact on health. ... Qualitative evidence from participants repeatedly affirms the

felt experience of art as a counter to the circumstances of ill health and social exclusion. (White, 2009) (adapted from pp. 201-204)

Evaluating community-based programmes has a range of well recognised difficulties (Cameron et al., 2013; Hamilton et al., 2003; Staricoff, 2006; Tesch & Hansen, 2013). The interventions are often complex, and outcomes are influenced by educational, socio-economic, lifestyle, and personality factors that are difficult to account for. Moreover, experimental methods have both practical and ethical difficulties in community settings as a means of evaluating social outcomes. Quantitative studies have largely relied on self-report by participants or measures that have been designed for assessing mental illness rather than positive mental health or wellbeing. Attrition is often unavoidable and control groups difficult to recruit.

Evaluating arts in health programmes in the community has even more challenges. These primarily relate to polarised attitudes between the objectives of arts and health: "social process vs artistic product; social good vs good art; excellence vs access" (Tesch & Hansen, 2013). The two disciplines are underpinned by different philosophies and do not share a vocabulary. On the one hand, there is the arts view that empirical methods are never able to understand "the full aesthetic experience" or capture the "... unexpected, profound and transformational outcomes [of the arts]" (Tesch & Hansen, 2013, p.21). In contrast, funders and policy makers from health systems need to be shown convincingly that the arts have a positive effect on the health and wellbeing of those who participate (Dileo & Bradt, 2009). Therefore the two disciplines need to resolve the tensions between them through dialogue and cooperation if the arts is to become an accepted area of practice in health care.

Tesch and Hansen (2013) provide a useful overview of the methods that have been used to evaluate arts programmes in primary care, through their examination of 29 relevant studies. Three main approaches have been used: measuring programme objectives; measuring health status of participants; and measuring participant experience. The first of these approaches is similar to an audit, usually focusing on whether the programme had met pre-determined indicators or objectives; the health status approach tends to treat the programme as intervention, using quantitative methods (most often validated scales) before and after the programme, sometimes in comparison with a control group. The third approach uses qualitative approaches, has more of an arts perspective, and is more open to unexpected findings and a richer understanding of the effect on participants. Few of the papers examined provided any discussion or justification as to why they had chosen one method over another, leading the authors to comment that the lack of discussion is likely to be a contributing factor to the "mismatch between the needs of practitioners, funders, agencies and other stakeholders" Tesch and Hansen 2013, p. 35).

While almost all commentary notes the necessity of evaluation for arts in health programmes, discussions have tended to focus on the problems rather than propose solutions. One commentator has referred to the search for a method that conclusively demonstrates the value of the arts as the "search for the Holy Grail" (Hamilton et al., 2003). Using quantitative methods in community settings has limitations with respect to establishing satisfactory control or comparison groups, getting an adequate and representative sample of participants, deciding what and how to measure, how the information gathered should be analysed (Stuckey et al 2010; Staricoff 2006). Staricoff (2006) recommends "solid and well-designed qualitative research [but concedes that] ... there are few established principles and protocols for evaluating outcomes, assessing methodology and disseminating the results of this type of project" (p. 117). Stuckey et al (2010) merely recommend that "researchers should make better attempts at "meaningful control groups, ... outcome variables at higher levels of standardization and precision ... and plan for longer term follow up" (p. 261). No large studies appear to have looked at the cost-effectiveness of arts based programmes in terms of a reduction in medication or health service use, though these outcomes have sometimes been self-reported.

One study that attempts to offer a new approach is that by Cameron et al (Cameron et al., 2013). In assessing the benefits of the Be Creative Be Well (BCBW) initiative that nurtured around 100 participatory arts projects in disadvantaged communities in London, they employed the Realistic Evaluation model described by Pawson and Tilley (1997). This model works through successive consideration of the context, mechanism the projects in the third and final year of BCBW initiative. Case studies and key factors that were learnt about the planning, promotion, and implementation of community arts programmes are presented. Limited detail is given of the exact methods used in the assessment, however, and it appears that though Realistic Evaluation has potential, the model is somewhat short on exactly how to go about it (Marchal et al., 2012).

Concluding comments

There is increasing interest in the provision of participatory arts programmes in the community for people of all ages. They appear to be particularly beneficial for those who lack opportunities for meaningful contributions to society, particularly those who are isolated because of lack of social support, and mental or physical impairments.

The key characteristics of successful programmes is that they allow people to engage in creating something purposeful in a supportive environment that encourages autonomy, and personal fulfilment through incremental challenges and in the company of others engaged in the same activity. Studies that described arts programmes without those key characteristics tended to be less successful.

