

Inquiry into the social impact of participation in culture and sport

Executive summary

Arts and cultural activities are ‘multi-modal’ interventions that comprise a number of components that are beneficial for health at individual, social and community levels. These components lead to psychological, physiological and behavioural mechanisms that affect our mental and physical health. Arts engagement has been shown to act as a protective factor against the development of a range of mental health conditions such as social and behavioural adjustment and depression, as well as a range of physical health conditions such as dementia, frailty, age-related disability, chronic pain and premature mortality. Arts engagement can also help in the management of conditions such as mental illness, autism, Parkinson’s disease, hemiplegia, dementia and lung disease, as well as supporting recovery from mental illness, surgery and stroke (amongst others). The arts also play a vital role in health promotion, including enhancing our understanding of illnesses, supporting healthcare professionals, communicating critical health messages, improving adherence to treatment regimes, reducing health-related stigma and reducing aggressive behaviours in hospitals. Overall, the arts can have powerful and lasting effects on health, from prevention, treatment and promotion perspectives. Hundreds of further research studies are currently ongoing globally.

Author introduction

I am a Wellcome Research Fellow / Senior Research Associate in the Institute of Epidemiology & Health Care at University College London. I specialise in psychobiology and social epidemiology, focusing on the effects of social and community participation on health, with a particular interest in the effects of arts and cultural engagement.

Evidence

1. How the arts affect our health

1.1 The UK has a rich cultural sector: c.40,000 community choirs¹, 11,000 amateur orchestras², 50,000 amateur arts groups², 5,000 amateur theatre societies², 3,000 dance groups², 2,500 museums³, 400 historic places⁴, 4,000 libraries⁵, 1,300 theatres⁶ and 50,000 book clubs⁷ (amongst others).

1.2 These activities are categorised as “complex” or “multi-modal” interventions as they combine multiple different components that are all known to be health-promoting themselves. For example, at an individual level, engaging with the arts and culture provides cognitive stimulation, a chance for emotional expression, opportunities for learning and developing agency, reduced stress, hedonic experiences and mindful moments. At a social level, engaging with the arts and culture provides social support, reduces loneliness, reduces sedentary behaviour, models prosocial behaviour, reduces discrimination and provides a voice for minority groups. At a community level, arts and cultural engagement develops skills, enhances social capital, helps signpost people to health or social care services, provides employment opportunities and leads to economic benefits within communities, as well as making virtuous use of community spaces. For more details on all of these components, see Fancourt (2017)⁸.

1.3 However, a particular strength of the arts is that they combine these many salutogenic factors with an inner aesthetic beauty that provides an intrinsic motivation for engaging beyond a particular regard for one’s health. This arguably makes arts programmes particularly effective for health for the precise reason that they are *not* medical.

1.4 These salutogenic components of arts engagement can affect health via three broad pathways: (i) enhancing psychological resources (e.g. increasing self-efficacy, coping and emotional regulation), (ii) promoting protective physiological responses (e.g. lowering stress response, enhancing immune function and affecting cardiovascular reactivity), and (iii) increasing positive health-related behaviours (e.g. exercise, healthy diet, acceptance of care and adherence to prescribed treatments, help-seeking behaviours and low alcohol/smoking/drugs consumption)⁹.

1.5 Via these components and pathways, the arts have been shown to reduce the risk of developing mental and physical health conditions, support management of and recovery from such conditions, and play a broader role in health promotion, such as by reducing stigma associated with illness and promoting key health messages. These effects are described in more detail in the following sections.

2. Arts engagement and prevention of ill health

2.1 There is a large body of research showing how arts engagement can enhance multidimensional subjective wellbeing, including experienced wellbeing (positive emotions in our daily lives), evaluative wellbeing (our life satisfaction), and eudemonic wellbeing (our sense of meaning, control, autonomy and purpose in our lives)¹⁰⁻¹². Wellbeing is not only a positive experiential state but is also associated with a lower risk of developing a range of mental and physical health conditions.

2.2 Arts engagement can also help to reduce the risk of developing mental health conditions such as depression in older age¹³, and broader social and behavioural adjustment issues at the onset of adolescence¹⁴.

2.3 The arts can also help to protect against the development of post-traumatic stress disorder (PTSD) in intensive care (ICU). An expensive and challenging condition to treat, PTSD affects approximately 10% of ICU patients. But diaries written by ICU staff and provided to patients post-discharge have been shown to reduce its incidence rate¹⁵.

2.4 Cultural engagement also contributes to cognitive reserve: the resilience of our brains as we age¹⁶. Going to museums, galleries, the theatre, concerts or the opera has been shown to reduce the rate of cognitive decline in older age and also reduce our risk of developing dementia^{17,18}.

2.5 The arts can also reduce our risk of developing physical health conditions. Ongoing research at UCL is showing how arts engagement is associated with a lower risk of developing frailty in older age and a slower rate of frailty progression. Similarly, arts engagement reduces the risk of developing a disability. Visiting cultural venues is also as protective as exercise against developing chronic pain in older age¹⁹.