The role of the tutors in guiding, suggesting, and encouraging but not imposing their own ideas is clearly critical. While this is stated frequently in the literature, there appears to be little detail on the skill set that tutors should have. It appears they are usually skilled practitioners of the particular art form and some are qualified teachers, but it is clearly unnecessary that they be trained therapists.

The studies outlined above show that existing programmes for members of the general public can also benefit people referred through health services. However, it appears that there is a need for some programmes targeted at people with particular needs who feel safer among those who have similar backgrounds. While not discussed in the literature, it seems likely that choosing an appropriate programme would depend on the nature and extent of the person's need, the particular art form that appeals to them, the skills of the tutors, the mix of participants, and the wider social context.

Evidence from both quantitative and qualitative studies shows that there can be significant benefits to psychosocial health, improved self-esteem, confidence, self-efficacy and overall quality of life. A preventive effect on cognitive decline also seems likely and a maintenance of the skills and ability needed to live independently. Improved social contact and improved social support through the making of new friends have also been widely reported. There is also some, though limited, evidence that there may be improvements in physical health for some people, particularly through singing or dance, and simply becoming totally engrossed in an appealing activity may reduce the impact of physical pain.

One of the barriers to developing an evidence base for the positive effect of participation in the arts on health and wellbeing has been the difficulty of measuring outcomes in terms that are meaningful to policy makers and funders as well as artists and participants. Much of the difficulty lies in the underlying tension between the philosophical differences of the creative arts and health care systems, and whether the programmes should aim primarily for artistic or social objectives. Moreover,

¹⁰ The full report is available at: http://www.artscouncil.org.uk/media/uploads/pdf/BCBW_final.pdf Accessed 11.3.14

evaluation methods used have been widely different, and all appear to have some limitations. No large studies appear to have looked at the cost-effectiveness of arts based programmes in terms of a reduction in medication or health service use, though these outcomes have sometimes been self-reported. On the other hand, an increasing number of studies that have consistently reported the same sort of benefits have established what makes for a successful programme, while also providing some lessons in what does not work so well.

Arts programmes tend to be vulnerable to uncertainties in funding unless long-term public money is available to support them. Participants who have experienced improved mental wellbeing through arts programmes can feel very let down and frustrated if a programme they enjoy is stopped. There is little discussion in the literature about sustainability for the participants and clearly, if tutors of sufficient calibre are to be attracted, they too must be confident that the programme will be of a reasonable duration and recognise their expertise and time with sufficient reimbursement. Moreover, those most likely to participate in arts programmes, who are often the least well off in the community, would seem unlikely to be able to bear the full cost of paying for the programme to continue if public funding or grant money is not forthcoming.

There are many factors to consider when contemplating a new initiative in the arts and health field. Not the least of these would be the need to take into account the expectations of any funding bodies, the programme planners, the referring GPs, the patients, and the artists who are running the programmes. Cameron et al (2013) provide a helpful starting point with nine areas of importance for which they provide recommended and not recommended approaches:

- Defining the [target] community
- Selecting the artist
- Preparing the ground
- Demystifying the artistic process
- Working with local structures
- Collaborative programming
- Building levels of engagement
- Using evaluation
- Leaving a legacy

While helpful, these recommendations are only able to point to the importance of each individual aspect without providing a great deal of guidance on how to go about them. For example, "ensuring that artist teams have skills in community development as well as their specific practice" (p. 57) may be far from simple. It seems likely that initiatives would need to be developed only following in-depth discussion among the parties about their expectations, incorporating lessons available from the literature, and taking the local context and resources into account.

References

- Baptista, A. S., Villela, A. L., Jones, A., & Natour, J. (2012). Effectiveness of dance in patients with fibromyalgia: a randomized, single-blind, controlled study. Clinical & Experimental Rheumatology, 30(6 Suppl 74), 18-23.
- Beaulac, J., Olavarria, M., & Kristjansson, E. (2010). A community-based hip-hop dance program for youth in a disadvantaged community in Ottawa: implementation findings. Health Promotion Practice, 11(3 Suppl), 61S-69S.
- Berridge, K. C., & Kringlebach, M. L. (2011). Building a neuroscience of pleasure and wellbeing Psychology of Wellbeing, 1(1), 1-29.

- Bidwell, S., Calder, K., Colhoun, C., & Monthy, R. (2012). Evaluation of the Rockers of Ages choirs Christchurch: Community and Public Health, CDHB.
- Bungay, H., & Vella-Burrows, T. (2013). The effects of participating in creative activities on the health and well-being of children and young people: a rapid review of the literature. Perspectives in Public Health, 133(1), 44-52.
- Cameron, M., Crane, N., Ings, R., & Taylor, K. (2013). Promoting well-being through creativity: how arts and public health can learn from each other. Perspectives in Public Health, 133(1), 52-59.
- Camic, P. M. (2008). Playing in the mud: health psychology, the arts and creative approaches to health care. Journal of Health Psychology, 13(2), 287-298.
- Clift, S. (2011). Arts and health. Perspectives in Public Health, 131(1), 8.
- Clift, S. M., & Hancox, G. (2001). The perceived benefits of singing: findings from preliminary surveys of a university college choral society Journal of the Royal Society for the Promotion of Health, 121(4), 248-256.
- Cohen, G. D., Perlstein, S., Chaplione, J., Kelly, J., Firth, K. M., & Simmens, S. (2006). The impact of professionally conducted cultural programs on the physical health, mental health, and social functioning of older adults. Gerontologist, 46(6), 726-734.
- Creech, A., Hallam, S., Varvarigou, M., McQueen, H., & Gaunt, H. (2013). Active music making: a route to enhanced subjective well-being among older people. Perspectives in Public Health, 133(1), 36-43.
- Davis, B., McGrath, N., Knight, S., Davis, S., Norval, M., Freelander, G., & Hudson, L. (2004).

 Aminina nud mulumuluna ("You gotta look afgter yourself"): evaluation of the use of traditional art in health promotion for Aboriginal people in the Kimberley region of Western Australia.

 Australian Psychologist, 39(2), 107-113.
- Dileo, C., & Bradt, J. (2009). On creating the discipline, profession, and evidence in the field of arts and health care. Arts and Health, 1(2), 168-182.
- Eades, G., & O'Connor, M. (2008). Sounds Lively! Choirs: introducing singing into healthcare. Journal of the Royal Society for the Promotion of Health, 128(2), 60-61.
- Engel, G. L. (1977). The need for a new medical model: a challenge for biomedicine Science, 196(4286), 129-136.
- Gick, M. L. (2011). Singing, health and wellbeing: a health psychologist's review Psychomusicology: Music, Mind and Brain, 21(1-2), 1-32.
- Government Office for Science. (2008). Foresight mental capital and wellbeing project. Final project report: executive summary. London: Government Office for Science.
- Gray, N., Ore de Boehm, C., Farnsworth, A., & Wolf, D. (2010). Integration of creative expression into community-based participatory research and health promotion with Native Americans. Family & Community Health, 33(3), 186-192.
- Greaves, C. J., & Farbus, L. (2006). Effects of creative and social activity on the health and well-being of socially isolated older people: outcomes from a multi-method observational study. Journal of the Royal Society for the Promotion of Health 126(3), 134-142.
- Hacking, S., Secker, J., Spandler, H., Kent, L., & Shenton, J. (2008). Evaluating the impact of participatory art projects for people with mental health needs. Health & Social Care in the Community, 16(6), 638-648.