2.6 Finally, arts engagement has been linked to a reduced risk of dying prematurely, even when accounting for individuals' health, wealth and lifestyles^{20,21}. This is likely due to the specific components and pathways involved in arts engagement (see 1.2 and 1.4).

3. Arts engagement and management or recovery from illness

3.1 As well as helping to prevent illness, the arts can also help in the management of health conditions. For children with autism, music has been shown to be a proxy language²², supporting verbal and non-verbal communication skills as well as social interactions²³.

3.2 The arts have been shown to be effective in occupational therapy and physical therapy. Dance has been shown to improve gait in people with Parkinson's disease²⁴. Magic tricks have been shown to improve hand function in children with hemiplegia (one-sided paralysis)^{25,26}.

3.3 Physiologically, singing has been found to improve lung function in people with Chronic Obstructive Pulmonary Disorder (COPD)²⁷.

3.4 In relation to mental health, Drumming has been shown to reduce depression in mental health service users^{28,29}. Music therapy has been found to reduce symptoms in those with schizophrenia³⁰. Singing has been found to improve mental health in cancer patients^{31,32}, amongst others.

3.5 The arts can also help in recovery from illness. Amongst premature babies, listening to music post-birth has been found to lower heart rate, increase feeding and weight gain, and thereby shorten hospital stays^{33,34}. Amongst mothers of new babies, singing has been found to reduce symptoms of postnatal depression faster than social groups or usual care³⁵.

3.6 Neurologically, listening to music has been found to help the development of new neural pathways following a stroke³⁶. For people with dementia, background music has been found to reduce agitated behaviours, improve memory recall and enhance speech^{37,38}. Singing has also been found to improve speech in people with aphasia following a stroke³⁹.

3.7 In specific clinical settings, the arts can also reduce anxiety, such as prior to surgery. Recorded music pre-operatively has been found to reduce anxiety more than anti-anxiety medication, as well as reduce stress hormones, pain, blood pressure and use of analgesics⁴⁰.

4. Arts engagement and health promotion

4.1 The arts also play an important role in broader health promotion. The arts help in our understanding of illness and disease, as work in medical humanities and health humanities shows. For example, the paintings of William Utermohlen (an artist who developed dementia) have helped clinicians understand the effects of dementia on the brain.

4.2 For clinicians, theatre workshops been shown to improve doctor-patient communication, art appreciation classes have been shown to improve the visual diagnostic skills of doctors and arts wellbeing classes have been shown to improve the mental health of health professionals and reduce burnout⁴¹⁻⁴³.

4.3 The arts are very powerful tools for health communication. During the Ebola epidemic, rap songs, radio plays and murals were used to raise awareness amongst locals of the symptoms of ebola and its transmission⁴⁴. In South Africa, touring theatre productions are used to raise awareness of symptoms of diabetes.

4.4 Engaging with the arts can also improve adherence to treatment regimes. For example, amongst teenagers, apps that gamify cancer treatments have been shown to improve uptake and adherence to chemotherapy⁴⁵.

4.5 The arts have been used to reduce stigma associated with some health conditions, such as arts festivals helping to increase positive attitudes towards mental health and television storylines helping to reduce secrecy and shame surrounding postpartum psychosis^{46,47}.

4.6 The use of arts and design in hospitals has also been shown to improve outcomes. Virtual windows showing films of nature have been shown to improve mental health and time-to-discharge in bone marrow transplant patients⁴⁸. The design of working spaces in hospitals can reduce nursing errors⁴⁹. And the design of A&E departments has been shown to reduce aggressive behaviours towards staff⁵⁰.

5. Summary

5.1 As is evidenced here, the arts can have powerful and lasting effects on health, from prevention, treatment and promotion perspectives. There is rapidly growing interest in research in this topic, with studies ongoing globally to understand more about what types of engagement affect which health

conditions, what the psychological, physiological, social and behavioural mechanisms underlying this are, and who benefits the most.

5.2 Notably, both active arts engagement (such as dancing, singing, knitting) and receptive arts engagement (visiting museums, going to the theatre or attending a concert) have been found to lead to health benefits. Further, both ubiquitous engagement (not necessarily for health benefits) and more targeted engagement (with specific clinical aims) have been shown to be beneficial.

5.3 Importantly, the size of the effects of arts engagement in comparison to other activities has in many instances been commensurate with other well-known salutogenic activities such as exercise and even commensurate with medication and other medical procedures.

5.4 Traditionally, research on arts and cultural engagement has been undertaken separately from research on libraries, parks, community gardens, allotments, volunteering, social clubs and community groups. However, many of these activities share common components. So there are ongoing efforts at the moment to draw more research parallels with these other activities and undertake comparative studies to understand the similarities and differences further. The MARCH Network funded by UK Research and Innovation is a new national research network to support such efforts⁵¹.

5.5 This submission only summarises a fraction of the existing and ongoing research in this field.

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