- Hamilton, C., Hinks, S., & Petticrew, M. (2003). Arts for health: still searching for the Holy Grail. 57, 6(401-402).
- Hammerman-Rozenberg, R., Maaravi, Y., Cohen, A., & Stessman, J. (2005). Working late: the impact of work after 70 on longevity, health and function Aging-Clinical & Experimental Research, 17(6), 508-513.
- Hampshire, K. R., & Matthijsse, M. (2010). Can arts projects improve young people's wellbeing: a social capital approach. Social Science and Medicine, 71(4), 708-716.
- Harris, A. H., & Thoresen, C. E. (2005). Volunteering is associated with delayed mortality in older people: analysis of the longitudinal study of aging. Journal of Health Psychology, 10(6), 739-752.
- Heenan, D. (2006). Art as therapy: an effective way of pomoting positive mental health? Disability and Society, 21(2), 179-191.
- Hogg, J., Diaz, A., Del Cid, M., Mueller, C., Lipman, E. G., Cheruvu, S., . . . Nimkarn, S. (2012). An after-school dance and lifestyle education program reduces risk factors for heart disease and diabetes in elementary school children. Journal of Pediatric Endocrinology, 25(5-6), 509-516.
- Huang, S. Y., Hogg, J., Zandieh, S., & Bostwick, S. B. (2012). A ballroom dance classroom program promotes moderate to vigorous physical activity in elementary school children. American Journal of Health Promotion, 26(3), 160-165.
- Hui, E., Chui, B. T.-k., & Woo, J. (2009). Effects of dance on physical and psychological well-being in older persons. Archives of Gerontology & Geriatrics, 49(1), e45-50.
- Jago, R., Sebire, S. J., Cooper, A. R., Haase, A. M., Powell, J., Davis, L., . . . Montgomery, A. A. (2012). Bristol girls dance project feasibility trial: outcome and process evaluation results. International Journal of Behavioral Nutrition & Physical Activity, 9, 83.
- Kimiecik, J. (2011). Exploring the promise of eudaimonic well-being within the practice of health promotion: the "how" is as important as the "what" Journal of Happiness Studies 12(5), 769=792.
- Liddle, J. L. M., Parkinson, L., & Sibbritt, D. W. (2012). Painting pictures and playing musical instruments: change in participation and relationship to health in older women. Australasian Journal on Ageing, 31(4), 218-221.
- Lipe, A. W., Ward, K. C., Watson, A. T., Manley, K., Keen, R., Kelly, J., & Clemmer, J. (2012). The effects of an arts intervention program in a community mental health setting: a collaborative approach. Arts in Psychotherapy, 39(1), 25-30.
- Marchal, B., van Belle, S., van Olmen, J., Hoeree, T., & Kegels, G. (2012). Is Realistic Evaluation keeping its promise? A review of published empirical studies in the field of health systems research. Evaluation, 18(2), 192-212.
- Noice, H., Noice, T., & Staines, G. (2004). A short-term intervention to enhance cognitive and affective functioning in older adults. Journal of Aging & Health, 16(4), 562-585.
- O'Shea, E., & Ni Leime, A. (2012). The impact of the Bealtaine arts programme on the quality of life, wellbeing and social interaction of older people in Ireland. Ageing and Society, 32, 851-872.
- Ojay, A., & Ernst, E. (2000). Can singing exercises reduce snoring? A pilot study. Complementary Therapies in Medicine, 8(3), 151-156.
- Pawson, R., & Tilley, N. (1997). Realistic evaluation. London: Sage.

- Pinniger, R., Brown, R. F., Thorsteinsson, E. B., & McKinley, P. (2012). Argentine tango dance compared to mindfulness meditation and a waiting-list control: a randomised trial for treating depression. Complementary Therapies in Medicine, 20(6), 377-384.
- Rapp-Paglicci, L., Stewart, C., & Rowe, W. (2011). Can a self-regulated cultural arts program promote positive outcome in mental health symptoms and academic achievement for at-risk youth>? Journal of Social Service research, 37(3), 309-313.
- Robb, C., Small, B., & Haley, W. E. (2008). Gender differences in coping with functional disability in older married couples: the role of personality and social resources. Aging & Mental Health, 12(4), 423-433.
- Ryff, C. D. (1989). Happiness is everything, or is it? Explorations on the meaning of psychological well-being Journal of Personality and Social Psychology 57(6), 1069-1081.
- Selman, L. E., Williams, J., & Simms, V. (2012). A mixed-methods evaluation of complementary therapy services in palliative care: yoga and dance therapy. European Journal of Cancer Care, 21(1), 87-97.
- Spandler, H., Secker, J., Kent, L., Hacking, S., & Shenton, J. (2007). Catching life: the contribution of arts initiatives to recovery approaches in mental health. Journal of Psychiatric & Mental Health Nursing, 14(8), 791-799.
- Staricoff, R. L. (2006). Arts in health: the value of evaluation. Journal of the Royal Society for the Promotion of Health, 126(3), 116-120.
- Stuckey, H. L., & Nobel, J. (2010). The connection between art, healing, and public health: a review of current literature. American Journal of Public Health, 100(2), 254-263.
- Studenski, S., Perera, S., Hile, E., Keller, V., Spadola-Bogard, J., & Garcia, J. (2010). Interactive video dance games for healthy older adults. Journal of Nutrition, Health & Aging, 14(10), 850-852.
- Swindells, R., Lawthorn, R., Rowley, K., Siddiquee, A., Kilroy, A., & Kagan, C. (2013). Eudaimonic well-being and community arts participation. Perspectives in Public Health, 133(1), 60-65.
- Tesch, L., & Hansen, E. C. (2013). Evaluating effectiveness of arts and health programmes in Primary Health Care: a descriptive review. Arts and Health, 5(1), 19-38.
- White, M. (2009). Arts development in community health: a social tonic. Abingdon: Radcliffe.
- Yeh, S. C., & Liu, Y. Y. (2003). Influence of social support on cognitive function in the elderly. BMC Health Services Research, 3, 9.